

TRUCKEE RIVER FUND ADVISORY COMMITTEE

AGENDA

Friday, February 17, 2017, 8:30 a.m. Community Foundation of Western Nevada 50 Washington Street, Suite 300, Reno, NV 89509

- 1. Roll Call*
- 2. Public comment (limited to no more than three minutes per speaker)*
- 3. Approval of the agenda (for possible action)
- 4. Approve the January summary meeting minutes (for possible action)t
- Fund balance report*
- 6. Review grant proposals to Truckee River Fund and select projects to be recommended for funding (**for possible action**)^t
- 7. Hear reports on projects completed in the last year: #133 Tahoe Resource Conservation District Truckee Regional Aquatic Invasive Species prevention program (Mike Brisbin); #135 Nevada Department of Wildlife New Zealand mud snail and aquatic invasive species outreach for the Truckee River (Bill Bradley); #137 Nevada Land Trust Alum Creek water quality improvement (Bill Bradley); #166 City of Reno Virginia Lake (Mike Brisbin)
- 8. Committee and staff comments*
- 9. Next meeting: June 2, 2017 (for possible action)
- 10. Public comment (limited to no more than three minutes per speaker)*
- 11. Adjournment (for possible action)

t=link to backup documents included

NOTES:

- The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355
 Capital), Reno City Hall (1 E. First), Sparks City Hall (431 Prater), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe
 County Clerk's Office/Courthouse (75 Court), Washoe County Central Library (301 South Center) Washoe County
 Administration (1001 East Ninth), and at http://www.truckeeriverfund.org/meetings.shtml
- 2. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call 834-8002 before the meeting date.
- 3. The Committee may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
- 4. Asterisks (*) denote non-action items.
- 5. Public comment is limited to three minutes and is allowed during the public comment periods. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a "Request to Speak" card and submitting it to the clerk. In addition to the public comment periods, the Chairman has the discretion to allow public comment on any agenda item, including any item on which action is to be taken.

MEETING MINUTES (TRANSCRIPT SUMMARY)

TRUCKEE RIVER FUND ADVISORY COMMITTEE MEETING OF JANUARY 20, 2017

The following meeting minutes is a summary of the certified transcript for the Truckee River Fund Advisory Committee meeting scheduled for 8:30 a.m., which due to weather commenced at 9:00 a.m., Friday, January 20, 2017.

Those Present: Committee Members: Janet Phillips, Chairman; Tom Swan, Vice Chairman; Susan Lynn; Bill Bradley; Candice Elder; and Don Mahin; Also: Tracy Turner and Lauren Renda, both with Community Foundation; John Enloe and Sonia Folsom, both with TMWA; and Sylvia Harrison, Esq., McDonald Carano Wilson LLP; Members of the Public: Christi Cakiroglu, Keep Truckee Meadows Beautiful; Alicia Reban, Nevada Land Trust; and Mickey Hazelwood, The Nature Conservancy.

- * Committee member arrived after roll call
- ** Committee member left meeting before adjournment

Agenda Item #1: Roll Call: Roll call was taken. A quorum was noted.

Agenda Item #2: Public comment: There was no public comment at this time.

Agenda Item #3: Approval of the agenda (for possible action): The agenda was unanimously approved.

Agenda Item #4: Approve the August summary meeting minutes (for possible action): The Meeting Minutes (Transcript Summary) for August 19, 2016 was unanimously approved.

Agenda Item #5: Fund balance report: Tracy stated that the current amount available to spend is \$901,715.86. She answered committee questions.

Agenda Item #6: Review 2017 meeting calendar (for possible action): Tracy described how the draft calendar comes about every year. After discussion, the February 24th meeting date was changed to February 17th. Sonia confirmed dates on the calendar. There was some discussion regarding a field trip.

Agenda Item #7: Hear reports on projects completed in the last year: #133 Tahoe Resource Conservation District Truckee Regional Aquatic Invasive Species prevention program (Mike Brisbin); #135 Nevada Department of Wildlife New Zealand mud snail and aquatic invasive species outreach for the Truckee River (Bill Bradley); #137 Nevada Land Trust Alum Creek water quality improvement (Bill Bradley); #142 Truckee River Watershed Council Truckee Wetlands Restoration Project (Candice Elder); #164 City of Reno Cemetery Drain (Susan Lynn); #166 City of Reno Virginia Lake (Mike Brisbin); #179 Sierra Nevada Journeys (Janet Phillips).

Regarding #133 Tahoe Resource Conservation District Truckee Regional Aquatic Invasive Species prevention program, Mike Brisbin was not present today, so this item will be put on a future agenda.

Regarding #135 Nevada Department of Wildlife New Zealand mud snail and aquatic invasive species outreach for the Truckee River, Bill Bradley indicated that he's not ready to report, so this item will be put on a future agenda.

Regarding #137 Nevada Land Trust Alum Creek water quality improvement, Bill Bradley indicated that he's not ready to report, so this item will be put on a future agenda.

Regarding #142 Truckee River Watershed Council Truckee Wetlands Restoration Project, Candice Elder reported that this project was a success, and the grantee met their goals. She read what the grantee had written thanking the Truckee River Fund and stating that with the additional grants that came in as well, they were able to do everything with all of the funding they received. She added that the grant has been successfully completed.

Regarding #164 City of Reno Cemetery Drain, Susan Lynn reported that the grantee has completed their project, but we haven't been out to inspect it yet due to being too muddy. She described a delay and how the project had to be modified so that the maintenance equipment could reach the drain to clean it out, that the additional cost went to the city, and that it worked very well on the first discharge from the major storm. After she has had a chance to see the site, Susan will send Tracy an email finalizing this project.

Regarding #166 City of Reno Virginia Lake, Mike Brisbin was not present today, so this item will be put on a future agenda.

Regarding #179 Sierra Nevada Journeys, Janet Phillips reported that the grantee met all the statistical parameters in terms of the number of participants and the before and after knowledge level. She added that they had some nice pictures of the kids participating, along with some really great quotes from the teachers, which she read to the group, and that the grant has been successfully completed

Agenda Item #8: One Truckee River presentation by Keep Truckee Meadows Beautiful and Nevada Land Trust: Alicia Reban and Christi Cakiroglu were present and presented a comprehensive review and update of the grand scope of this plan, including key accomplishments, the completed baseline mapping of the river, that they're in the process of

producing various maps for planning, potential acquisitions along the river for the purposes of open space, an NDEP grant application for a watershed survey, and their education committee. They also talked about the 911 mileage markers for the entire Phase 1 area and how this is important for recreation and public safety, and showed an example of one; about an ad hoc task force they've created with leaders of social issues and public safety committees; and about the art trail project and river stories. They talked about the core planning team, planning for organizational success, and how leadership must be shared by an entire coalition in order for it to be truly One Truckee River. They answered questions from the committee, with input from John Enloe, talked about a multijurisdictional approach, strong commitments, great community buy-in, sponsors in the upcoming legislation, further ideas and hurdles for one cohesive plan.

Agenda Item #9: Tributaries Assessment presentation by Truckee River Watershed Council: Tracy stated that the TRWC people are not coming down the hill because of road conditions up top, so they have requested to be deferred to another meeting.

Agenda Item #10: Committee & staff comments: Janet mentioned that Sue Donaldson's seat is vacant and that Ron Penrose has applied for that Washoe County seat. Tracy indicated she will check on the status and let them know that our next meeting has moved to February 17th.

Janet commented that we should think about this group having a succession for the chair. Tracy added that it would be good to have someone in the wings as a rising chair, so that someone is always being trained for that position.

John Enloe commented that he and Mickey Hazelwood are going to be doing a tag team presentation on the Truckee River Fund for the Nevada Water Resources Association in February.

Janet commented that on February 15th and 16th, at the Nevada Water Resources Association conference at the Peppermill in Reno, she will have a table there for both the Truckee River tour that she does and the bikeway, and that she could easily add a poster about the Truckee River Fund. John Enloe and Sonia Folsom indicated they could prepare an updated poster and a flyer or card for this purpose. Susan Lynn suggested adding One Truckee River as part of the table, too, under the fund, and Janet said she'll make room for that, too.

Agenda Item #11: Next meeting: February 24, 2017 (for possible action): The next meeting has been moved to February 17th. No action was taken.

Agenda Item #12: Public comment (limited to no more than three minutes per speaker): Mickey Hazelwood commented that it's been great participating in the One Truckee River planning process and to see the energy that has built around this thing and the support that's grown for it.

In answer to Janet's question regarding how they did with the flood, Mickey Hazelwood indicated that things performed beautifully.

Agenda Item #13: Adjournment (for possible action): The meeting adjourned at 10:12 a.m. No action was taken.





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Organization Name:	City of Reno				
Type:	EIN#88-6000201 Governmental entity? Yes				
Address:	P.O. Box 1900 Reno NV 89505				
Project Name:	Truckee River Cleanup Crew – Year 3				
Amount requested: \$28,694 Website: reno.gov				,	
This funding will be used t	o (complete ti	his	Provi	ide a dedicate	ed crew to remove trash, debris, noxious
sentence with a max of 2 sentences):				_	owth from the banks of Truckee River and within City of Reno.
Key People:	Director:	Andy Ba	Andy Bass, Director, Parks, Recreation and Community Services		
	Board Chair:	Hillary S			
	Project	Name:		Jeff Mann	
	Contact:	Positio		Parks Manage	er
		Phone:		775-334-2270	
		Fax:		775-334-2471	
		Email:		manni@reno	gov
	benefits for a		itainab	ole, and enhar	nce the quality of life and economic
Has your organization	If yes,				
received other grants	Date award	ed:	See	Attached List	
from the Truckee River	Project title:				
Fund?	Amount of Award:				
Yes No (use	Date awarded:				
additional page if	Project title:				
necessary)	Amount of Award:				
	Date awarded:				
	Project title:				
	Amount of	Award:			
DESCRIPTION OF PROJECT			N		
Indicate the description the	at best fits the	project yo	u are į	proposing. Ma	ark no more than three categories:
					ecrease erosion.
					ects on tributaries and drainages to the Trucke
					iments entering the Truckee River.
C. Projects that					
		ntrol invasi	ive aqı	uatic species o	or terrestrial invasive plant species that are
adverse to water supply.¹ E. Other projects that meet the evaluation criteria.					

¹ For proposals related to weed control/eradication, contact Tracy Turner at the Community Foundation of Western Nevada for additional criteria. tturner@nevadafund.org; 775-333-5499.







NARRATIVE REQUIREMENTS

Provide answers for all 11 sections below; use the numbers and topics (in **bold**) to label each section in your response. Your application is limited to 5 narrative pages, including the cover sheet. Your budget is page 6. All projects are required to have measurable outcomes:

- Specific project goals and measurable outcomes and how you will measure and report them.
 Goal: Remove trash and debris from the banks of the Truckee River within Reno's city limits, focusing on public property along the Truckee River Path, including City, County and State property.
 Outcome: Results will be measured by number of bags of trash and debris, shopping carts, posts, appliances, furniture and other materials removed from the project area.
- 2. Project location. The project location will be the banks of the Truckee River within Reno's city limits, with specific emphasis along the Truckee River Path. The upper limit will be the White Fir subdivision; the lower limit will be just below Telegraph Road. Work will primarily be on public property (City, County and State) within Reno city limits, and may also include certain private properties with owner permission. These will primarily include adjacent business, railroad and owner association property.
- 3. **Project description**. Include site map and aerial photos if applicable/possible. Maps and photos must fit on 8-1/2" x 11" paper. Cite any studies that support your project. **See attached map**.
- 4. Grant priorities. Explain how the proposed project advances the TRF's grant priorities (page 2 of the cover sheet); refer to the priorities by number in your narrative. This request supports Priority VI Stewardship by funding a crew dedicated to remove trash, litter, illegal campsites and other refuse along the banks of the Truckee River and direct tributaries within Reno City limits, primarily upstream of the Glendale Treatment Plant.
- 5. **Permitting.** Provide a permitting schedule for your project along with your plan for getting the required permits. Be sure to include the cost of permitting as a line item in your budget. No permits required. In the event any site cleanup requires use of equipment below the mean high water line, we can proceed using the Carson-Truckee Water Conservancy's encroachment permit with prior notice.
- 6. If future phases of the project will be needed, identify anticipated sources of funding. This is the final phase of a three year project, with City absorbing an increasing cost of the program each year. City anticipates assuming full cost in future years. In current fiscal year (FY16/17), program funded with 59% match from City through TRF Grant #169, which expires June 30, 2017.
- 7. Principals involved in leading or coordinating the project or activity. Jeff Mann, Parks Manager, will be the project lead. Dave Barrett, Park Maintenance Supervisor, and Pam Bedard, Horticulturist, supervise and coordinate the work crew.
- 8. Number of staff positions involved in project: Fulltime 4 Part-time 4 ("Fulltime" means 100% of their staff position will be dedicated to this project; "part-time" means only a portion of their staff position will be dedicated to this project)
- Number of volunteers involved in project and an estimated number of volunteer hours. None directly, however we do have Adopt a River groups which perform cleanup projects along various sections of the river. Their time is not included as grant match.

Time Line of Project. List key dates and include project milestones. *Note*: Be realistic in your estimate of dates and milestones. List any factors that may cause a delay in implementing and/or completing the project.

•Budget approval by City Council – May 24, 2017. If City Council fails to approve the grant match, then this request will be withdrawn. Note: City cannot sign grant award letter until after budget approval.







- Start Date July 1, 2017.
 End Date June 30, 2018.
- 10. Success. Tell the committee how we will know you succeeded in what you proposed to do. Project success will be measured by the amount of debris (such as bags of trash, counts of other debris) removed from the project location, as well as the number of campsites located and removed. Success can also be determined by a reduction in calls for service to Reno Direct regarding trash & debris along the river.
- 11. Grant match. All applicants must provide a match of at least 25 percent for dollars requested. The match may be with funding and/or in-kind services. For larger grant requests, priority will be given to projects that significantly leverage the grant with funding from other sources. Complete the Grant Match section.
- 12. **Project budget** (see Sample Budget Template on page 5 of this RFP). Provide detail on line-item expenditures and show which costs are to be paid for by the Truckee River Fund grant, which expenses will be paid for by other sources, and which will be paid for with in-kind services. Other sources of funding should be provided.
 - Note 1: Project budget must be a stand-alone, one-page attachment.
 - Note 2: Indirect/overhead expenses cannot exceed 25 percent.

Grants from the Truckee River Fund are paid on a reimbursable basis for actual expenditures only. Craft your budget in such a way that requests for reimbursement correspond to the original budget.









Truckee I	Truckee River Fund			
City of Re	eno Funded Projects (Parks & Recreation Only)			
Mar-13	Hazard Tree Removal at Oxbow Park	\$32,250		
Mar-13	Truckee River Path/Bank Stabilization	\$30,615		
Feb-15	Truckee River Cleanup Crew (Year 1)	\$104,235		
May-16	Truckee River Cleanup Crew (Year 2)	\$47,787		
	Total	\$214,887		







Grant Match

Match amount t	o be provided	: \$77,045
Match details:	Please provide the form of your matching funds. If match is made up of both cash and inkind, fill in both sections. Match is: Cash \$59,554 In-kind \$17,491 Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. Indirect cost may not be counted as match. For the cash portion of your match, is the funding already being held by the applicant for	
Description of matching funds/in-kind donations:	expense.	

