

# TRUCKEE RIVER FUND

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## TRUCKEE RIVER FUND ADVISORY COMMITTEE

### AGENDA

Friday, February 23, 2018, 8:30 a.m.

Community Foundation of Western Nevada

50 Washington Street, Suite 300, Reno, NV 89509

#### NOTES:

1. 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), State of Nevada Public Notice Website, <https://notice.nv.gov/> 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. Staff reports and supporting material for the meeting are available at Truckee River Fund and on the Truckee River Fund website <http://truckeeriverfund.org/meetings/> or you can contact Sonia Folsom at (775) 834-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
4. 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.
5. Asterisks (\*) denote non-action items.
6. 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.

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 December summary meeting minutes (**for possible action**)
5. Fund balance report\*
6. Review grant proposals to Truckee River Fund and select projects to be recommended for funding (**for possible action**)
7. Discuss tracking of match funds to ensure the requirement is met (**for possible action**)
8. Discuss and select date for field trip (**for possible action**)
9. Committee and staff comments\*
10. Next meeting: June 1, 2018 (**for possible action**)
11. Public comment (limited to no more than three minutes per speaker)\*
12. Adjournment (**for possible action**)

## MEETING MINUTES (TRANSCRIPT SUMMARY)

### TRUCKEE RIVER FUND ADVISORY COMMITTEE MEETING OF DECEMBER 1, 2017

The following meeting minutes is a summary of the certified transcript for the Truckee River Fund Advisory Committee meeting held at 8:30 a.m., Friday, December 1, 2017.

**Those Present:** Committee Members: Janet Phillips, Chairman\*\*; Susan Lynn, Vice Chairman\*\*; Michael Cameron\*; Bill Bradley\*; Mike Brisbin; Candice Elder\*; Don Mahin; and Brian Bonnenfant; Also: Lauren Renda, Community Foundation of Western Nevada; John Enloe and Sonia Folsom, both with TMWA; and Sylvia Harrison, Esq., McDonald Carano Wilson, LLP; Members of the Public: Lisa Wallace, Truckee River Watershed Council; Mikey Hazelwood, The Nature Conservancy; Christi Cakiroglu, Keep Truckee Meadows Beautiful; Alicia Reban, Nevada Land Trust; Birgit Henson, NDEP; and Kara Steeland, TMWA.

\* 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.

**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 18, 2017 was unanimously approved.

**Agenda Item #5: Fund balance report:** Lauren reported that we have \$614,726.74 available for the next cycle.

**Agenda Item #6: Review 2018 meeting calendar (for possible action):** Janet stated that the Executive Committee met and put together the calendar, following the same series we've had in past years. She noted that it's important to have a quorum at the two proposal review meetings, February 23<sup>rd</sup> and August 17<sup>th</sup>. No action was taken.

**Agenda Item #7: Hear report and discussion on Truckee River Watershed Council projects, completed and in-progress (Lisa Wallace); update Farad burn site mud slide from The Nature Conservancy (Mickey Hazelwood) (for possible action):**

Lisa Wallace gave a slide presentation, which included describing her organization (TRWC), summarizing TRF funding and projects over the last decade, and talking about the Tributaries Assessment. She showed a map of their area of focus and the degradation in various areas and how they prioritized those, areas that the TRF has helped them in, and how they came up with 50 large-scale restoration projects. She talked about how they have had a meaningful relationship and 16 grants from the TRF since 2010, talked about match and leveraging that funding, and that they have made a significant 10% TMDL and sediment load reductions since then. She talked about the tributaries, level of impairment of roads in those areas, and where they'll be using our funds in 2018. She thanked the group for their support since 2010. There were questions and comments by the group.