ATTACHMENTS

You may be asked to submit the following attachments via email. If you are asked to submit the attachments, clearly label each file with your organization's name. If you do not have the ability to email them, place each of the items listed below on a separate page and submit just one copy.

Nonprofits	submit:
	Last audited financial statements if your organization has been audited
	List of Board of Directors
	Copy of agency's IRS 501(c)(3) Tax Determination Letter
	Copy of the agency's most recent IRS Form 990

Governmental entities submit:

Departmental budget in lieu of audited financial statements







Project Budget

	No of	Hours			
Position	Pos	Per Wk	Total	TRF \$\$	CITY \$\$
Existing Maintenance Staff	1	4	\$8,327	\$0	\$8,327
Crew Leader	1	30	\$30,860	\$0	\$30,860
Work Crew	3	30	\$55,788	\$27,894	\$27,84
Supplies			\$1,600	\$800	\$800
Vehicles & Equipment Includes dedicated crew cab pickup, use of 3 yard dump truck and trash compactor; power equipment includes weedeaters,					
chainsaws and blowers.		30	\$4,000	\$0	\$4,000
Admin/Supervision	1	1.4	\$5,164	\$0	\$5,164
Total			\$105,739	\$28,694 27%	\$77,045 73%







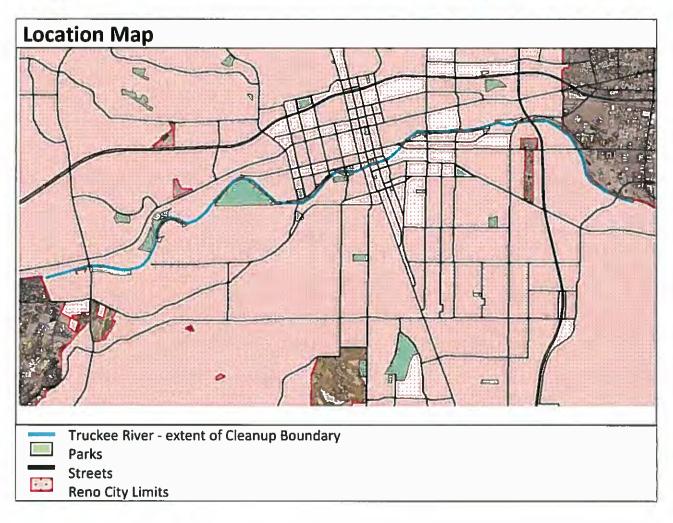
City of Reno FY 16/17 Budget Park Maintenance

Through 1/25/2017

		Adopted	YTD	Budget - YTD	%
Account	Account Description	Budget	Transactions	Transactions	Used/ Rec'd
Fund 00100 - GE	ENERAL FUND				
EXPENSE					
Salaries & V	Vages .				
7102-0000	Regular salaries	1,782,353.00	846,856.05	935,496.95	48
7104-0000	Temporary salaries	156,900.00	82,645.25	74,254.75	53
7106-0000	Overtime	2,854.00	84.37	2,769.63	3
7106-1000	Overtime-FLSA	.00	34.29	(34.29)	+++
Salaries & Wages 7	Totals	\$1,942,107.00	\$929,619.96	\$1,012,487.04	48%
Employee 8	lenefits				
7202-0000	Retirement	499,059.00	236,338.27	262,720.73	47
7204-0000	Group insurance	335,683.00	149,352.94	186,330.06	44
7205-0000	Life insurance	6,735.00	2,825.07	3,909.93	42
7206-0000	Workers comp premiums	79,664.00	46,470.69	33,193.31	58
7210-0000	Employer medicare contributions	27,397.00	13,151.01	14,245.99	48
7212-0000	Long Term Disability	6,308.00	2,047.02	4,260.98	32
7214-0000	Deferred Compensation	88,817.00	31,478.83	57,338.17	35
7299-0000	Employee benefits-Other	1,692.00	775.50	916.50	46
Employee Benefits	Totals -	\$1,045,355.00	\$482,439.33	\$562,915.67	46%
Services & S	Supplies				
7300-0000	Supplies	225,259.00	69,829.63	146,929.37	35
7400-2000	Outside services-other	224,712.00	118,506.84	106,205.16	53
7410-0000	Communication	4,950.00	2,213.24	2,736.76	45
7420-0000	Rentals	12,958.00	5,952.00	7,006.00	46
7420-1000	Motor vehicle fleet charges	195,909.00	114,280.25	81,628.75	58
7484-0000	Employee training/travel	4,710.00	2,645.28	2,064.72	56
7499-0000	Miscellaneous operating expense	13,881.00	7,650.63	6,230.37	55
Services & Supplies	: Totals	\$682,379.00	\$321,077.87	\$352,801.13	48%
Capital Outla	ay				
7340-0000	Capital outlay-non capitalized	.00	10,950.00	(10,950.00)	+++
Capital Outlay Total	ls -	\$0.00	\$10,950.00	(\$10,950.00)	+++
	EXPENSE TOTALS	\$3,669,841.00	\$1,744,087.16	\$1,917,253.84	48%













Cover Sheet

Organization Name:	Sierra Nevada Journeys				
Type:	501(c)(3) EIN#01-0881587 Governmental entity? No				
Address:	190 E. Liberty St. Reno, NV 89501				
Project Name:	Watershed Education Initiative				
Amount requested: \$32,9	998		We	bsite: www.sie	erranevadajourneys.org
This funding will be used		his			ty, experiential watershed education
sentence with a max of 2	sentences):		Rive em Tru citi:	er, such as wat powering yout ckee River. Sig zen science, an g-term sustain:	n local issues associated with the Truckee er quality and invasive species while h to protect and enhance the quality of the nificantly increase parent engagement, d volunteer components to increase the ability of our Watershed Education
				•	fostering protection of the primary water
V Dl	TT	.		rce for our con	nmunity.
Key People:	Director:			berger, CEO	
	Board	Mark Bu	rrell		
	Chair:	Nieron		C 11211	
	Project Contact:	Name: Position		Sean Hill Education Di	
	Contact.	Phone:		775-355-1688	
		Fax:		775-329-1689	
	<u> </u>	Email:			nevadajourneys.org
Organization Mission:					liver innovative outdoor, science-based
		-	•	•	o critical thinking skills and to inspire
	natural reso	urce stew	ardsl	hip.	
Has your organization	If yes,		_		
received other grants	Date award		_	ptember 2016	
from the Truckee River	Project title			atershed Educa	ation Initiative
Fund?	Amount of		\$28,446		
Yes X No	Date award		April 2016		
(please see page 7)	Project title: Amount of Award:			atershed Educa	ation Initiative
			1 60	3,041	
	Date award	ed:	Oc	ctober 2015	
		ed: ::	Oc W		ation Initiative

A. Projects that improve bank or channel stabilization and decrease erosion.
B. Structural controls or Low Impact Development (LID) projects on tributaries and drainages to the Truckee
River where data supports evidence of pollution and/or sediments entering the Truckee River.
C. Projects that remove pollution from the Truckee River.
D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are
adverse to water supply. ¹

E. Other projects that meet the evaluation criteria.

NARRATIVE REQUIREMENTS

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¹ For proposals related to weed control/eradication, contact Tracy Turner at the Community Foundation of Western Nevada for additional criteria. tturner@nevadafund.org; 775-333-5499.







1. Specific project goals and measurable outcomes and how you will measure and report them.

During the past eight years, Sierra Nevada Journeys' (SNJ) Watershed Education Initiative (WEI) has impacted over 6,100 students and more than 425 educators. This has been made possible in no small part thanks to the generous support of the Truckee River Fund. WEI educates students about the local watershed including human impacts on the watershed, water quality, and watershed protection. While in-class and field-based lessons reach students and educators, WEI's additional outreach components serve to engage families and community volunteers. Through WEI, we will successfully meet the following objectives:

Outputs	Outcomes
Deliver WEI to 783 K-8th grade students from	80% of students can correctly identify, label, and diagram the Truckee River Watershed.
throughout northern Nevada. All students receive first-	80% of students will define and diagram the components of a water cycle system and watershed system.
hand experience with the local watershed through a	80% of students will describe the interaction between the water cycle system and the watershed system.
field-study on the Truckee River or one of its	70% of students will use knowledge of storm drains to describe how individuals and communities can protect watersheds.
tributaries. 87 parents and community	80% of students will describe two ways to determine the health of the local watershed.
members volunteer for the program and serve 522	80% of students will define what happens to rainwater and associated non-point source pollutants after they enter a storm drain.
educational service hours. Provide 29 teachers with	30% of parents will read emails (based on click rates, average click rate for non-profits is 2.84%).
WEI extension lessons.	90% of teachers will report that the program is helping to build critical thinking skills among their students.
Reach 680 parents with engagement emails.	95% of students participating in "Hands in the River" curriculum complete a Truckee River issue case study on water quality in the watershed.

<u>Methods to measure outcomes</u>: Pre- and post-assessments scores completed by each participating student and teacher surveys. A consultant from the Nevada Department of Education's assessment office designed these assessments. <u>Methods to measure outputs</u>: SNJ's Education Department manages an internal database that tracks details on participating students, schools, and volunteers.

2. Project location.

The three main field sites for this program will be the Truckee River at the McCarran Ranch Preserve, (managed by The Nature Conservancy in Nevada) Galena Creek Regional Park (managed by Washoe County Regional Parks and Open Space), and the Oxbow Nature Study Area (managed by the Nevada Department of Wildlife). These locations are convenient and close to home for local students, increasing their sense of ownership, awareness and comfort with accessible nature areas.

3. Project description.

Why WEI? A recent study from The Nature Conservancy reveals that students who have had a personal experience in nature are:

- Significantly more likely to express concern about water pollution, air pollution, global warming, and the condition of the environment;
- More than twice as likely to "strongly agree" that protecting the environment is "cool";
- More than twice as likely to consider themselves a "strong environmentalist,"; and







• Substantially more likely to express interest in studying the environment in college, working in a job related to nature, or joining an environmental club at their school.²

Unfortunately, the study also notes that these personal experiences are increasingly uncommon reporting that, "The vast majority of today's children use a computer, watch TV, or play video games on a daily basis, but only about 10 percent say they are spending time outdoors every day." Through WEI, SNJ strives to provide local youth with opportunities to have a meaningful experience outdoors, thereby increasing their likelihood to value nature, engage with it, and feel empowered to care for it.

Through this funding, SNJ will serve 783 students in 29 classrooms throughout northern Nevada. Conducted over a four-week period, WEI includes three in-class lessons, one field-study experience, pre- and post-assessments, classroom extension lessons for teachers, and family and community engagement. Curriculum developed and delivered by SNJ's team of credentialed teachers aligns to state and national standards and the North American Association for Environmental Education's Guidelines for Excellence.

Watershed Education Initiative Overview

The **school-based** component includes three in-class lessons for a total of 4.5 hours of engaging instruction. Students participate in hands-on lessons that incorporate the Truckee River watershed, the water cycle, point and non-point source pollution, invasive species, sources and impacts of erosion, water conservation and stewardship. Through a case study model funded by the Truckee River Fund in 2013 students study pressing issues facing the watershed and learn how to address the problem. The case study currently focuses on the data collection and analysis of water quality indicators in the Truckee River (i.e. the collection of macro-invertebrates).

The **field-based** component includes approximately one day of outdoor science education as students hike around the Truckee or one of its tributaries. Students seek clues related to the health of the watershed and determine water quality by collecting and identifying macro-invertebrates (aquatic insects) or conducting chemical tests such as pH, dissolved oxygen, or turbidity. Students search for evidence of the New Zealand Mud Snail to learn about water quality issues. SNJ instructors encourage students to participate in stewardship projects with their friends and families such as the Truckee River Cleanup Day. SNJ will also support the Truckee River Snapshot Day, an annual student-based water quality-monitoring event.

SNJ provides five ready-to-use classroom **extension lessons for teachers** that help students prepare for and review learning objectives as well as extend and reinforce each SNJ-directed lesson. By explicitly modeling teaching methods and reinforcing with SNJ's classroom lessons we strive to support educators and multiply the effects of our student programming. These innovative extensions, funded by the Nevada Division of Forestry and Project Learning Tree, help teachers teach the Arts, Math, English Language Arts (ELA), and Social Studies through a watershed-focused lens.

To encourage **family engagement** SNJ provides parents with an email summary and pictures of their child's experience after each 4-lesson unit along with information for family-based discussion of the curriculum. This increases parent involvement, which allows individuals within families to reinforce the attitudes, motivations, skills, and behaviors learned and to foster parent–student communication about watershed-related topics. The National Parent Teacher Association identifies many benefits of family engagement, including increased student achievement, regardless of socioeconomic status, ethnic/racial background, or the parent's education.

The **volunteer component** of the program builds our capacity to involve the local community and broadens accessibility to our programming for low-income schools by helping to keep costs low. Volunteers, who are primarily comprised of retired educators, naturalists, and parent chaperones, also consistently report learning tremendous amounts in their participation with WEI. Community and parent volunteers will donate 522 hours of work in support of WEI.

² The Nature Conservancy, Connecting America's Youth to Nature, 2012 Retrieved from: http://www.nature.org/newsfeatures/kids-in-nature/youth-and-nature-poll-results.pdf







4. Grant priorities.

WEI is an education program that addresses water, water quality and watershed protection for K-8th grade students, directly aligning with grant priority VI: *Stewardship and Environmental Awareness*. Students gain first-hand experience with the Truckee River, explore human impacts on their water source, and obtain skills and knowledge to help protect the watershed. The overall long-term impacts we aim to achieve through this program include:

Students understand important science concepts related to the Truckee River watershed and can articulate how their actions affect the Truckee River watershed and local ecosystems. Students understand and discuss with family and friends how their behavior affects the Truckee River. Parents are empowered to discuss protection of our water resources with their children. Teachers use extension lessons and implement more hands-on exploration of the watershed. Parents and community members engage in watershed education directly through WEI volunteer opportunities.

The health of the Truckee River watershed and local ecosystems improves as students and their families adopt environmental stewardship practices that help reduce water pollution and human impacts.

- 5. Permitting. N/A
- 6. If future phases of the project will be needed, identify anticipated sources of funding. N/A

7. Principals involved.

Credentialed science educators on the SNJ staff will be directly responsible for coordination and delivery of watershed education programs. Sean Hill, SNJ's Education Director, will oversee the implementation of WEI. Sean is a former science teacher and holds a Bachelor of Science degree from Montana State University and a Master of Science degree in Human Dimensions of Natural Resources from Colorado State University. His passion for outdoor science education was inspired by his service as a Graduate Fellow for the Walking Mountains Science School in Avon, Colorado, and from his time spent as a science teacher in the inner-city during his service with Teach For America.

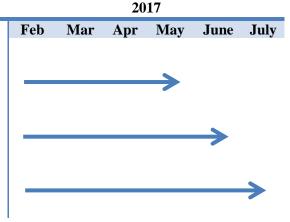
- 8. Number of staff positions involved in project: Fulltime 0 Part-time 7
- 9. Number of volunteers involved: **Eighty-seven** (87) volunteers (including field educators and parent volunteers) will donate 522 volunteer hours during the field-study portion of the program, increasing parents and community member access to watershed education.
- 10. Time Line of Project.

Recruitment/Scheduling: SNJ outreach efforts are continuous. Outreach is now underway for the spring semester. SNJ targets schools that participated in watershed programming in the past and new schools that have not received WEI.

Deliverables

Program Delivery: SNJ instructors will deliver engaging watershed education lessons to 783 students through school-based and field-based programs.

Evaluation: SNJ staff will compile student assessment data throughout the grant period. These results will inform any changes to the curriculum to ensure effective programming in the future.









July



Final Report: Submit the final report to the Community Foundation of Western Nevada. This report will include a summary of the work completed, student assessment data, and a budget update.

11. Success.

Outputs	Tracking
Deliver watershed education to 783 K-8th grade students from throughout northern Nevada.	Internal SNJ
All students receive first-hand experience with the local watershed through a field-study on	database –
the Truckee River or one of its tributaries.	Updated
87 parents and community members volunteer for the program and serve 522 service hours.	regularly
Provide 29 teachers with WEI extension lessons.	throughout the
Reach 680 parents with engagement emails.	year

Outcomes	Tracking
80% of students can correctly identify, label, and diagram the Truckee River Watershed.	
80% of students will define and diagram the components of a water cycle system and watershed system.	Pre- and post-
80% of students will describe the interaction between the water cycle system and the watershed system.	assessments – reviewed after
70% of students will use knowledge of storm drains to describe how individuals and communities can protect watersheds.	the end of each program and presented in
80% of students will describe two ways to determine the health of the local watershed.	report at end of grant period
80% of students can define what happens to rainwater and associated non-point source pollutants after they enter a storm drain.	Teacher surveys
95% of students participating in "Hands in the River" curriculum complete a Truckee River issue case study on water quality in the watershed.	Mail Chimp
30% of parents will read emails (based on click rates, average click rate for non-profits is 2.84%).	click/open rate reports
90% of teachers will report that the program is helping to build critical thinking skills among their students.	

Grant Match

Match amount to be provided:		\$13,050			
Match details:	Match is:				
	Cash	\$2,610			
In-kind		\$10,440			
	For the cash portion of your match, is the funding already being held by the applicant for this project? Yes No _X_				
Description of matching	Match prov	Match provided by bus transportation expenses paid for by the Washoe County School			
funds/in-kind donations:	District. In	District. In-kind match provided by field educator and parent volunteer hours.			







WEI BUDGET

	ORIGINAL PRO	DJECT BUDGET		
Budget Item Description	TRF\$	Other Funding Name	Match \$	Total
Program Teachers at \$18.15/hour x 812 hours, 21.65% fringe/benefits Education Director at \$25.50 x 319 hours, 17.9% fringe/benefits	\$27,519	-	\$0	\$27,519
Laborvolunteer - 87 volunteers at \$20/hr for 522 hours (6 hrs/volunteer)	\$0	SNJ Volunteers	\$10,440	\$10,440
Materials - \$2/student for 783 students for printing and program supplies and materials	\$1,566	-	\$0	\$1,566
Other (be specific): Transportation costs cover expenses associated with SNJ staff traveling to and from schools and field sites including company vehicle expenses. Approx. 1,740 miles to serve 29 classes (60 miles/class).	\$940	-	\$0	\$940
School bus transportation for students - Approx. \$90/class * 29 classes	\$0	Washoe County School District	\$2,610	\$2,610
Overhead (13%)	\$2,973		\$0	\$2,973
TOTAL	\$32,998		\$13,050	\$46,048







Continued List of Grants Received, Sierra Nevada Journeys

Date awarded:	September 2014
Project title:	Watershed Education Initiative
Amount of Award:	\$23,900
Date awarded:	March 2014
Project title:	Watershed Education Initiative
Amount of Award:	\$23,750
Date awarded:	October 2013
Project title:	Watershed Education Initiative
Amount of Award:	\$24,200
Date awarded:	March 2013
Project title:	Watershed Education Initiative
Amount of Award:	\$16,050
Date awarded:	October 2012
Project title:	Watershed Education Initiative
Amount of Award:	\$12,690
Date awarded:	October 2011
Project title:	Watershed Education Initiative
Amount of Award:	\$10,000
Date awarded:	March 2011
Project title:	Watershed Education Initiative
Amount of Award:	\$10,000

Cover Sheet

0	E C N			er Sneet	
Organization	Friends of N	vevada v	viiae	rness	
Name:	501()(2) FD1 00 00117(2)				
Type: 501(c)(3)	501(c)(3) EIN# 88-0211763 Governmental entity? No 1360 Greg St. #111 Sparks Nevada 89431				
Address:			•		
Project Name:		Noxious			and Treatment #5
Amount requested: S					evadawilderness.org
This funding will be					a Wilderness seeks to treat
this sentence with a 1	max of 2 sent	ences):			acres of noxious weeds on Humboldt-
			_		Forest lands within the Truckee River
	I			ershed.	
Key People:	Director:	Shaaror	n Neth	nerton	
Nora Kaufmann,					
Richie Bednarski	Board	Roger S	Scholl		
	Chair:				
	Project	Name	:	Nora Kaufm	nann, Richie Bednarski
	Contact:	Position	on:	Northern Ne	evada Stewardship Coordinators
		Phone	:	775-324-766	57
		Fax:		775-324-26	77
		Email	:		lawilderness.org
					adawilderness.org
					3
Organization	Friends of N	evada W	ilderr	ness is dedica	ted to preserving all qualified Nevada
Mission:	public lands as Wilderness, protecting all present and potential Wilderness from				
	ongoing threats, educating the public about the values of and need for				
	wilderness, and improving the management and restoration of wild lands.				
Has your	If yes,		<u> </u>		
organization	Date award	ed:	Apı	ril 2016	
received other	Project title				nt Rose Noxious Weed Monitoring and
grants from the				eatment #4	
Truckee River	Amount of	Award:	_	,002	
Fund?	Date award			otember 2014	
Yes _X_ No	Project title		_		nt Rose Noxious Weed Monitoring and
(use additional page	110,000 0.00	•		eatment #3	110 11000 1 101110 40 11 004 11 1011110 11119 4114
if necessary)	Amount of	Award:		5,807	
	Date award			gust 2013	
	Project title		_ `	~	nt Rose Noxious Weed Monitoring and
		•		eatment #2	it nose i toalous weed monitoring and
	Amount of Award: \$10,896				
	Date awarded: August 2012				
	Project title: 3TRF #111 Mount Rose Noxious Weed Monitoring and				
	Treatment #1				
	Amount of	Award),896	
	7 Illiount of	11waru.	φIU	,090	

DESCRIPTION OF PROJECT UNDER CONSIDERATION

D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are adverse to water supply.

NARRATIVE:

1. Specific project goals and measurable outcomes:

Goals: The goal of the Mount Rose Wilderness Noxious Weed Monitoring and Treatment Project is to protect the water quality of the Truckee River and its watershed. Eradicating noxious weeds in the Mount Rose Wilderness is critical due to its immediate proximity to the Truckee River. Noxious weeds out-compete native plants and as a result, they damage water quality, contribute to soil erosion, and degrade plant and animal habitat. Removing noxious weeds will help retain and improve watershed health by allowing native plant communities to thrive without the competition from noxious weeds. Our continued work will restore ecological conditions to a more natural state. By focusing on identified noxious weed populations, we will help in mitigate the spread of weeds throughout the Truckee River watershed and reduce the density of existing weed locales.

Methods: The methods used to control weeds in the Wilderness will be direct treatment and continued monitoring. Friends of Nevada Wilderness staff will host volunteer weed pulling events in which we will use shovels and clippers to pull musk thistle (*Carduss nutans*) and perennial pepperweed (*Lepidium latifolium*); both are listed on the state noxious weed list and the Truckee Meadow's Dirty Dozen Noxious Weed list. We will also clip mature seed heads to reduce dense regrowth the following year. Mechanical methods are the most appropriate way to treat these weeds and reduce impacts on the watershed. We will hire an AmeriCorps Service Member to assist us in volunteer recruitment, noxious weed education, and project completion. Staff and volunteers will monitor identified areas to assess outcomes and continue to document change in known populations as identified in our 5-Year Noxious Weed Management Plan, available upon request. We work in close partnership with the Truckee Meadows Weed Coordinating Group. Lastly, staff and volunteers will attend the Weed Warrior Class offered by the Cooperative Extension of the University of Nevada.

Measurable outcomes: Friends of Nevada Wilderness staff and volunteers will monitor and treat approximately 75 acres of noxious weeds. We will host eight volunteer weed-pulling events and four volunteer weed monitoring projects. These projects will not only engage and educate volunteers in the treatment of noxious weeds, but will give citizens a chance to take part in the critical stewardship of their public lands. To date we have removed over 70,000 weeds in the Mount Rose Wilderness, resulting in a decrease in density of noxious weeds, and we want to continue the hard work necessary to reduce noxious weed populations. We will also continue monitoring locations identified by the Carson City Ranger District (RD) as possible noxious weed locales. We began working with the Carson RD on noxious weed treatment and monitoring in the Hunter Creek drainage in 2006, and have hosted 40 projects in the past ten years.

2. **Project location**:

The project is focused in the northern section of the Mount Rose Wilderness: an area 5,000 acres in size. The majority of the noxious weeds are located within Hunter Creek and Belli Front areas of the Wilderness. All of the identified noxious weed locales are within the Truckee River Watershed and are two to four miles from the Truckee River. Areas of concern are the helicopter loading points used by the Carson City RD to fight the Hunter Falls Fire of 2014, which we plan to monitor closely for any invasive weed developments.

- 3. **Project description**. Staff will lead volunteers to known locales of noxious weeds, removing them with shovels and clippers as necessary. Staff and volunteers will also scout new sites and monitor existing sites as needed. See pages 4 and 5 for photos and a detailed map.
- 4. **Permitting**: As of now this project does not require any permits, we will be taking direction from our Carson Ranger District contacts.
- 5. Future phases: Musk thistle seeds can stay dormant in the soil for up to 15 years resulting in a need for continued management. We have been working on this project for ten years and have seen good results, but populations still exist. We plan to continue our efforts to make a greater

- impact on these noxious weed locales. The Truckee River Fund has generously supported this effort in the past. In addition, our weed treatment efforts have been partially funded by the National Forest Foundation (NFF)—one of our match sources. We anticipate receiving funding from the NFF again this year though funds are not yet committed.
- 6. Principals involved: Five staff members from Friends of Nevada Wilderness, including Northern Nevada Stewardship Coordinators Nora Kaufmann and Richie Bednarski, GIS Mapping Technician Jake Kastner, and two seasonal AmeriCorps Service Members. We will also be working with two Forest Service Employees: Dan Morris, Recreation Officer and Maureen Easton, District Wildlife Biologist.
- 7. **Number of staff positions involved in project:** Fulltime: 0 Part-time: 5
- 8. **Volunteers involved**: We plan to host 8 volunteer weed pull trips and four volunteer weed monitoring trips with an average of six volunteers per trip. Our outings are typically day trips ranging from 4-8 hours. This year, we hope to include at least one over-night trip to reach the more remote weed sites. We use a variety of outreach methods to recruit volunteers such as tabling, flyer placement, and social media. In addition, we utilize websites such as www.volunteermatch.com and www.volunteerm
- 9. **Timeline:** Outreach for individual volunteers and group partners will start immediately upon project approval. Logistical planning and early site visits will begin in early April. Depending upon the weather and growing season, monitoring and treatment will begin in early May, possibly going through July. Reporting will occur in late summer and fall.
- 10. **Success**: We will let the committee know of our success with written reports and with photographs. We also invite the committee to join us on any of our volunteer events to see progress firsthand. We will communicate our efforts through press releases, quarterly newsletters, and monthly e-news letters. We also update our accomplishments often through social media such as Twitter and Facebook. Lastly, we keep an organizational blog at http://friendsofnvwild.tumblr.com/ to share news with the general public.

11. Grant Match

Match amount to be provided	: \$20,872	
Match details: We have applied for two grants from The National Forest Foundation (NFF) and the National Wilderness Stewardship Alliance (NWSA) which we will use to match this grant.	Please provide the form of your matching funds. If match is made up of both cash and in-kind, fill in both sections. Match is: Cash Note: Cash match including overhead match: \$12,232 In-kind Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per	
	held by the	sh portion of your match, is the funding already being e applicant for this project? YesNo _X_
Description of matching	Matching funds will be for transportation, volunteer supplies,	
funds/in-kind donations:	tools, planning, outreach, labor, and training. In-kind matches will be made with volunteer hours.	



Perrenial pepperweed



Hunter Creek East Fork



Musk thistle florettes in bloom at Hunter Creek East Slope site



Volunteer mechanically removes musk thistle



Musk thistle set upside-down to dry out; medusa head near Hunter Creek Road

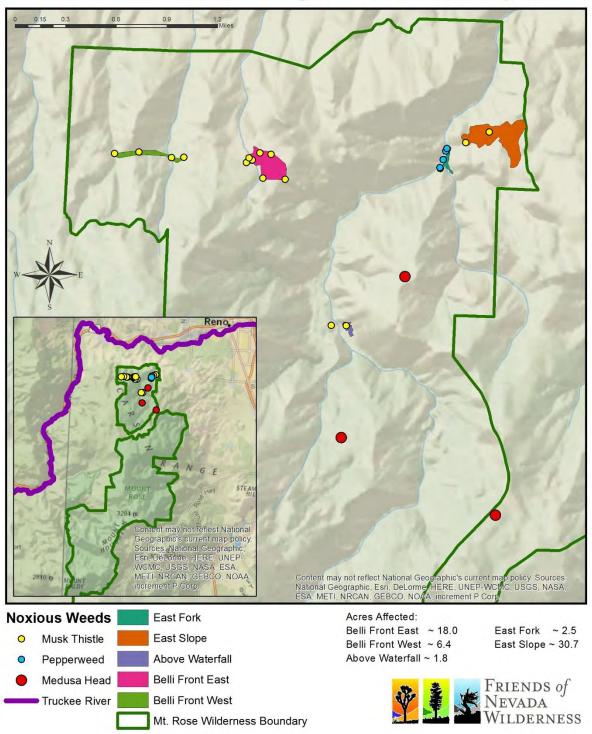


Musk thistle BEFORE



Musk thistle AFTER

Mt. Rose Wilderness Noxious Weed Monitoring and Treatment Project



12. PROJECT BUDGET

Budget Item Description	Truckee River Fund	Match Source	Match Amount	Total
Payroll Expenses	\$15,351	NFF	\$10,470*	\$25,821
AmeriCorps Stipend	\$1,950			\$1,950
Volunteer Labor		In-kind	\$8,640	\$8,640
Printing and Reproduction	\$500	NFF	\$125*	\$625
Project Supplies	\$350	NFF	\$100*	\$450
Training Expenses	\$500	NWSA	\$225*	\$725
Travel and Meals	\$450	NFF	\$200*	\$650
Database/DeLorme	\$382			\$382
Subtotal	\$19,483		\$19,760	\$39,243
Overhead (at 15%)	\$2,922	Overhead (at 10%)	\$1,112*	\$4,034
TOTAL	\$22,405		\$20,872	\$43,277

^{*}Overhead match based only on cash match which totals \$11,120

BUDGET NARRATIVE

Payroll Expenses: Payroll expenses are calculated at 25% of Stewardship Coordinator's yearly salary, 5% of Grant Coordinator's salary, and 2% of a Director's budget. Costs include all project planning, facilitation, data entry, and program oversight, as well as follow up, volunteer recruitment and Truckee Meadows Weed Coordinating Group meetings.

AmeriCorps Stipend: This helps cover the cost of one of our AmeriCorps Service members for a portion of the field season.