Mickey Hazelwood gave a slide presentation, which included an update of a study they're doing on watershed health and risk assessment, and the concern that we may be at risk of unnaturally large and intense wildfires in this watershed, together with the impacts that come with those, and he showed slides and a video clip post-fire in other areas of the West in watersheds much like ours. He indicated that they're looking at the cost of forest-thinning to greatly reduce the risk of these type of fires. He talked about the Rio Grande Water Fund, a watershed investment program and the various groups that participate in it. He described the Landscape Conservation Forecasting (LCF) tool developed by The Nature Conservancy, state transition models, and community engagement, their group of community advisors, science review committee, and subject matter experts that they're working with, and how they're developing large-scale land management plans, described how for the first time they're combining their LCF modeling process with hydrologic and sediment transport modeling. He talked about the next steps if the study demonstrates a compelling case for investment in the watershed. He added that in January they should have some pretty good results coming out of the modeling process to review, and by April they should be finished with the LCF and hydrologic part of the modeling part of the study, and sometime late summer they'll wrap this up. This is one of very few projects like this where we're trying to get in front of an issue. There were questions and comments from the group.

No action was taken.

**Agenda Item #8: Hear report and discussion on One Truckee River (Christi Cakiroglu) (for possible action):** Christi Cakiroglu, Alicia Reban, and Birgit Henson gave the report and slide show. Christi began by describing how she and Alicia are the original pushers of this, and that Birgit has important information to share. She gave some history of this initiative and how it's a partnership of organizations that want to do some good things for the river in a much more constructive way than in the past. She talked about how with the seed money from the TRF they were able to create a planning effort, identified nine key issues, including social issues affecting water quality, over 100 actions items identified by 130

stakeholders, came up with four primary goals. The plan was unanimously adopted by Washoe County, City of Reno and City of Sparks in 2016.

Alicia talked about how they completed the baseline amenities mapping, that they worked with NDEP to complete the community knowledge survey, they have teacher resource and photo guides with the help of AmeriCorps, a couple new life jacket stations. She talked about the mile markers every tenth of a mile to aid with public safety and rescue efforts. They participated in AB 379, which gives communities the option of creating a special park district, that having a single linear park may solve a lot of issues identified by the One Truckee River process. She mentioned that there's lots of fund-raising to do, talked about the signage and wayfinding plan grant from TRF that will be underway shortly. They've received information on several models that other communities have used successfully. They're working to bring on the One Truckee River coordinator. She described other things being looked at, such as housing.

Janet Phillips needed to leave the meeting, and Susan Lynn began presiding over the meeting.

Birgit talked about what NDEP and some other partners are doing. She brought in a colleague at NDEP and they were able to get a watershed planning component put in as the main strategy of the One Truckee River plan. Becoming a partner and working through that process gave them an avenue for other things going on with the state to participate actively. She talked about the money they've leveraged toward this effort, and other money requests. They have a lot of information they're sorting through, and moving forward with getting projects in the plan approved by the EPA, which opens up more federal funding for more projects. The traction gained through this project was critical for them to move forward with bigger, much more important planning processes.

There were questions, comments and discussion. No action was taken.

**Agenda Item #9: Hear reports on projects completed in the last year: #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); #141 Tahoe Resource Conservation District Truckee River Eurasian Watermilfoil Survey & Removal (Mike B.); #160 Truckee River Watershed Council Johnson Canyon Westside Restoration (Candice); #162 Nevada Conservation District Rosewood & Third Creeks Invasive Weed Removal (Jerry/Janet/Lauren?); #169 City of Reno Truckee River Cleanup Crew Year2 (Susan); #173 Tahoe Fund Take Care - Truckee River (Susan); #176 Keep Truckee Meadows Beautiful 2017 Spring Invasive Weed Pull & Fall Cleanup (Susan); #178 Truckee River Watershed Council Donner Creek Concept Design (Don); #181 Truckee Donner Land Trust Webber Lake Little Truckee Headwaters Management (Michael); #184 Sierra Nevada Journeys Watershed Education Initiative (Janet):**

Regarding #135 Nevada Department of Wildlife New Zealand mud snail and aquatic invasive species outreach for the Truckee River (Bill Bradley), Bill reported that this was placement of signs along the river back in 2014 and 2015, and unfortunately there was no river at that time. All but \$8,000 of the original grant was given back to the organization. Each of the communities decided to do it themselves. He got the impression that the effort tailed off because of lack of people using the river. He'll follow up on whether or not that project needs to be revisited, with the river being much more vibrant now. The money would be available to regrant if they came back in with another proposal.