Volunteer Labor: This is calculated at 20.00/hr for 12 volunteer events with at least 6 people at each event for 6 hours; 20/hr x 6 volunteers x 6 hrs x 12 projects = 8,640.

Printing and Reproduction: This will go towards printing flyers and brochures for advertising our events and volunteer recruitment. A portion of this will go towards our twice a year newsletter and to help recruit volunteers and share our weed pulling success.

Project Supplies: This portion will help cover the cost for first aid kits, tool/supply maintenance, and volunteer appreciation, etc.

Training Expenses: The University of Nevada, Reno Cooperative Extensions will potentially be hosting a Weed Warrior Class. This is a two day intensive class focused on identification and management. It is \$50 per person for staff and volunteers to attend. This will also cover a portion of a Wilderness First Responder Course. In addition, we will continue to update our invasive weed reference materials for staff/volunteers.

Travel and Meals: This portion accounts for the use of a company vehicle and UTV which may be used to access the Hunter Creek Road, as well as mileage reimbursement for distances driven with personal vehicles. It also accounts for volunteer food such as trail snacks, Gatorade, etc.

Database/DeLorme Device: We have emergency satellite devices we take on each trip and this will cover the subscription cost for two months.

Match will be met from two projected grants, NFF and NWSA, as well as volunteer labor. We have received NFF MAP funding in the past and expect to receive it again for the 2016 season. \$5,470 of NWSA salary expenses have been secured and allocated to match the Truckee River Fund salary expenses.



Proposal for Truckee River Fund 2017 Grant Funding by Sierra Business Council

Sierra Business Council: 501(c)(3) EIN# 68-0397204

Sierra Business Council ("SBC") is a private nonprofit corporation; not a governmental entity, and is located at 10183 Truckee Airport Road P.O. Box 2428

Truckee, CA 96161

Project Name: Lake Tahoe Water Trail Educational Wayfinding Interpretive Signage (LTWT Signage/Signs)

Amount Requested: \$29,645.40 Website: www.SierraBusiness.org

This funding will be used for the design and production of LTWT Signage for 10 LTWT trailhead sites with regulated launch/landing facilities which includes six USFS Lake Tahoe Basin Management (LTBMU) public beaches, and four California State Park (CSP) public beaches. Project funding will complete the LTWT educational trailhead system that includes twenty public beaches with launch/landing sites, approved by lake wide land managers, municipalities, and public utility districts who manage public lake access and resource conservation including the prevention of aquatic invasive species that affect Lake Tahoe's only outlet, the Truckee River.

Key People:

SBC President: Steven Frisch Board Chair: Allan Pietrasanta

Project Contact: Becky Bell, Lake Tahoe Water Trail Project Manager

Phone: (530) 318-6454 Fax: (530) 582-1230

Email: bbell@sierrabusiness.org

SBC Mission Statement: Sierra Business Council pioneers and demonstrates innovative approaches and solutions to increase community vitality, economic prosperity, environmental quality, and social fairness in the Sierra Nevada.

SBC has not received other grants from the Truckee River Fund.

Description of Project under Consideration:

The LTWT Signage Project is a comprehensive bi-state, lake wide stewardship and environmental awareness program designed to educate and motivate non-motorized boaters (paddlers) to help prevent the spread of aquatic invasive species (AIS) in the Truckee River watershed through identified stewardship practices prescribed by the Tahoe Resource Conservation District (Tahoe RCD).



1. Project Goals and Measureable Outcomes

A. Project Goals

The project goals are to design and produce 20 LTWT Sign Panels for 10 designated LTWT Trailheads at public beaches (2 signs per location) for the 2017 paddle season, featuring AIS self-inspection and prevention information and a wayfinding map to direct paddlers to public launch/landing sites in order to mitigate substantial threats to water quality and the watershed caused by Lake Tahoe paddlers.

B. Measurable Outcomes

Measurable outcomes to achieve project goals includes two phases for the design, production, and delivery of the LTWT Signage that will be installed by LTBMU and CSP at their sites by September 29, 2017.

1. Phase One Measureable Outcome: Temporary Signage

Since fabrication of the permanent LTWT Sign Panels takes 8 to 10 weeks, in order to have LTWT Signage installed for the 2017 paddle season, 10 full color/full size, 24" x 36", durable plastic UV coated laminated Sign Panels will be designed, produced, and delivered to LTBMU and CSP land managers for their installation by July 4, 2017. Phase One begins with the intensive detailed task of designing the 10 custom Sign Panels that requires ongoing communication/reviews/proofs with land mangers and designers to ensure accuracy.

2. Phase Two Measureable Outcome: Permanent Signage

Twenty permanent 24" x 36" LTWT Sign Panels for the 10 LTWT Trailhead sites (2 panels per site) will be fabricated and delivered to LTBMU and CSP by September 29, 2017 for their installation and maintenance. Two Sign Panels per site location are required in order to help paddlers find public launch/landing sites from land and on-the-water for safety purposes and to reduce erosion and direct paddlers away from sensitive natural resources such as marshes and Tahoe Yellow Cress populations.

C. Measurement and Reporting

Production and delivery of the temporary and permanent LTWT Signage will be the key measurement metric. Measurement of the progress and completion of the goals, including delivery dates/receipt and installation by land managers at their sites, will be documented in the required SBC quarterly Project reports and invoices. Measurement of LTWT Signage usage and its influence on paddler stewardship behavior, AIS awareness and self-inspection participation, and land manager public access regulatory compliance can only be obtained by LTBMU and CSP land managers with their own intercept studies and research. Ancillary measurements by SBC include traffic to the LTWT website, www.LakeTahoeWaterTrail.org, and AIS/resource education pages that include the Tahoe RCD Tahoe Keepers and League to Save Lake Tahoe's Eyes on the Lake recreation stewardship programs, and the Tahoe Funds' Take Care AIS and Dog Waste prevention messages/images.

2. Project Location

The 10 LTWT Signage Project locations in the Lake Tahoe basin are listed below along with the land manager.

- 1. Zephyr Cove Resort, NV LTBMU
- 2. Round Hill Pines Beach/Marina, NV LTBMU
- 3. Nevada Beach/Campground, NV LTBMU
- 4. Pope Beach, CA LTBMU
- 5. Baldwin Beach, CA LTBMU

- 6. Meeks Bay Resort, CA LTBMU
- 7. Emerald Bay State Park, CA CSP
- 8. DL Bliss State Park, CA CSP
- 9. Sugar Pine Point State Park, CA CSP
- 10. Kings Beach State Recreation Area, CA CSP



3. Project Description

The Project will complete the design and production of LTWT Signage for the 10 LTWT launch/landing sites circled in red on the map, to complete the designated 20-Trailhead educational system shown.

Ten other LTWT Trailheads are complete or in-progress with secured funding and SBC management, including:

NLTRA/Placer County, CA Grant:

- 1. Commons Beach
- 2. Lake Forest Boat Ramp/Campground
- 3. William Kent Beach & Campground
- 4. Carnelian Bay/Watermans Landing
- 5. North Tahoe Beach
- 6. Tahoe Vista Recreation Area

NV Department of Wildlife Funds:

- 1. Sand Harbor, Nevada State Park
- 2. Cave Rock, Nevada State Park

City of South Lake Tahoe Funds:

- 1. El Dorado Beach, CA
- 2. Regan Beach, CA

In order to have LTWT Signage installed at the 10 Project locations for the 2017 paddle season, following the intensive design and



approval process for the 10 custom Sign Panels with LTBMU and CSP, 10 (1 sign per location) full color/full size, 24" x 36", temporary signs made of durable plastic, laminated and UV coated will be ordered and delivered within 1 to 2 weeks to LTBMU and CSP before July 4, 2017 for their installation, which completes Phase One. At the same time, 20 permanent Sign Panels (2 panels per location) are ordered, which take 8 to 10 weeks for fabrication and delivery. Phase Two includes intensive review of art files and printing proofs by Bell/SBC and Fallon Multimedia, until final delivery of permanent signage to LTBMU and CSP by September 29, 2017 for their installation, management, and maintenance. Permanent Sign Panels are 24" wide x 26" high x 1/8" thick, full bleed, 12-color HD digitally printed, high pressure laminate panels, graffiti-proof, UV coated, moisture and scratch-resistant, and come with a 10-year warranty from the panel manufacturer.

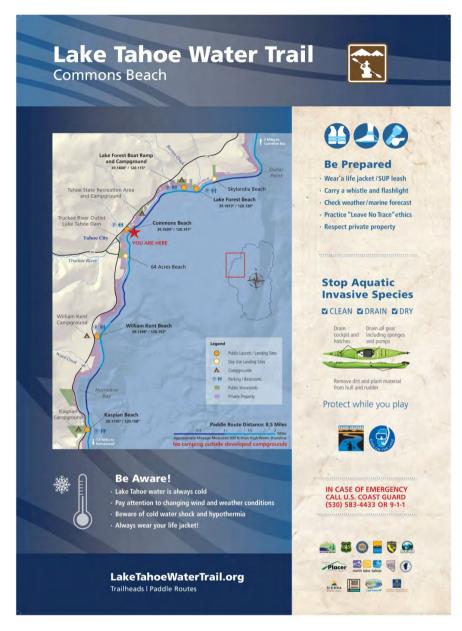
Paddling at Lake Tahoe has reached a critical mass, as well as the high alert for the prevention and control of AIS in the Lake Tahoe basin and Truckee River Region. In 2016, Tahoe RCD reported AIS prevention efforts for over 12,000 paddlers in the Lake Tahoe basin occurred at public beach kiosks, boat ramps and park entrances, compared to only 1,536 watercraft screenings in 2009. Tahoe RCD watercraft inspectors also educated over 3,000 power boaters and paddlers at Prosser, Boca, and Stampede Reservoirs. As such, six regional land managers and recreation providers who manage public lake access and resources – LTBMU, CSP, Nevada State Parks, California Tahoe Conservancy, Tahoe City Public Utility District, and the City of South Lake Tahoe – agreed to develop an educational LTWT trailhead system with 20 locations/Signs coordinated by SBC using the LTWT because of its strong recognition by paddlers. Combining stewardship with recreation, the LTWT is a72-mile water route with paddler education tools including a website, maps, Water Safety brochure, and Trailhead Signage promoted through the SBC "72 Miles of Pure Liquid Fun" marketing campaign.



Along with input from public/private stakeholders including Tahoe RCD and the Lake Tahoe AIS Outreach Committee – the six land managers developed the main educational messages – AIS prevention, resource conservation, water safety, and public access – that encase a wayfinding mapped route. In 2016, Bell/SBC managed the funding and collaborative process for developing the master LTWT Sign Panel created by Greg Brady and Fallon Multimedia who will design the ten custom Project Sign Panels to ensure consistency. SBC also obtained funding and managed the development, design, and production of the 10 completed or in-progress LTWT Signs listed on Page 3.

4. Grant Priorities

The Project advances the Truckee River Fund Grant Priorities 1. Aquatic Invasive Species, and VI. Stewardship and Environmental Awareness by completing a high-demand, regionally-supported educational program designed to prevent the spread of AIS into the Truckee River headwaters and watershed, and leverage AIS education programs by grant recipients such as Tahoe RCD and the Tahoe Fund.



5. Permitting

No permitting is required. Permits for LTWT Signage are covered by the individual LTBMU and CSP interpretive/wayfinding signage MOU agreements with the Tahoe Regional Planning Agency (TRPA). LTWT Signage is a designated TRPA Environmental Improvement Project - TRPA EIP # 04.01.01.0012.

6. Future Phases

No future phases are needed. Land managers at LTBMU and CSP, and all 20 LTWT Trailhead sites, have agreed to be responsible for funding and managing the installation and maintenance of LTWT Signage.

7. Principals Involved

Steven Frisch, President, and Angelo Genasci, Director of Development, will be updated on the overall progress of the Project to ensure it meets the SBC LTWT business model objectives that promote stewardship of the watershed supported by businesses and individuals. The symbiotic relationship of the LTWT business model – where recreation, innovation, and stewardship intersect - nurtures the interconnected economic, social and environmental assets - crucial for sustaining the LTWT and Truckee River Region community vitality.



8. Staff Involved

Becky Bell, SBC LTWT Project Manager, will continue her full time position to manage the entire Project from planning, reporting, coordination of design and production process, meetings and communication with LTBMU, CSP, sign designers and production contractors to ensure a high quality product, and time line deliverables.

9. No volunteers will be in involved in this Project.

10. Project Time Line

Following is an estimated Project time line based upon the funding grant awarded on March 15, 2017. Project will commence April 3, 2017 (pending approval/date by TMWA) and conclude September 29, 2017.

- o April 3 Obtain Truckee River Fund logo to include on 10 LTWT Signage Panels to promote support.
- o April Meet with LTBMU and CSP land managers to review Sign Panel design elements, content and site specifics including mapped route. Submit input and mapped route files to Greg Brady with directions for customization; send 10 custom routes to LTBMU and CSP land managers for input/review. Submit edits to Brady; upon approval by land managers submit to Fallon Multimedia for insertion into 10 custom Sign Panels along with specific directions from land managers and the Truckee River Fund logo.
- o April 3 June 2 Coordinate and manage the review process with Brady, Fallon Multimedia and land managers to ensure accuracy of 10 Sign Panels, complete necessary amendments, and obtain final approval.
- o June 2 June 9 Upon final approval of 10 Sign Panels with LTBMU and CSP land managers, work with Fallon Multimedia to order 10 Temporary Sign Panels and 20 Permanent Sign Panels (2 per location).
- o June 9 June 23 Deliver 10 Temporary Sign Panels to LTBMU and CSP land managers by July 4, 2017 to complete Phase One Project time line. Produce report and submit with invoices for reimbursement.
- O June Sept 29 Coordinate, manage, and oversee file/print review process and production of permanent Sign Panels with Fallon Multimedia and production vendors, including delivery to LTBMU and CSP by or before September 29, 2017 to complete Phase Two. Obtain validation of installation of 20 permanent Sign Panels by LTBMU and CSP at 10 sites. Produce final reports and submit with invoices for reimbursement.

11. Success

Project success will be achieved once the 20 LTWT Permanent Sign Panels are installed at the 10 Project locations by the LTBMU and CSP land managers by September 29, 2017.

12. Grant Match

Match amount to be provided: \$11,204.60

Match is:

Cash	\$2,804.60
In-Kind	\$8,400.00

For the cash portion of our match, funding is already being held by SBC for the project.

Description of matching/in-kind donations: 38% of total grant request

Cash: 9% of total grant request for Overhead Expenses. Includes Bell's travel expenses to LTBMU and CSP offices, meetings with designers, office expenses for multiple print outs of Sign Panels for proofing, editing, and review, and reporting and management documentation; represents 50% of total travel and office expenses.

In-kind Donations: 28% of total grant request for Bell/SBC Project Management Direct Labor: 420 hours of 600 total hours; represents 70% of total hours required to complete Project.