Regarding #137 Nevada Land Trust Alum Creek Water Quality Improvement (Bill Bradley), Bill reported that one branch of Alum Creek was discovered to be highly impacted by the development of Caughlin Ranch and overuse of fertilizer; they have now adopted nonphosphorus fertilizer. The other branch was attributable to a land management and stormwater problem, and recommendations were made which have now been carried out.

Regarding #141 Tahoe Resource Conservation District Truckee River Eurasian Watermilfoil Survey & Removal (Mike B.), Mike reported that they had originally asked for \$110,000, that we had asked what they could cut out, and it was brought back down to \$59,000. He stated that in the future it would be helpful to get a follow-up proposal so we know exactly what they're going to do. He described that the project was a three-mile stretch of the river, that their drone videos had too much surface reflection on the water to be useful, that the 40 volunteers weren't able to hand-pull milfoil in over 1,000 of the 1,800 total linear feet, that the more effective part was scuba divers with dredges near the dam and then just downstream of that the half an acre that they put bottom barriers on. It was effective at wiping out most of the milfoil. Another part was public outreach. They completed the activities specified in the proposal, and the grantee deemed their project a success, and it was successful. He indicated that he'd like to see them come back with another proposal to assess the entire Truckee River mapping, to assess how big is the problem.

Regarding #160 Truckee River Watershed Council Johnson Canyon Westside Restoration (Candice), Candice described the project and the goals, passed around the plan set that she brought. She reported that the funding was used for the activities specified, that not all activities specified were completed due to our funding it at \$25,000 of the \$92,000 requested, that the grantee deemed their project a success, and that they met expectations and their stated goals.

Regarding #162 Nevada Conservation District Rosewood & Third Creeks Invasive Weed Removal (Jerry/Janet/Lauren?), Susan stated that Janet's report indicates that not all weeds were eradicated; but they met most, but not all, of their expectations; and they completed the activities specified.

Regarding #169 City of Reno Truckee River Cleanup Crew Year2 (Susan), Susan reported that they completed year number two, that they will probably not be coming back for further funding, that they lost a lot of their volunteer crew, so it went to their paid staff to continue

activities. They achieved what they intended. She doesn't know what level they feel satisfied but will have a further report on Monday, so it isn't signed off on yet.

Regarding #173 Tahoe Fund Take Care - Truckee River (Susan), Susan reported that it is still pending, but most of it is done, and she'll have a report Monday afternoon.

Regarding #176 Keep Truckee Meadows Beautiful 2017 Spring Invasive Weed Pull & Fall Cleanup (Susan), Susan reported that it has been completed, they by far and away exceeded their expectations and goals in all elements, they spent their money as planned and will probably be back for next year.

Regarding #178 Truckee River Watershed Council Donner Creek Concept Design (Don), Don reported that they completed their 60% design for the projects along Donner Creek between Donner Lake and Truckee. They feel they're successful because CalTrans is facilitating future funding for the final design and project implementation and that that funding is in process

Regarding #181 Truckee Donner Land Trust Webber Lake Little Truckee Headwaters Management (Michael), Michael reported that they were proposing to thin 34 to 40 acres with a risk of a crown fire, which was successful. They focused in on the highest area of risk and wound up thinning a slightly different area around the lake than they originally intended. Michael and Lauren will follow up on a question they have regarding the match amount. Sylvia suggested adding an agenda for a future meeting to address how to make sure those matches are coming in.

Regarding #184 Sierra Nevada Journeys Watershed Education Initiative (Janet), Susan stated that Janet's report indicates that they completed and exceeded their expectations in all three goals, success and meeting the activities specified.

**Agenda Item #10: Review need for quarterly reports on small grants (for possible action):** Lauren described some situations for how this agenda item came to be. There was discussion by the group, with input from Sylvia, and it was decided that no changes are necessary to the way the reports are currently handled. No action was taken.

**Agenda Item #11: Discuss possible revisions to Request for Proposals ("RFP"), including but not limited to: Identifying any special topics that should be considered for next RFP; including zoning, development, and land use plans that might affect certain proposals (for possible action):** Susan stated she needed to leave the meeting but noted three items that she had written down for possible discussion: one, should we require a follow-up to proposals after the final report on monitoring the success of the project; two, how much money do we want to spend on milfoil; and, three, how to deal with matches that are met or not met. Bill Bradley presided over the rest of the meeting.



Regarding zoning, development, and land use plans that might affect certain proposals, the group had a discussion. A motion was unanimously approved to add wording in the RFP regarding if there's any known or foreseeable changes or updates with regards to zoning, land use, or land development.

Regarding the other topics mentioned, they will be put on as future agenda items.

**Agenda Item #12: Committee and staff comments:** Mike commented that this is the first meeting ever where all the reports that were due were reported. Sylvia added that she really appreciated hearing all of the reports, that going back to the accountability standard it's nice to have all the reports prepared and presented.

**Agenda Item #13: Next meeting: January 19, 2018 (for possible action):** It was noted that the next meeting is Friday, February 23, 2018. No action was taken.

**Agenda Item #14: Public comment (limited to no more than three minutes per speaker):** There were no public comments.

**Agenda Item #15: Adjournment (for possible action):** The meeting adjourned at 10:34 a.m. No action was taken.



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### Cover Sheet

<b>Organization Name:</b>	Sierra Nevada Journeys																				
<b>Type:</b>	501(c)(3) EIN#01-0881587	<b>Governmental entity?</b> No																			
<b>Address:</b>	190 E. Liberty St.   Reno, NV 89501																				
<b>Project Name:</b>	Watershed Education Initiative																				
<b>Amount requested: \$83,376</b>	<b>Website:</b> www.sierranevadajourneys.org																				
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	SNJ will deliver high-quality, experiential watershed education programs based on local issues to protect and enhance the quality of the Truckee River and RAP will deliver water-saving opportunities for residential customers through a family education program and home water efficiency kits. Both programs will work together through cross-promotion to significantly increase students' commitment to long-term sustainability and protection of the primary water source for our community.																				
<b>Key People:</b>	<b>Director:</b>	Eaton Dunkelberger, CEO																			
	<b>Board Chair:</b>	Mark Burrell																			
	<b>Project Contact:</b>	<b>Name:</b>	Sean Hill																		
		<b>Position:</b>	Education Director																		
		<b>Phone:</b>	775-355-1688																		
		<b>Fax:</b>	775-329-1689																		
		<b>Email:</b>	sean@sierranevadajourneys.org																		
<b>Organization Mission:</b>	Sierra Nevada Journeys' mission is to deliver innovative outdoor, science-based education programs for youth to develop critical thinking skills and to inspire natural resource stewardship.																				
<b>Has your organization received other grants from the Truckee River Fund?</b> Yes <input checked="" type="checkbox"/> No (please see page 7)	If yes, <table border="1"> <tr> <td>Date awarded:</td> <td>June 2017</td> </tr> <tr> <td>Project title:</td> <td>Watershed Education Initiative</td> </tr> <tr> <td>Amount of Award:</td> <td>\$32,998</td> </tr> <tr> <td>Date awarded:</td> <td>March 2017</td> </tr> <tr> <td>Project title:</td> <td>Watershed Education Initiative</td> </tr> <tr> <td>Amount of Award:</td> <td>\$28,446</td> </tr> <tr> <td>Date awarded:</td> <td>September 2016</td> </tr> <tr> <td>Project title:</td> <td>Watershed Education Initiative</td> </tr> <tr> <td>Amount of Award:</td> <td>\$28,446</td> </tr> </table>			Date awarded:	June 2017	Project title:	Watershed Education Initiative	Amount of Award:	\$32,998	Date awarded:	March 2017	Project title:	Watershed Education Initiative	Amount of Award:	\$28,446	Date awarded:	September 2016	Project title:	Watershed Education Initiative	Amount of Award:	\$28,446
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### DESCRIPTION OF PROJECT UNDER CONSIDERATION

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

- ☐ 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.<sup>1</sup>  
☒ E. Other projects that meet the evaluation criteria.

### NARRATIVE REQUIREMENTS

<sup>1</sup> For proposals related to weed control/eradication, contact Tracy Turner at the Community Foundation of Western Nevada for additional criteria. [tturner@nevadafund.org](mailto:tturner@nevadafund.org); 775-333-5499.