13. Project Budget

Phase One: April – June 2017

Budget Item Description	Truckee River Fund \$	SBC Match In-Kind/\$	Total
Design Fees	\$11,500.00		\$11,500.00
Production Costs	\$1,600.00		\$1,600.00
Permitting	NA		\$0
Direct Labor – SBC Project	\$5,140.80		\$5,140.80
Management	(180 hours at \$28.56)		
Overhead	\$1,402.30	\$1,402.30	\$2,804.60
Phase One TOTAL	\$19,643.10	\$1,402.30	\$21,045.40

Phase Two: July - Sept 2017

Budget Item Description	Truckee River Fund \$	SBC Match In-Kind/\$	Total
Design Fees	\$5,000.00		\$5,000.00
Production Costs	\$3,600.00		\$3,600.00
Permitting	NA		\$0
Direct Labor – SBC Project		\$8,400.00	\$8,400.00
Management		(420 hours at \$20)	
Overhead	\$1,402.30	\$1,402.30	\$2,804.60
Phase Two TOTAL	\$10,002.30	\$9,802.30	\$19,804.60
PROJECT TOTAL	\$29,645.40	\$11,204.60	\$40,850.00

Project Budget Notes

Design Fees: \$16,500.00 Total

- 1. Greg Brady Design \$1,500 Design of 3 master mapped routes, 10 customized routes per Sign panel (Phase One: \$1,500)
- 2. Fallon Multimedia \$15,000 Design, layout, proofing, and management of 10 custom Sign Panels with Brady, Bell, land managers, and two production firms; Management of final design file proofs and coordination and confirmation of final delivery with Bell. (Phase One: \$10,000; Phase Two: \$5,000)

Production Costs: \$5,200.00 Total

- 1. J&R Sign Company \$600 Production of 10 Temporary Sign Panels (1 per site), includes shipping and delivery fees (Phase One: \$600)
- 2. Integrative Graphics \$4,600 Production of 20 Permanent Sign Panels (2 panels per site/10 sites), includes shipping and delivery fees (Phase One: \$1,000; Phase Two: \$3,600)

Permitting: \$0 - LTWT Signage Permitting is covered under individual LTBMU and CSP MOUs with TRPA Direct Labor: SBC Project Management Hours: \$5,140.80

180 hours or 30% of 600 Total SBC Project Management Hours by Project Manager, Becky Bell. Hourly rate of \$28.56 is at cost; does not include overhead or employee fringe benefits.

Total estimated SBC Project Management Labor is 600 hours due to the meticulous level of details, planning, coordinating, and management of entire Project from communications between land managers and designers to final fabrication and delivery. While two-thirds of grant funds are allocated to hard costs, Project success is contingent upon the management of the intricate steps.

Overhead: \$2,804.60; 50% of travel and office expenses by Bell/SBC Project Manager

As required, SBC will submit progress reports and invoices for reimbursement of actual expenditures based on the completion of identified tasks under Phase One and Phase Two, and may request a percentage of Phase One billable tasks up front, at the beginning of the Project.







Cover Sheet

Organization Name:	The Nature Cons	The Nature Conservancy in Nevada			
Type:	501(c)(3) EIN# 53-0242652 Governmental entity? Y/N No				
Address:	1 E, 1st St, Suite 1007 Reno, NV 89501				
Project Name:	<u> </u>	ervation Fore	casting	for the Truckee Riv	er Watershed
Amount requested: \$60,000			We	bsite: www.na	ature.org/nevada
This funding will be used to sentence with a max of 2		his	The Neva	ide Chapter of TNC is undertaking a	targeted study that will use Landscape Conservation Forecasting, a mapping and stare-and-transition
Key People:	Director: Juan Palma				
	Board Chair:	Joel I	Laub		
	Project Contact:	Name:		Mickey F	lazelwood
		Positio	n:	Truckee	River Project Director
		Phone:		775.322.4990 x3116	
				775.322.	5132
		Email:		mhazelw	ood@tnc.org
Organization Mission:	The mission of	The Nature	Conse	ervancy is to conse	erve the lands and waters on which all life depends
Has your organization	If yes,				
received other grants	Date award	led:	Sep	tember 5, 2014	
from the Truckee River	Project title		Opti	mizing Restoration Is	nvestments in the Truckee River Watershed
Fund?	Amount of	Award:	\$50,000		
Yes No	Date award	led:	Mar	ch 21, 2013	
(use additional page if	Project title	::	Truc	kee River Watershe	d Restoration - Forest Thinning at Independence Lake
necessary)	Amount of	Award:	\$41.	,300	
Yes	Date award	ed:	Sep	tember 19, 2012	
	Project title		Inde	pendence Lake Woody F	uels Reduction for Fire Resilience - Year 3 Supplemental Funding
	Amount of	Award:	\$30	,000	
A. Projects that	at best fits the improve bank	project yo or channe	ou are	oilization and de	rk no more than three categories: crease erosion. ects on tributaries and drainages to the Truck

NARRATIVE REQUIREMENTS

adverse to water supply.3

River where data supports evidence of pollution and/or sediments entering the Truckee River.

D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are

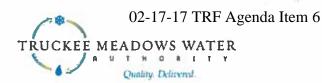
C. Projects that remove pollution from the Truckee River.

E. Other projects that meet the evaluation criteria.

³ For proposals related to weed control/eradication, contact Tracy Turner at the Community Foundation of Western Nevada for additional criteria. tturner@nevadafund.org; 775-333-5499.







Grant Match

Match amount to be provided:		d: \$25,000					
Match details:	Please provide the form of your matching funds. If match is made up of both cash and inkind, fill in both sections.						
	Match is:						
	Cash	\$ 25,000					
	In-kind	\$					
	Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. Indirect cost may not be counted as match.						
		n portion of your match, is the funding already being held by the applicant for ? Yes No 7					
Description of matching funds/in-kind donations:	funds hav	ching funds will come from a grant from NV Energy. These we already been received by TNC and budgeted for data imagery) acquisition and classification.					

ATTACHMENTS

You may be asked to submit the following attachments via email. If you are asked to submit the attachments, clearly label each file with your organization's name. If you do not have the ability to email them, place each of the items listed below on a separate page and submit just one copy.

Nonprofits submit:

Nonprofits	submit:
×	Last audited financial statements if your organization has been audited
×	List of Board of Directors
×	Copy of agency's IRS 501(c)(3) Tax Determination Letter
x	Copy of the agency's most recent IRS Form 990
Governmer	ntal entities submit:

Departmental budget in lieu of audited financial statements

Project Description

- 1. Specific project goals and measurable outcomes and how you will measure and report them. The immediate goals of the Landscape Conservation Forecasting (LCF) -based Truckee River watershed study The Nature Conservancy (TNC) is undertaking are to:
 - assess and quantify the potential for disturbances, including wildfires and climate change, to impact the forested watershed's snow pack retention, runoff characteristics, and erosivity;
 - quantify the expected change in sediment runoff and sediment loading of the mainstem, key tributaries, and reservoirs of the Truckee River system, as well as the change in timing and volume of flows as a result of those impacts;
 - quantify the economic impacts that may be realized as a result of these disturbances and subsequent sedimentation and changes in flows; and
 - assess the potential to avoid those economic impacts through more effective land management actions, including forest thinning and prescribed fire

TNC will draft a formal report outlining the results of the study to share with project funders and stakeholders upon completion of the study.

The long-term goal of the watershed study is to make a compelling case for stakeholders to make new investments to support greater measures to protect our source waters and increase regional water security through public/private partnerships. This study is building upon the conclusions of the recently completed Resource Investment Optimization System (RIOS) model-based study, partially funded through Truckee River Fund (TRF). The RIOS study presents a compelling case for additional land protection and dirt road maintenance for the benefit of our water supply. The RIOS results have been embraced by key stakeholders, including the U.S. Forest Service (USFS) and Truckee Meadows Water Authority (TMWA).

The RIOS study was limited in its scope, however, as the model was not designed to analyze wildfire risk and the potential subsequent impacts of wildfire to our water supply. TMWA, the USFS, and TNC agree that wildfire and climate change are likely to be critical drivers of water supply and water quality in the Truckee River watershed. This second study using TNC's Landscape Conservation Forecasting model, coupled with hydrologic and sediment models, will address the wildfire and climate change drivers. The LCF study will enable development of a management plan for the health of the forested watershed and regional water security.

Our long-term success will be measured by our ability to work with watershed stakeholders to develop: a) the proposed forested watershed management plan and the enabling agreements; b) a structure for a water fund; c) funding mechanisms for implementation of the water fund; and d) methods to implement and monitor the plan. Beyond development of the management plan, most of this work will take place outside the term of the requested funding. However, we would present a draft management plan and other project updates to the TRF as soon as they are available.

2. Project location.

The project includes the forested portion of the Truckee River watershed from the outlet of Lake Tahoe to Verdi, including the eastern slope of the Sierra Nevada.

3. Project description.

The RIOS watershed assessment by Podolak et al. (2017) indicates that management of the upper Truckee River watershed, in the form of increased land protection and dirt road maintenance, would reduce sediment delivery and improve water quality and water security for downstream users. However, this assessment was not able to account for potential high intensity wildfires and subsequent erosion and sedimentation due to those events, potential vegetation community shifts due to climate change, nor potential changes in water supply due to changes in timing and amount of snow versus rain precipitation.

The Truckee River watershed originates in California and includes Lake Tahoe, but about 75 percent of the watershed is located in Nevada. Most water demand for Truckee River water is also in Nevada (BOR, 2016), but the majority of the forested watershed is located in California, as the river transitions from the Northern Sierra Nevada to the Great Basin. The hydrology of the Truckee River basin is dominated by snowmelt, and the river is fully appropriated. So potential changes in the timing and amount of snow accumulation in the basin could stress water security for the basin. The BOR (2016) assessment of climate risk for the Truckee River basin indicated that mean air temperatures were projected to increase over future decades relative to the 1990s, and median basin snowpack was projected to decrease. These findings were consistent with analysis of historical records that showed an increasing trend of mean annual temperature and a decreasing trend in April 1 snow water equivalence (SWE) from 1950 to the present (BOR 2016). In addition to altering the timing of snowmelt runoff, these projected changes could impact vegetation dynamics.

In addition to water quantity, the water quality of the Truckee River is important for water users in the basin. In particular, the Truckee Meadows Water Authority (TMWA; tmwa.com) supplies high-quality drinking water to more than 385,000 people in the Reno-Sparks metropolitan area, and the Truckee River is the primary source of TMWA's water supply. Since a large portion of the watershed above the Reno-Sparks area is forested, projected reduction in snowpack and higher air temperatures could lead to increased risk of large-scale wildfires (Westerling et al. 2006). Besides climate change, there is evidence that historic forest management practices have left the headwaters forest more vulnerable to large-scale wildfire than is either desirable or necessary. Large-scale wildfire events combined with large floods could lead to sediment erosion and transport (Miller et al. 2011) that would compromise drinking water supplies. Furthermore, projected changes in climate could alter vegetation characteristics in the upper watershed, reducing resilience of the watershed to erosion and further affecting snowpack and runoff.

Thus, the Nevada Chapter of TNC has undertaken a targeted second study that will use Landscape Conservation Forecasting (LCF; Provencher et al. 2013), a mapping and state-and-transition modeling approach that simulates vegetation succession under different management scenarios for conservation, coupled with hydrologic and sediment modeling. TNC began the first steps of preparing for data collection and analysis during spring 2016 and began data collection and ground trothing during summer 2016. Scenarios of climate change and disturbances such as wildfire, floods, and droughts will be simulated, followed by an assessment of water resource impacts that would result from those disturbances. Vegetation raster outputs from LCF will be used with Precipitation Runoff Modeling System (PRMS) models developed for the BOR (2015) Truckee Basin Study to quantify changes in snowmelt and runoff. The Water Erosion Prediction Project (WEPP) model will be used with the LCF vegetation raster maps to quantify erosion and transport. Coupling LCF outputs with hydrologic and sediment models represents groundbreaking science, and its first application will be in the Truckee River watershed. TNC is currently working to build the models and will begin model runs during summer 2017. The results of these models will also allow for quantification of economic impacts that may be realized as a result of these disturbances and subsequent sedimentation and our ability to avoid those impacts through a set of land management activities.

Through the RIOS study and stakeholder process, the forested portion of the Truckee River watershed was identified as a potential management area that would be suitable for a "water fund" that raises capital for investments in high return-on-investment management actions (Podolak et al. 2017). While the RIOS study brought to light the importance of land protection and dirt road maintenance, development of an effective forested watershed management plan to protect our water resources will require identification of management actions that would reduce risks to large-scale wildfire and increase watershed resilience to climate change.

The final product of the LCF study will be a forested watershed management plan emphasizing water resource protection for the headwaters from the outlet of Lake Tahoe to Verdi, including the eastern slope of the Sierra Nevada. The plan will integrate the results of the RIOS study with those of the LCF study. The management plan will serve as the basis for developing a water fund and for attracting additional watershed investment capital. The estimated cost of the LCF study is approximately \$390,000 of which TNC is requesting \$60,000 (approximately 15% of total budget) from the TRF. Funding has already been provided by the National Fish and Wildlife Foundation (NFWF) and NV Energy, and the balance would come through a pending grant request from the BOR Desert Terminal Lakes program.

[BOR] Bureau of Reclamation. 2016. SECURE Water Act Section 9503© - Reclamation Climate Change and Water 2016. Denver, CO: Bureau of Reclamation, Policy and Administration. Available at https://www.usbr.gov/climate/secure/ (accessed 1/23/17).

[BOR] Bureau of Reclamation. 2015. Truckee Basin Study: Basin Study Report. Bureau of Reclamation. Available at https://www.usbr.gov/watersmart/bsp/completed.html (accessed 1/25/17).

Miller ME, MacDonald LH, Robichaud PR, Elliot WJ. 2011. Predicting post-fire hillslope erosion in forest lands of the western United States. International Journal of Wildland Fire 20:982-999.

Podolak K, Lowe E, Wolny S, Nickel B, Kelsey R. 2017. Informing watershed planning and policy in the Truckee River basin through stakeholder engagement, scenario development, and impact evaluation. Environmental Science and Policy 69:124-135.

Provencher L, Anderson T, Low G, Hamilton B, Williams T, Roberts B. 2013. Landscape Conservation Forecasting for Great Basin National Park. Park Science 30: 56-67.

Westerling AL, Hidalgo HG, Cayan DR, Swetnam TW. 2006. Warming and earlier spring increase western U.S. forest wildfire activity. Science 313:940-943.

4. Grant priorities.

This project falls under TRF's grant priority VIII. Leverage Stakeholder Assets and Participation. The LCF study stems from an assessment of various stakeholder interests in all aspects of river water quality, watershed protection, source water protection and species enhancement completed through the previously TRF-funded RIOS study. During this study, TNC will continue to work closely with key stakeholders to ensure stakeholder interests are appropriately addressed in this innovative study and that key stakeholders are party to the development of a management plan for the forested watershed. Also under grant priority VIII, leveraging available funds and other assets is one of the longer term goals of the proposed study and stakeholder outreach, as we will use the results as a tool in our effort to attract new investments to leverage existing land manager budgets and existing sources of conservation/restoration funding. The long-term goals of the project would also fall under TRF's grant priority II. Watershed Improvements, as the new investments would be directed to increasing the pace

and scale of land management activities to address erosion and the resulting sediment and related pollutant discharges to the river.

5. Permitting.

No permitting will be required to complete this project.

- 6. If future phases of the project will be needed, identify anticipated sources of funding. Beyond the term of this grant request, TNC and partners will continue to develop the organizational structure, enabling agreements, and funding mechanism(s) to create a water fund. Funding for the balance of the project needs has been requested from the U.S. Bureau of Reclamation's Desert Terminal Lakes program. That grant request is currently under review. We are receiving positive feedback from the review and have been told the review should be complete in the next couple of months. The funding will likely be made available in spring 2017.
- 7. Principals involved in leading or coordinating the project or activity. The following TNC staff will have major roles in the project:
 Mickey Hazelwood, Truckee River Project Director for TNC
 Louis Provencher, Director of Conservation Science for TNC
 Kevin Badik, Rangeland Ecologist for TNC
 Laurel Saito, Water Program Director for TNC
- 8. Number of staff positions involved in project:

No staff will be dedicated to this project full time. Part-time Staff include 6 TNC staff members.