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### 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 nearly 7,000 students and 500 educators. This has been made possible thanks to the generous support of the Truckee River Fund since 2011. WEI educates students about the local watershed including human impacts on the watershed, water quality, and watershed protection. To increase the impact of our watershed education programming, SNJ is collaborating with Resource Actions Programs' (RAP) WaterWise Program to further engage students, families, and community members in measurable water saving activities. Through WEI and WaterWise, we will successfully meet the following objectives:

	Outputs	Outcomes
Watershed Education Initiative	Deliver WEI to 1,100 K-8th grade students from throughout northern Nevada.	80% of students can correctly identify, label, and diagram the Truckee River Watershed.
	All students receive first-hand experience with the local watershed through a field-study on the Truckee River or one of its tributaries.	70% of students will use knowledge of storm drains to describe how individuals and communities can protect watersheds.
	123 parents and community members volunteer for the program and serve 738 educational service hours.	80% of students will define what happens to rainwater and associated non-point source pollutants after they enter a storm drain.
	Provide 41 teachers with WEI extension lessons.	95% of students participating in "Hands in the River" curriculum complete a Truckee River issue case study on water quality in the watershed.
		80% of students will describe two ways to determine the health of the local watershed.
WaterWise		90% of teachers will report that the program is helping to build critical thinking skills among their students.
	Enroll 1,000 Washoe County students into the WaterWise program.	Direct Water Savings: Participants will save 8,208 gallons of water per home annually Participants will save 8,208 gallons of wastewater per home annually
		Through Water Savings: Participants will save 30 therms of gas per home annually Participants will save 153 kWh of electricity per home annually

Methods to measure outputs: SNJ's Education Department and RAP's Program Manager manages an internal database that tracks details on participating students, schools, and volunteers.

Methods to measure outcomes: SNJ will use pre- and post-assessments completed by each participating student and teacher surveys. A consultant from the Nevada Department of Education's assessment office informed the design of the assessments. RAP will use participating students to provided water efficiency measures and surveys. RAP incentivizes teachers to implement the program in its entirety and return Student Surveys for accurate reporting.

**2. Project location:** SNJ works throughout the Truckee River watershed to educate students. In partnership with RAP, we will continue outreach to these communities to deliver WEI and WaterWise programming. During WEI, the three main field sites for this program are the Truckee River at the McCarran Ranch Preserve, Galena Creek Regional Park, and the Oxbow Nature Study Area. 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.

#### SNJ's Watershed Education Initiative Overview

The **school-based** component includes three in-class lessons (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.

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



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water quality by collecting and identifying macro-invertebrates or conducting chemical tests such as pH, dissolved oxygen, or turbidity. Students use evidence to make a conclusion about the health of the Truckee River Watershed.

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.

To encourage **family engagement**, SNJ provides teachers with a template to email parents with a summary and pictures of their child's experience after each 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 **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 tremendously in their participation with WEI.

### **RAP's WaterWise Program**

RAP designs and implements water conservation programs that inspire change in households across the country. The WaterWise Program will target residential customers in the Truckee watershed via 5<sup>th</sup> grade students, teachers, and families while engaging the community in water education. The goal is to create water-saving opportunities for residential customers through a school education program that aligns with Nevada State K-12 Common Core Learning Standards in Mathematics, English Language Arts, and Science.

RAP will identify and enroll 5th grade teachers and students into the program using a customized outreach approach. Participating teachers are provided with lesson plans and interactive, investigative curriculum, allowing implementation to occur in the classroom. Step-by-step directions and kits filled water efficiency measures are provided for the teacher to ensure program milestones are achieved. The program offers a variety of materials, customized to incorporate the TMWA brand.

Student Materials	Teacher Materials
Water Wise Kit*	Full color teacher folder
Take-home student guide	Pre/Post knowledge test
Installation instruction booklet	Survey return envelope (postage paid/Tyvek)
Student survey form	Teacher evaluation form
Certificate of achievement	Teacher thank you card and envelope
Student Supplies	Parent Materials
Digital thermometer	Program instructions
Resource fact chart	Pledge form / Letter to parent
Teflon tape	Parent program evaluation form
Student wristbands	
Program Resources	
Dedicated, toll-free, 1:1 call-in support line	
Water Wise Kits* include:	
(1) 1.75 gpm High-Efficiency Showerhead; (1) 1.5 gpm Kitchen Faucet Aerator; (1) 1.0 gpm Bathroom Faucet Aerator; (1) Rain/ Drip Gauge; (1) Flow Rate Test Bag; (1) Toilet Leak Detector Tablets	

WaterWise is based on RAP's proven Measure-Based Education (MBE) methodology. MBE is a combination of cost-effective measures blended with interactive education and hands-on activities. The result is students who readily engage in the program, and with the help of their parents, facilitate the water-saving measure installation at home.

Teachers are incentivized to implement the program in its entirety, and return student surveys for accurate reporting. A final Program Summary Report will be prepared and provided to SNJ who will then submit to TRF that presents information on program participants, implementation steps, installation rates, and resource savings.



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### Collaborative Outreach and Cross Promotion

Strong programs on their own, the WEI and WaterWise programs offer complementary education efforts that build off each other's teachings to make students better stewards of our local watershed, and families more informed water users. Teachers will have the option to utilize both programs to reinforce the educational impacts of each. SNJ and RAP will partner on email and outreach opportunities (events, flyers etc.) to leverage the resources of each program, with the ultimate goal of increasing participation in both programs.

#### 4. Grant priorities.

WEI and WaterWise are education programs that address the concepts of local water resources, water quality and watershed protection for elementary students, directly aligning with grant priority VI: *Stewardship and Environmental Awareness*. Between the two programs, students gain first-hand experience with the Truckee River, explore human impacts on their water source, obtain skills and knowledge to help protect the watershed, and an understanding of ways to reduce water consumption at home.

WEI's 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.
- 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

Although water savings are apparent throughout RAP's WaterWise lesson, students and families learn together that changes in water usage also affects savings across gas and electricity as well. WaterWise's overall long-term impacts aim to save the following natural resources connected to water saving methods:

PROJECTED ANNUAL SAVINGS PER HOME		PROJECTED LIFETIME SAVINGS PER HOME	
8,208	gallons of water saved	56,008	gallons of water saved
30	therms of gas saved	228	therms of gas saved
153	kWh of electricity saved	1,168	kWh of electricity saved
8,208	gallons of wastewater saved	56,008	gallons of wastewater saved

Both programs have the ultimate goal of improving the health of the Truckee River watershed and local ecosystems 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.

RAP will assign a specific implementation team to the Reno WaterWise program who will work with SNJ for the duration of the contract. The team is led by a PMP®-certified program manager with an MBA who will manage the daily operations, and ensure the program hits key milestones and results.

#### 8. Number of staff positions involved in project: Fulltime 10 Part-time 7

#### 9. Number of volunteers involved: 123 volunteers (including field educators and parent volunteers) will donate 738 volunteer hours during WEI's field-study portion of the program, increasing parents and community member access to watershed education.

#### 10. Time Line of Project.



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### SNJ Deliverables

<b>Recruitment/Scheduling:</b> 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.	<b>February – June</b>
<b>Program Delivery:</b> SNJ instructors will deliver engaging watershed education lessons to 1100 students through school-based and field-based programs.	<b>February – July</b>
<b>Evaluation:</b> 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.	<b>February – July</b>
<b>Final Report:</b> 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.	<b>July</b>

### RAP Deliverables

<b>Preparation &amp; Program Ramp-Up:</b> RAP and SNJ will review logistics of the partnership, develop project plan, identify program targets and school list, produce materials for teachers and students.	<b>February - June</b>
<b>Implementation:</b> RAP will outreach to researched schools and teachers, enroll teachers, assemble and ship materials to enrolled teachers, and provide ongoing teacher support and follow-up	<b>February – July</b>
<b>Assessment &amp; Reporting:</b> RAP staff will collect assessment data provided from teachers.	<b>February – July</b>
<b>Final Report:</b> A final Program Summary Report will be prepared and provided to SNJ that presents information on program participants, implementation steps, installation rates, and resource savings by July 31, 2018.	<b>July</b>