9. Number of volunteers involved in project and an estimated number of volunteer hours. No volunteers will be involved in this project.

10. Time Line of Project.

We estimate the vegetation dynamics (LCF) portion of the study will be complete one year from now, or roughly by February 2018. During that time, we will continue to work with key stakeholders to develop partnerships and draft enabling agreements. Upon completion of the LCF portion of the study, the outputs of that study will be coupled with hydrologic models, and that part of the study is expected to take no more than one year. Within two years, or roughly by the end of 2018, we should be in position to begin drafting a forested watershed management plan that would govern implementation of a water fund program.

11. Success.

Within the term of this grant, our first measure of success will be completion of vegetation dynamics (LCF) portion of the study. Coupling LCF outputs with hydrologic and sediment models has not been done before, and applying this technology and methodology to the Truckee River watershed will be groundbreaking science. That said, LCF and the hydrologic models being used meet the scientific rigor required by land management agencies, and TNC has already used LCF to support large-scale management plans and their implementation on both USFS and U.S. Bureau of Land Management (BLM) managed lands. Our next measure of success will be the enlistment of key partners and the execution of partnership agreements.

Following the formal establishment of partnerships, and outside the term of this grant request, the next measures of success will include coordinated development of a watershed management plan, development of funding mechanisms, and finally implementation of on-the-ground management activities.

Total Project Budget

				Match\$			Re	clamation		
Budget Item	TRF\$		NV Energy*		1	NFWF\$		DTL\$**		Total
Labor - TNC staff	\$	28,980			\$	25,000	\$	120,149	\$	174,129
Consultant (hydrologic modeling)							\$	12,000	\$	12,000
Consultant (workshop moderator)							\$	12,000	\$	12,000
Consultant (software modification)							\$	9,600	\$	9,600
Consultant (satellite imagery)	\$	20,000	\$	21,187	\$	50,000	\$	18,813	\$	110,000
Total Direct Cost	\$	48,980	\$	21,187	\$	75,000	\$	172,562	\$	317,728
ICR @ 22.5%	\$	11,020	\$	3,813	\$	16,875	\$	38,826	\$	70,535
Total	\$	60,000	\$	25,000	\$	91,875	\$	211,388	\$	388,263

^{*}NV Energy Grant ICR = 18%

^{**}DTL proposal is pending.

Organization Name:	Nevada Lan							
Type:	501(c)(3) EII	N # 88-02	87591		Governmental entity? N			
Address:	PO Box 202	88, Reno	NV 89	515				
Project Name:	One Trucke	e River Ph	iase I A	Action				
Amount requested: \$412	2,454		Web	site: www.ne	evadalandtrust.org			
This funding will support Phase I Action Items fror River Management Plan term sustainability of the	n the One Truc and to insure I	kee ong-	Proje	ect website:	www.onetruckeeriver.org			
Key People:	Director:	Alicia R	leban					
Christi Cakiroglu Alicia Reban	Board Chair:	Karen I	Ross					
Lindsey Panton	Project	Name	:	Alicia Reban				
Alex Hoeft Lynda Nelson	Contact:	Position:		: Executive Director				
		Phone:		(775) 851-5	180			
		Fax:		(775) 851-5182				
Organization Mission:	Protecting of	pen spac	es and	special place	es for future generations.			
Has your organization	If yes,							
eceived other grants	Date awar	Date awarded:			See Attachment A			
rom the Truckee River	Project titl	e:						
und?	Amount of	Award:						
es: Please see	Date awar	ded:						
Attachment A (use additional page if necessary)	Project titl	e;						
	Amount of	Award:	-					
	Date awar	ded:						
icccssui y)	Project title:							
recessary	Project title Amount of							

DESCRIPTION OF PROJECT UNDER CONSIDERATION

Indicate the description that best fits the project you are proposing. Mark no more than three categories:

- X A. Projects that improve bank or channel stabilization and decrease erosion.
 - B. Structural controls or Low Impact Development (LID) projects on tributaries and drainages to the Truckee River where data supports evidence of pollution and/or sediments entering the Truckee River.
- X C. Projects that remove pollution from the Truckee River.
 - D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are adverse to water supply.¹
- X E. Other projects that meet the evaluation criteria.

1. GOALS AND PRIORITIES:

Activity 1: Master Signage Plan. The OTR Master Signage Plan involves working with all OTR stakeholders to build consensus around a unified signage plan for the Truckee River Phase I section of the OTR plan. Though primarily focused on Phase I, we will also work with our upstream and downstream partners to incorporate the "Take Care" Campaign that Tahoe Fund is implementing in the Tahoe Basin. The plan will consider existing signage along the river including those for interpretive purposes, regulatory requirements, wayfinding (moving people to the river with access point directions, and from point to point along the river), and art installations, as well as for partners such as the Tahoe Pyramid Bikeway. Baseline mapping was completed by OTR AmeriCorps members (in part through funding from TRF #180) and will be available to the Master Signage Plan contractor. Additionally, mileage markers have been designed, ordered, and will be installed spring of 2017. The Signage Plan will identify design elements such as shape, color, font, logos (branding), height and location for a consistent and unified look and feel along the river corridor. We will also create a phased schedule and begin implementation of the signage plan as initial funding is available and as older signs needs replacing. We will gain approvals of all necessary jurisdictions and partners involved with the Truckee River. The expected timeline is to issue an RFP April 1st and have a contractor on board May 1st with the draft plan by December 2017 and the final plan and agency approvals in January/February 2018.

Grant Priorities: VI, VII, VIII

Outcomes: 1. Creation of Master Signage Plan (MSP). 2. Agreement by key Truckee River stakeholders to incorporate MSP recommendations for all signage. 3. Schedule produced for implementation of MSP, beginning with older signs in need of replacement. 4. MSP recommendations used as basis for funding proposals to partners and potential sign sponsors.

OTR Phase I Action Items: 2.2.b, 2.3.c, 2.3.f, 2.4.a, 3.1.b, 3.4.g, 3.5.a, 3.5.b, 4.4.a

Activity 2: Community Watershed Knowledge Survey Data Analysis. Mandated by the One Truckee River Phase I Management Plan, Keep Truckee Meadows Beautiful is currently conducting a Community Watershed Knowledge Survey to help OTR understand current perceptions and behaviors of the region's residents that influence nonpoint source pollution and other factors relating to water quality in the Truckee Meadows. Survey results will inform the OTR's Community Watershed Education Plan and the Nevada Department of Environmental Protection's Watershed Management Plan, both of which will help improve water quality, habitat health and ecosystem function, recreational opportunities and long-term community stewardship of the Truckee River watershed.

The survey has been (or is scheduled to be) distributed digitally via Constant Contact and community partners (e.g., City of Reno, City of Sparks, Washoe County, PLAN, TMWA, etc.) and in-person via face-to-face interviews by our AmeriCorps members and other volunteers at community events. TMWA has included the survey information in its paper and electronic billing. At least 1,000 qualified responses from a demographically representative sample of Truckee Meadows residents are required for results to be valid.

OTR will contract with Dr. Fred Steinmann, UNR Center for Economic Development to confirm the statistical validity of the responses through examining socio-demographic and economic characteristics, directing additional survey work if necessary, as well as conducting data analysis, holding a stakeholder workshop, and preparing a final technical report for distribution to OTR stakeholders.

Grant Priorities: I, II, III, VI, VII, VIII

Outcomes: 1. Data Analysis and Assessment of Community Watershed Survey in final report form 2. Data provided to NDEP for development of Watershed Management Plan 3. Effective messaging for OTR created and educational programs developed based on the data analysis.

Activity 3: OTR Phase I Implementation and Phase II and III Initial Outreach and Planning. The adopted One Truckee River Phase I Plan includes 122 action items, all of which require a level of management and oversight to implement. Until OTR gains more administrative and fundraising momentum, it remains largely a project of KTMB and NLT. We request support to shepherd the program and its activities through the creation of the long-term partnership, including: plan advocacy and outreach; decision-making, fiscal administration and management; fundraising and partnership development; coordination and communication; program prioritization and delivery; and planning, evaluation, and staff management. This request includes advanced partnership development, outreach, research, and the initiation of planning and fundraising for Phases II and III.

Grant Priorities: I, II, III, VI, VII, VIII

Outcomes: Successful implementation of all remaining first year action items adopted in Phase I Plan. NLT and/or KTMB have responsibility to oversee, implement, or facilitate all first-year action items for which OTR has primary responsibility until such time as the permanent OTR structure is up and running. All action items are currently being expanded by OTR and its partners to include individual timelines, work plans, and evaluation measures. Information on all action items can be found in the full OTR plan provided to TRF board members in January, 2017. Planning for Phases II and III will be underway.

OTR Phase I Action Items: 4.1.c, 4.1.d, 4.1.e, 4.2.a, 4.2.b, 4.3.a, 4.3.b

Activity 4: Contract for Partnership Coordinator. NLT and KTMB are looking at how best to help organize OTR long-term to ensure shared responsibility and success. Both organizations feel strongly that the move to a larger formal partnership is imperative and we have the support of OTR's Core Planning Team to establish the new structure over the next 12 months to reduce our demanding individual leadership roles and responsibilities. As OTR continues to grow, its projects are becoming increasingly complex and difficult to manage given current resources. OTR's facilitator Barbara Rice, Program Manager with National Park Service's Rivers, Trails, & Conservation Assistance Program, has significant experience helping other communities move from planning into long-term collaborations. Barbara has provided three potential structures to OTR's "Organizing for Success" subcommittee (Partnership, Lead Entity, and Project Sponsor) and the Partnership model most closely fits the goals of the Core Planning Team.

A Partnership Coordinator to support One Truckee River through this transition would be hired to prepare quarterly reports of OTR activities, brief local jurisdictions and key stakeholders, support the Core Planning Team/Partnership and committees, maintain relationships with funding agencies, identify project development/grant opportunities and shape proposals to achieve OTR goals, and take the lead on specific action items as determined by the Core Planning Team/Partnership. Future funding for this position may be identified through the agreements and commitments from each of the Team/Partnership members; this request will get the process started more quickly and relieve NLT and KTMB of a number of OTR-related administrative and management functions and to enhance OTR reporting and relationships with all partners.

Grant Priorities: I, II, III, VI, VIII, VIII

Outcomes: 1. Signed contract with OTR Partnership Coordinator. 2. Quarterly reports on progress toward completion of Phase I Plan Action Items produced and distributed to OTR partners and stakeholders. 3. Regular coordination with local governments. 4. Ongoing identification of potential new funding sources and a minimum of 3 proposals submitted. 5. Prepare meeting agendas and provide administrative support to the Core Planning Team and the evolving partnership structure. **OTR Phase I Action Items:** 4.1.a, 4.1.c, 4.1.d, 4.2.b, 4.3.a, 4.3.b

Activity 5: AmeriCorps Support for 2017-2018. Truckee River Fund grant #180 allowed KTMB and NLT to

bring on four AmeriCorps volunteers to pursue watershed education efforts. KTMB requests TRF support to

implement these watershed education programs by bringing on two new AmeriCorps education volunteers. including a Community Education Member who will be tasked with delivering the Community Watershed Education Plan based on the results of the Community Watershed Knowledge Survey and the Community Watershed Education Plan developed by the AmeriCorps team made possible through TRF 180; and a Watershed Warriors Educator who will focus on providing watershed education to K-12 students including identifying and providing access opportunities for "outdoor classrooms" and creating and implementing a Junior River Ranger program.

Grant Priorities: I, II, VI, VII, VIII

Outcomes: 1. Community Education Member will deliver compiled adult and youth education materials related to watershed respect and management; design and deliver targeted education projects (interpretive signs, "don't pollute" brochures, safe swimming PSAs, etc.); target key audiences (home owners, dog walkers, kayakers, lawn-care companies, etc.) with messages and materials that encourage better stewardship of the watershed; help engage more adults in the Truckee Meadows to increase volunteerism, organizational support, and awareness of the Truckee River. 2. Watershed Warriors Educator will improve education outcomes relating to watershed appreciation and management throughout the watershed; target underserved schools to empower students to address environmental issues that impact water quality and lower the quality of life and health in the Truckee Meadows; enhance watershed-specific curricula to be delivered at sites along the Truckee River and its tributaries.

OTR Phase I Action Items: 1.3.b, 2.1.i, 2.1.j, 3.1.c, 3.2.a, 3.2.b, 3.2.c, 3.2.d, 3.2.f, 3.2.h, 3.4.a, 3.4.b, 3.4.d, 3.4.e, 3.4.f

Activity 6: One Truckee River Annual Forum One Truckee River will host an annual River Forum in an ongoing effort to provide stakeholders with the initiative's progress, confirm priorities and seek input on action items. The forum's overall purpose is to continue the One Truckee River conversation on a regular basis with the entire stakeholder group (130+ people). One Truckee River materials will be distributed to further brand the initiative. The meeting will be held in May, along with the River Fest taking place at Reno's Wingfield Park. At least one winner of the River Stories contest will read his or her story during the forum as a way to show community involvement. By holding more river-related events during the month of May, One Truckee River aims to establish May as a "river month." A grant has been awarded to help by Trout Unlimited; the requested funds from TRF would cover the balance required to host the second annual One Truckee River Forum in May 2017. Measurable outcomes of the River Forum include the number of attendees and more stakeholders working on the goals of One Truckee River.

Grant Priorities: VI, VII, VIII

Outcomes: 1. Second One Truckee River Forum held in May 2017. 2. Increase awareness of OTR goals and increase engagement in implementation activities. 3. Identify new stakeholders and assign responsibilities.

OTR Phase I Action Items: 3.1.a, 3.1.d, 3.3.a, 3.3.b, 3.3.h, 4.4.b

- 2. PROJECT LOCATION: One Truckee River is focused on the Truckee River in Nevada from the California state line to Pyramid Lake. Most projects related to this proposal will take place along the Phase I stretch of the Truckee River through Reno and Sparks. Phase II is downstream, from Sparks to Pyramid Lake. Phase III is upstream of Reno to the state line.
- PROJECT DESCRIPTION: This project supports the implementation of first year Action Items for Phase 1 listed in the Truckee River Management Plan unanimously adopted by Washoe County, City of Reno and City of Sparks in September 2016. This includes identifying and creating a structure for the long-term management and implementation of the One Truckee River initiative and Management Plans. Other implementation items include creating a Master Signage Plan for the Truckee River; implementing the Community Watershed Education Plan (developed through TRF 180); hosting a Truckee River Forum

to obtain community commitments for Phase 1 Action Plan items; advocacy work for the Truckee River at the state and local level; and launching the planning process for Phases II and III.

- **4. GRANT PRIORITIES:** This proposal advances all of Truckee River Fund's grant priorities through implementation of the comprehensive One Truckee River Phase I Plan and associated action items.
- 5. **PERMITTING:** No permitting required.
- **6. FUTURE FUNDING:** OTR continues to seek additional funding for the continued implementation of Phase I of the Truckee River Management Plan. One Truckee River has already secured \$75K from State Question 1 funds to advance the planning effort for Phase II and Phase III of the Truckee River Management Plan, and other identified sources of funding include the Nevada Division of Environmental Protection, Western Regional Water Commission, and Washoe County.
- **7. PRINCIPALS:** Nevada Land Trust and Keep Truckee Meadows Beautiful are the lead organizations. Members of the existing OTR Core Planning Team, the OTR Working Group discussed above, and a host of other partners and stakeholders are also engaged.
- 8. STAFF POSITIONS INVOLVED: NLT has 5 PT; KTMB has 3 PT
- 9. **VOLUNTEERS:** Two AmeriCorps volunteers, each with a 1700-hour commitment, totaling 3,400 hours. To date, over 1,040 hours have been contributed to One Truckee River by members of the Core Planning Team and other key stakeholders. Facilitator Barbara Rice of the National Park Service contributes in-kind hours to the project.

10. TIMELINE:

Spring 2017: Organize and host One Truckee River Forum to engage wider group on issues and obtain commitments. Connect with partners regarding implementation items for OTR priority action items and complete Action Plan Updates. Conduct Community Watershed Knowledge Survey data analysis. Issue RFP and hire contractor for Master Signage Plan. Advocate to give local governments the option - through state statute - to create a linear park or park district for the Truckee River.

Summer 2017: Hire Partnership Coordinator. Secure funding for Linear Park feasibility study. Identify long-term structure for One Truckee River Partnership.

Fall 2017: Hire two AmeriCorps members to implement Community Watershed Education Plan within community and WCSD schools. Secure funding to implement Master Signage Plan. Draft and execute partnership agreements among OTR coalition members.

Winter 2017-Spring 2018 Phase II and III planning underway.

11. SUCCESS:

- One Truckee River Initiative Partnership is firmly in place to oversee planning for Phases II and III and the implementation of all phases of the One Truckee River Management Plan.
- OTR Phase I Action Items are completed.
- Master Signage Plan in place for the Truckee River and funding secured for signage.
- Residents of all ages are engaged with the Truckee River through implementation of the Community Watershed Education Plan.
- Planning for Phase II and Phase III of the river is underway.
- Metrics developed for each OTR Action Item in Phase I show improvement over time.
- Broad-based support from community leaders for a healthier Truckee River corridor continues through ongoing education and engagement efforts.

Grant Match

Match amount	to be provided:	\$\$103,114		
Match details:	Please provide the form of your matching funds. If match is made up of both cash ar kind, fill in both sections. Match is: Cash \$4000 (to KTMB) In-kind \$99,114 Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. Indirect cost may not be counted as match. For the cash portion of your match, is the funding already being held by the applicant this project? Yes No X			
Description of matching funds/in-kind donations:	Funding paid by Cities of Reno and Sparks and NLT for Mileage Markers (\$2,500) Value of AmeriCorps members stipend (2) (\$25,000)			

ATTACHMENTS

You may be asked to submit the following attachments via email. If you are asked to submit the attachments, clearly label each file with your organization's name. If you do not have the ability to email them, place each of the items listed below on a separate page and submit just one copy.

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Last audited financial statements if your organization has been audited
List of Board of Directors
Copy of agency's IRS 501(c)(3) Tax Determination Letter
Copy of the agency's most recent IRS Form 990

BUDGET TEMPLATE

BUDGET TEMPLATE	ORIGINAL PR	ROJECT BUDGET			REIMBURSE	MENT REPORT Expenditures to
Budget Item Description*	TRF\$	Other Funding Name** State Question 1/Washoe	Match \$	Total	Expenditures to date TRF	date (other sources)
Staff	154,650	County	71,614	226,264		
Travel	530			530		
Supplies	150			150	-	
Contracted			х			
Signage Plan	75,000			75,000		
		NDEP via				
UNR Survey	5,000	KTMB Trout Unlimited via	2,000	7,000		
River Forum	5,300	KTMB City of Reno, City of Sparks,	2,000	7,300	43	
One Truckee River part		NLT (Mileage			ø.	
time coordinator	54,000	Markers) Truckee	2,500	56,500		
KTMB Partner costs (staff time, travel,		Meadows Parks				
supplies)	117,825	Foundation	25,000	142,825		
TOTALS	412,455		103,114	515,569		

NLT TRF Grant History

Date awarded:	September 23, 2016		
Project title:	TRF #180: One Truckee River-Phase 1 Implementation		
Amount of Award:	\$98,534		
Date awarded:	March 21, 2012		
Project title:	TRF #104: Washoe Drive Fire Stabilization and Restoration Effort		
Amount of Award:	\$115,000		
Date awarded:	December 12, 2011		
Project title:	TRF #99: Caughlin Fire Emergency Watershed Stabilization & Restoration Effort		
Amount of Award:	\$219,856		
Date awarded:	October 11, 2011		
Project title:	TRF #90: Weed Treatments & Revegetation: Truckee River & Tributaries		
Amount of Award:	\$127,500		
Date awarded:	July 21, 2009		
Project title:	TRF #70: Weed Treatments & Revegetation Truckee River & Tributaries		
Amount of Award:	\$125,000		
Date awarded:	July 21, 2009		
Project title;	TRF #66: Scope of Work for Truckee River Ecosystem Restoration Coordination: Creation of a 5-year Weed Control and Restoration Plan for the Truckee River		
Amount of Award:	\$10,000		
Date awarded:	July 17, 2008		
Project title:	#46 Weed Treatments & Revegetation: Truckee River & Tributaries		
Amount of Award:	\$112,500		

Big Chief: F4M Restoration Culvert Outflows

Organization Name:	Truckee Riv	Truckee River Watershed Council (TRWC)					
Туре:	501(c)(3) EI	N#91-181	8748	3	Governmental entity? No		
Address:	P.O. Box 85	68, Trucke	ee, C	A 96162			
Project Name:	Big Chief: F4	Big Chief: F4M Restoration Culvert Outflows					
Amount requested: \$	50,000		We	bsite: <u>www.tı</u>	ruckeeriverwc.org		
This funding will be u	sed to (comp	lete	Dec	crease sedime	entation (the 303(d) listed TMDL		
this sentence with a r	max of 2 sent	ences):	•	-	ckee River in the First 4 Miles (F4M)		
					m. Specifically, to design outflows from		
					er the Truckee River Bike Trail through		
		ī			ach of the main stem Truckee River.		
Key People:	Director:	Lisa Wal	lace				
	Board	Michael	Park	<			
	Chair:			T			
	Project	Name:					
	Contact:		Position:Executive DirectorPhone:530-550-8760, x 2				
		Phone					
		Fax:					
		Email:		lwallace@truckeeriverwc.org			
Organization	•		•	•	the Truckee to restore, protect, and		
Mission:		e Truckee	Rive	er watershed.			
Has your	If yes,						
organization	Date awar	ded:	April 2016				
received other	Project titl	e:	Johnson Canyon Westside Restoration – Construction				
grants from the				plementation	1		
Truckee River	Amount of	f Award	\$67,000				
Fund?	Date awar	ded:	00	tober 2015			
Yes X No	Project titl				n Westside Restoration		
	Amount of	f Award	\$2	5,000			
	Please see A	Attachme	nt A	for a full list o	of awarded grants		

DESCRIPTION OF PROJECT UNDER CONSIDERATION

Indicate the description that best fits the project you are proposing. Mark no more than three categories:

- **x** A. Projects that improve bank or channel stabilization and decrease erosion.
- **x** B. Structural controls or Low Impact Development (LID) projects on tributaries and drainages to the Truckee River where data supports evidence of pollution and/or sediments entering the Truckee River.
- **x** C. Projects that remove pollution from the Truckee River.
- D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are adverse to water supply.
- E. Other projects that meet the evaluation criteria.

Big Chief: F4M Restoration

Attachment A Full list of grants from the Truckee River Fund

Date awarded:	November 2016
Project title:	Donner Creek Concept Designs
Amount of Award	\$40,000
Date awarded:	November 2016
Project title:	Donner Creek Bank Stabilization
Amount of Award	\$92,000
Date awarded:	April 2016
Project title:	Johnson Canyon Westside Restoration – Construction Implementation
Amount of Award	\$67,000
Date awarded:	October 2015
Project title:	Johnson Canyon Westside Restoration
Amount of Award	\$25,000
Date awarded:	September 2014
Project title:	Donner Lake Watershed Assessment
Amount of Award	\$70,000
Date awarded:	March 2014
Project title:	Truckee Wetlands Restoration – Phase 3,4, & 5 – Design
Amount of Award	\$50,000
Date awarded:	October 2013
Project title:	Truckee River Big Chief Corridor –Restoration
Amount of Award:	\$150,000
Date awarded:	March 2013
Project title:	Truckee River Big Chief Corridor – Implementation
Amount of Award	\$11,000
Date awarded:	March 2013
Project title:	Middle Martis Wetland Restoration – planning and design
Amount of Award:	\$120,000
Date awarded:	August 2012
Project title:	Phase 2 Coldstream Canyon Floodplain Restoration
Amount of Award:	\$196,000
Date awarded:	March 2012
Project title:	Lacey Creek and Meadow Assessment
Amount of Award	\$50,000
Date awarded:	March 2012
Project title:	Negro Canyon Restoration – pre-project monitoring
Amount of Award:	\$25,000
Date awarded:	October 2010
Project title:	Coldstream Canyon Floodplain Restoration Project
Amount of Award:	\$135,000
Date awarded:	August 2010
Project title:	Truckee Wetlands Restoration Project – Phase 2

Big Chief: F4M Restoration

Amount of Award:	\$40,000
Date awarded:	July 2006
Project title:	"This Drains to the Truckee River" Storm Drain Stenciling Pilot Project
Amount of Award:	\$9,300

Big Chief: F4M Restoration Culvert Outflows

1. Specific project goals and measurable outcomes and how you will measure and report them. The goal of the Big Chief: F4M Restoration (First 4 Mile) Culvert Outflows project is to complete design of outflows from 34 culverts. The project will ultimately improve water quality and habitat along the main stem Truckee River, and decrease sedimentation reaching the Truckee River.

The Middle Truckee River watershed is listed as Clean Water Act impaired by sediment by the U.S. EPA, with an approved TMDL (Lahontan Water Board, 2008). The Truckee River is primary source delivering water supply for the Reno Sparks metropolitan area via the Truckee Meadows Water Authority.

Outcomes of the project are final restoration design plans that coordinate and complement engineering plans for the reconstruction of the Truckee River Bike Tail.

We will know we are successful when the project is ready for construction. Ultimately, project construction and post- project monitoring will confirm erosion reduction.

- 2. Project location. Please see included location map.
- 3. **Project description**. Please see 1)photos and 2)excerpts of engineering plans for the Truckee River Bike Trail and culvert re-construction.

<u>Plans and Previous work related to this project.</u> Placer County completed the Truckee River Corridor Access Plan (2006) which documents the need for restoration of the Truckee River's stream banks and adjacent meadows and wetlands from Tahoe City to Squaw Valley Road. The Truckee River Watershed Council (TRWC) has completed the Tributaries Assessment (2017) that identifies significant erosion to the Truckee River through this four mile reach (and through to the confluence of the Truckee River and Donner Creek). Finally, in 2016, Tahoe City Public Utility District (Tahoe City PUD) and the TRWC completed restoration at nine sites along the Truckee River. (CFWN Truckee River Fund supported this project – thank you!)

A Near Term Opportunity to Reduce Excessive Sedimentation. The Tahoe City PUD has funding to reconstruct the Truckee River Bike Trail after Labor Day in 2017. Because the majority of the culverts under the bike trail are not performing, they are contributing to damaging the bike trail. The trail reconstruction includes the surface of the bike trail as well as the culverts that run underneath the trail.

The re-construction does not address the outflow of the culverts across the meadow and wetland areas between the trail and the Truckee River.

<u>The Problem.</u> An example of the problem is seen in the attached photos. The culvert outflows onto a site that was restored in October 2016. Current conditions concentrate the culvert outflow across the meadow and riparian area causing erosion directly into the Truckee River. Similar conditions exist with the majority of the 34 culverts associated with the Truckee River Bike Trail.

<u>Design of Outflows from Culverts.</u> This project will coordinate and complement the trail re-construction engineering plans with restoration design plans to address the outflows from the 34 culverts. Restoration design will slow, spread, and/or facilitate infiltration of outflows in the meadow and riparian areas. We anticipate simple restoration activities such as minor grading, sod and willlow stabilization, and revegetation.

Big Chief: F4M Restoration Culvert Outflows

- 4. **Grant priorities**. The project addresses:
 - Watershed Improvements: The project will decrease sedimentation, the 303(d) listed TMDL pollutant to Truckee River in the First 4 Miles (F4M) below Tahoe Dam.
 - Stewardship and Environmental Awareness: The project is located adjacent to the very popular and heavily used Truckee River Bike Trail. Interpretative and acknowledgement signage are planned and funded to explain the role of erosion in harming water quality and habitat.
 - Meet Multiple Objectives: The project meets the two objectives listed above. The project also benefits meadow, riparian, and in-stream habitat, and the fish and wildlife using those habitats.
 - Leverage Stakeholder Assets and Participation: Stakeholders' prioritization of this reach of the
 Truckee River is documented in the Truckee River Corridor Access Plan (Placer County, 2006), and the
 Tributaries Assessment (Truckee River Watershed Council and U.S. Forest Service, 2017)
- 5. **Permitting**. No permitting is needed for this phase of the project. For the implementation phase, Tahoe City PUD will obtain needed permits.
- 6. If **future phases** of the project will be needed, identify anticipated sources of funding. Implementation funding will be needed. We anticipate funding from The Martis Fund.
- 7. **Principals involved** in leading or coordinating the project or activity. Michele Prestowitz will be the lead from the Truckee River Watershed Council. We will have stakeholder involvement from Tahoe City PUD and the U.S. Forest Service, Lake Tahoe Basin Management Unit.
- 8. Number of **staff positions involved** in project: No full time staff positions are associated with this project.
- 9. Number of **volunteers involved** in project and an estimated number of volunteer hours. No volunteers will participate in this project.

10. Time Line.

Task	Start Date	Completion Date
Restoration design	April 2017	June 2017
Design plan review by Tahoe City PUD and	June 2017	July 2017
USFS Lake Tahoe Basin Management Unit		
Project management and reporting	April 2017	July 2017

11. **Success**. We will know we are successful with this project when we have completed restoration designs for the outflow of the 34 culverts. Ultimately, project construction and post- project monitoring will confirm erosion reduction.

Big Chief: F4M Restoration Culvert Outflows

Grant Match

Match amount	Match amount to be provided:		\$15,000				
Match	Match is:						
details:	Cash	\$					
	In-kind	\$15,	000				
	For the cas	h port	ion of your match, is the funding already being held by the				
	applicant f	applicant for this project? Yes No					
Description	The match	ing fur	nds are from Tahoe City PUD.				
of matching							
funds/in-	They are funding the engineering and design of the bike trail reconstruction,						
kind	including culverts that cross below the bike trail. The project is approved,						
donations:	budgeted,	and u	nderway.				

ATTACHMENTS (You may be asked to submit the following attachments via email. If you are asked to submit the attachments, clearly label each file with your organization's name. If you do not have the ability to email them, place each of the items listed below on a separate page and submit just one copy.)

We have these documents and can submit via email if asked.

Nonprofi	ts submit:
	Last audited financial statements if your organization has been audited List of Board of Directors Copy of agency's IRS 501(c)(3) Tax Determination Letter Copy of the agency's most recent IRS Form 990

Big Chief: F4M Restoration Culvert Outflows

BUDGET

	ORIGINAL PROJECT BUDGET				REIMBURSEMENT REPORT	
Item	TRF\$	Other Funding Name	Match \$	Total	Expenditures to date TRF	Expenditures to date (other sources)
		Tahoe City				
Restoration design	\$42,000	PUD	\$15,000	\$57,000	\$0.00	\$0.00
Project						
management	\$8,000		\$0	\$8,000	\$0.00	\$0.00
					\$0.00	\$0.00
TOTAL	\$50,000		\$15,000	\$65,000	\$0.00	\$0.00

Project Location: The bike trail is adjacent to the Truckee River from Tahoe Dam at Tahoe City through Squaw Valley Road. The bike trail is purple/violet; the Truckee River is light blue.

02-17-17 TRF Agenda Item 6

Tahoe City PUD is re-constructing the bike trail, including culverts which run under the trail. This project will design the outflows from the culverts to minimize flows and decrease erosion directly into the main stem Truckee River. The design will maximize retention of the flows in the meadow and riparian areas between the bike trail and the Truckee River.



December 11, 2016 - photos from one of 34 culverts that run underneath the bike trail from Tahoe City to Squaw Valley Road. (photos: Balance Hydrologics)



Flows sheeting across Highway 89S and into a storm drain. The drain is not visible, but in the lower right corner of the photo, pooling from the drain backing-up is visible.



Flows are from the strom drain 1)sheeting across the bike trail (visible) and 2) flowing through the culvert underneath the bike trail (not visible). The culvert will be cleaned out as part of the TCPUD bike trail re-construction.



Flows from the culvert concentrating and channelizing across the wetland to the Truckee River. The flow are eroding meadow and soil into the River. The project will design flow disperal across the area, eliminating erosion.

THESE PLANS HAVE BEEN PREPARED UNDER THE DIRECT SUPERVISION OF WALTER R. AUERBACH, P.E. WALTER R. AUERBACH, P.E. RCE NO. C34303 EXP: 9-30-17 TAHOE CITY PUBLIC UTILITY DISTRICT DATE TAHOE - TRUCKEE SANITATION AGENCY DATE

DEVELOPER'S RIGHT-OF-WAY CERTIFICATE

TAHOE CITY PUD A PUBLIC UTILITY DISTRICT , DEVELOPER OF TRUCKEE RIVER TRAIL RECONSTRUCTION AND RENEWAL PROJECT

HEREBY CERTIFIES THAT ALL REQUIRED RIGHT-OF-WAY AND OTHER LEGAL REQUIREMENTS FOR THE CONSTRUCTION OF ALL IMPROVEMENTS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSTRUCTION PERMITS, WRITTEN CONSENTS, AND RIGHTS OF ENTRY, HAVE BEEN ACQUIRED PRIOR TO APPROVAL OF THESE PLANS. DEVELOPER CERTIFIES THAT DOCUMENTATION TO SUBSTANTIATE THIS CERTIFICATION HAS BEEN SUBMITTED TO PLACER COUNTY. DEVELOPER SHALL HOLD PLACER COUNTY HARMLESS IN THE EVENT THE ABOVE RIGHTS ARE NOT OBTAINED OR ARE DISPUTED. DEVELOPER HEREBY ACKNOWLEDGES AND AGREES THAT UNDISCOVERED ERRORS AND OMISSIONS OR OTHER REVISIONS REQUIRED BY ACTUAL FIELD CONDITIONS SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE AS DISCOVERED.

AS USED IN THIS CERTIFICATE, "DEVELOPER" SHALL INCLUDE THE DEVELOPER, DEVELOPER'S SUCCESSORS AND ASSIGNS AND DEVELOPER'S AUTHORIZED AGENT(S).

THE UNDERSIGNED HEREBY CERTIFIES THAT HE OR SHE HAS LEGAL AUTHORITY TO EXECUTE THIS CERTIFICATE ON BEHALF OF DEVELOPER, AND TO BIND DEVELOPER TO THE TERMS AND CONDITIONS STATED HEREIN.

SIGNED:____

_____ TITLE: _

OMOLKA, PE DAT

INSTRUCTIONS TO CONTRACTORS

48 HOUR NOTICE REQUIRED PRIOR TO COMMENCING WORK

BEFORE COMMENCING WORK, ALL PLANS, SCHEDULES, AND PROGRAMS MUST BE SUBMITTED AND APPROVED IN CONFORMANCE WITH THE REQUIREMENTS OF SECTION 7-1.01E, 7-1.01G AND 8-1.04 OF THE PLACER COUNTY GENERAL SPECIFICATIONS DATED AUGUST 2005, AND THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS DATED 2010. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY THE PLACER COUNTY DEPARTMENT OF ENGINEERING AND SURVEYING, CONSTRUCTION DIVISION 48 HOURS IN ADVANCE OF THE TIME OF COMMENCEMENT.

PLACER COUNTY DPW

AUBURN LAKE TAHOE

AHOE (530) 745-7558 (530) 581-6227

RECORD DRAWINGS NOTE

ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY, OR UNDER DIRECTION OF, THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED AND/OR INFORMATION RECEIVED FROM THE PROJECT OWNER, PROJECT CONTRACTORS AND PUBLIC AGENCIES WHEN THE ENGINEER IS ADVISED IN WRITING OF SUCH CHANGE. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, CHANGES TO THESE PLANS NOT AUTHORIZED BY THE ENGINEER.

DATE

ENGINEER SIGNATURE (STAMP OR SEAL)

SURVEY NOTES

- 1. NO INVESTIGATION CONCERNING ENVIRONMENTAL & SUBSURFACE CONDITIONS, OR THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES WHICH MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
- NO EXTENSIVE INVESTIGATION CONCERNING THE LOCATION OF OR EXISTENCE OF UTILITY SERVICE LINES TO THIS PROPERTY WAS MADE AS A PART OF THIS SURVEY.
 ALL INCLUDED UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO ANY DESIGN
- OR CONSTRUCTION.
 4. DATE OF FIELD WORK: JUNE 11, 2015.
- 5. THE TOPOGRAPHY SHOWN HEREON IS BASED ON A SURVEY OF THE TRAIL CENTERLINE AND MANHOLE ELEVATIONS PERFORMED BY AUERBACH ENGINEERING CORPORATION. SUPPLEMENTAL MANHOLE ELEVATIONS PROVIDED BY ANDREGG GEOMATICS.

VERTICAL DATUM BOUNDARY NOTES

NGVD 29 BASED ON BENCHMARK BASED ON CALTRANS CONTROL

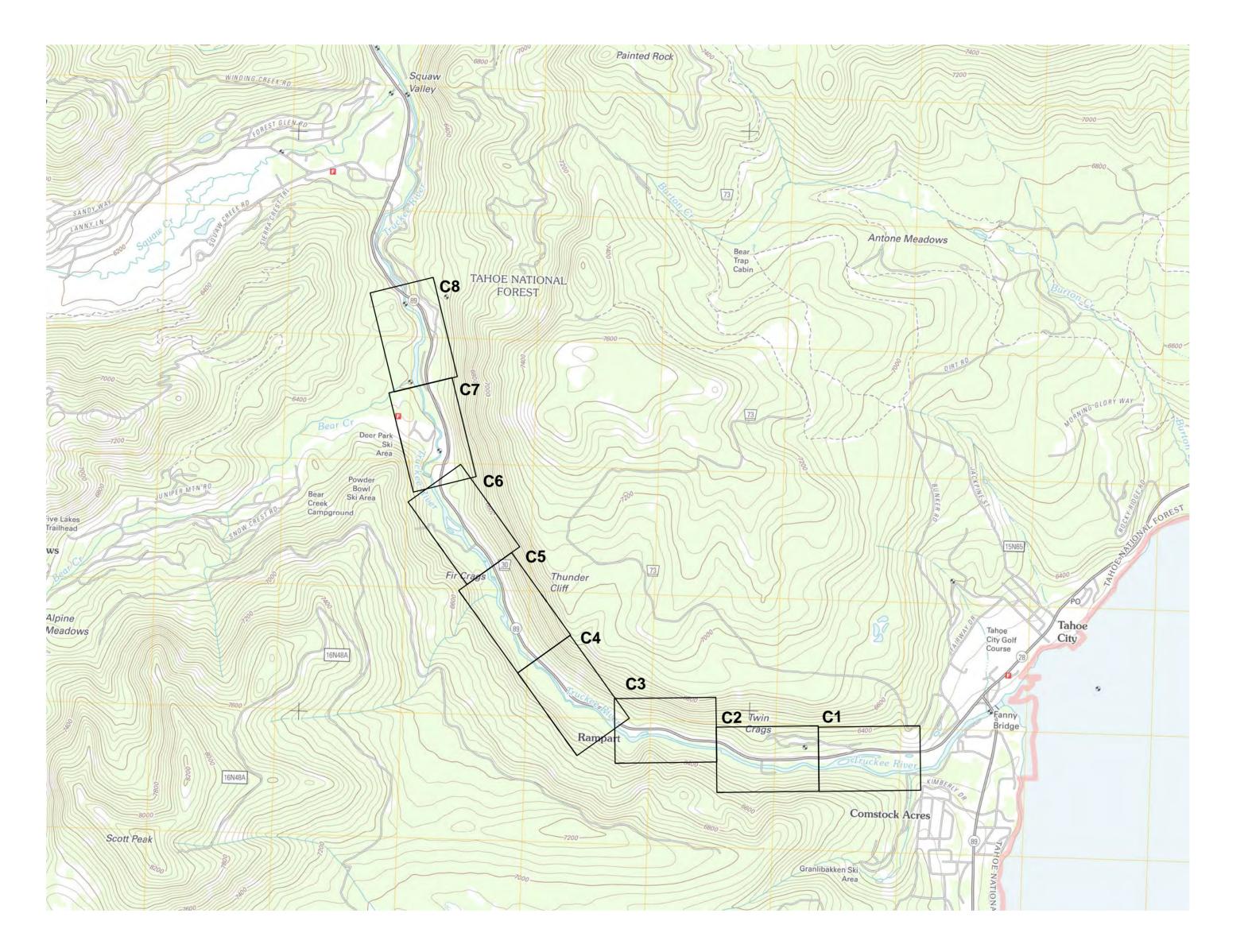
VERTICAL DATUM

CALIFORNIA STATE PLANE COORDINATE SYSTEM ZONE II NAD83(1991.35)
DISTANCES SHOWN HEREON ARE GRID DISTANCES

MEAN COMBINATION FACTOR (CF): 0.99962
TO CONVERT GRID DISTANCE TO GROUND DISTANCE ... DIVIDE BY THE CF

IMPROVEMENT PLANS FOR THE TRUCKEE RIVER TRAIL RECONSTRUCTION AND RENEWAL PROJECT

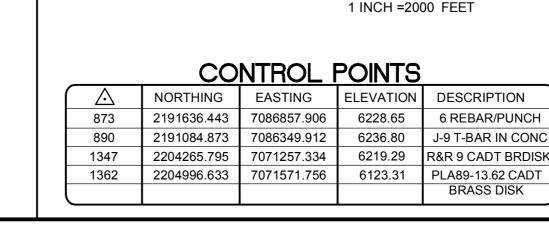
TAHOE CITY, PLACER COUNTY, CALIFORNIA



SHEET INDEX

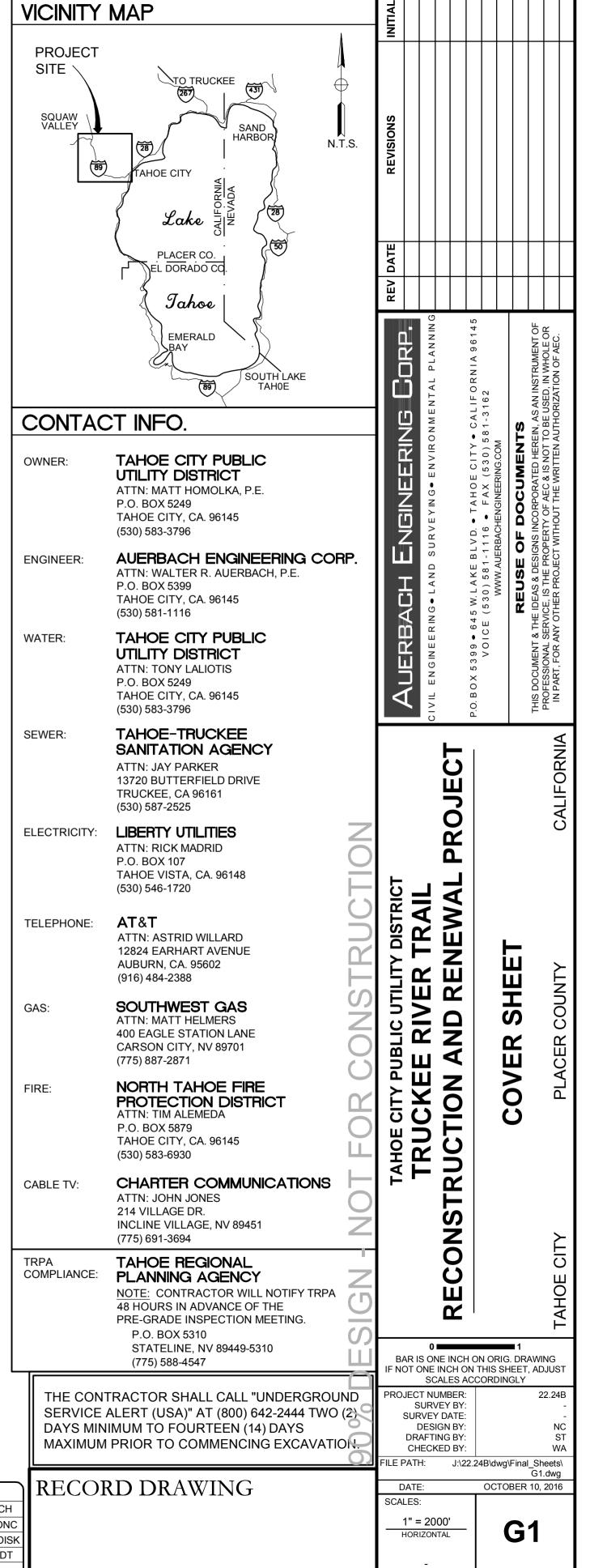
THE BOUNDARY SHOWN HEREON IS BASED ON STATE HIGHWAY RIGHT OF WAY MAPS.

- G1 COVER SHEET
 G2 NOTES, ABBREVIATIONS AND LEGEND
- C1 PLAN AND PROFILE STA 12+00 TO 40+00 C2 PLAN AND PROFILE STA 40+00 TO 68+00
- C3 PLAN AND PROFILE STA 68+00 TO 96+00 C4 PLAN AND PROFILE STA 96+00 TO 124+00
- 7 | C5 PLAN AND PROFILE STA 124+00 TO 152+00 8 | C6 PLAN AND PROFILE STA 152+00 TO 180+00
- 9 | C7 PLAN AND PROFILE STA 180+00 TO 208+00 10 | C8 PLAN AND PROFILE STA 208+00 TO 228+00
- 11 CD1 CIVIL DETAILS 12 CD2 CIVIL DETAILS
- 13 EC1 EROSION CONTROL DETAILS



GRAPHIC SCALE

DATE



VERTICAL

ENGINEER INITIAL