## 11. Success.

SNJ Outputs	Tracking
Deliver watershed education to 1,100 K-8th grade students from throughout northern Nevada.	Internal SNJ database – Updated regularly throughout the year
All students receive first-hand experience with the local watershed through a field-study on the Truckee River or one of its tributaries.	
123 parents and community members volunteer for the program and serve 738 service hours.	
Provide 41 teachers with WEI extension lessons.	
SNJ Outcomes	Tracking
80% of students can correctly identify, label, and diagram the Truckee River Watershed.	Pre- and post-assessments – reviewed after the end of each program and presented in report at end of grant period
70% of students will use knowledge of storm drains to describe how individuals and communities can protect watersheds.	
80% of students can define what happens to rainwater and associated non-point source pollutants after they enter a storm drain.	
95% of students participating in “Hands in the River” curriculum complete a Truckee River issue case study on water quality in the watershed.	
80% of students will describe two ways to determine the health of the local watershed.	
90% of teachers will report that the program is helping to build critical thinking skills among their students.	Teacher surveys

RAP Outputs	Tracking
Enroll 1,000 Washoe County students into the WaterWise program.	Internal RAP database – Updated regularly throughout the year
RAP Outcomes	Tracking
Participants will save 8,208 gallons of water per home annually.	Participating students are provided water efficiency measures and surveys.
Participants will save 30 therms of gas per home annually.	
Participants will save 153 kWh of electricity per home annually.	
Participants will save 8,208 gallons of wastewater per home annually.	





**COMMUNITY  
FOUNDATION**  
of Western Nevada

**TRUCKEE RIVER FUND**  
Enhancing and protecting our water resources



## 12. Grant Match

<b>Match amount to be provided:</b>		<b>\$28,092 (25% of requested funds)</b>
<b>Match details:</b>	Match is:	
	Cash	<b>\$12,707</b>
	In-kind	<b>\$15,385</b>
	For the cash portion of your match, is the funding already being held by the applicant for this project? Yes ___ No <u>X</u>	
<b>Description of matching funds/in-kind donations:</b>	Match provided by bus transportation expenses paid for by the Washoe County School District and funding from NDEP (Nevada Department of Environmental Protection). In-kind match provided by field educator volunteers and parent volunteer hours.	

## 13. Project Budget

### Watershed Education Initiative (WEI) Budget

Budget Item Description	ORIGINAL PROJECT BUDGET			Total
	TRF \$	Other Funding Name	Match \$	
<b>Labor—paid:</b> <i>Program Teachers</i> at \$18.15/hour x 1025 hours, 21.65% fringe/benefits <i>Education Director/Finance Director/Marketing Director</i> at \$35.00 x 625 hours (outreach, training, program eval., grant and subcontract admin.). 17.9% fringe/benefits	\$39,706	NDEP	\$8,000	\$47,706
<b>Labor—volunteer:</b> An average of 3 volunteers per field-study dedicate 6 hours to helping guide and facilitate the program = 18 hours per class / 27 kids per class. Independent Sector Value of Volunteer time in Nevada = \$20.98/hour	\$0	SNJ Volunteers	\$15,385	\$15,385
<b>Materials:</b> \$2/student for 1100 students for printing and program supplies and materials	\$2,200	-	\$0	\$2,200
<b>Other:</b> Transportation costs cover expenses associated with SNJ staff traveling to and from schools and field sites including company vehicle expenses. Approx. 1,800 miles to serve 41 classes (60 miles/class @ 0.535 per mile).	\$1,308	-	\$0	\$1,308
<b>Other:</b> School bus transportation for students - Approx. \$90/class * approx. 41 classes	\$0	Washoe County School District	\$ 3,667	\$3,667
Overhead (13%)	\$5,162	NDEP	\$1,040	\$6,202
<b>Other:</b> Sub Contract: Resource Action Programs Water Wise Education for 1000 students	\$35,000	-	\$0	\$35,000
<b>TOTAL</b>	<b>\$83,376</b>		<b>\$28,092 (25%)</b>	<b>\$111,468</b>

Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

### Cover Sheet

<b>Organization Name:</b>	Friends of Nevada Wilderness		
<b>Type: 501(c)(3)</b>	501(c)(3) EIN# 88-0211763	<b>Governmental entity?</b> No	
<b>Address:</b>	1360 Greg St. #111 Sparks Nevada 89431		
<b>Project Name:</b>	Mount Rose Noxious Weed Monitoring and Treatment #6		
<b>Amount requested:</b> \$23,724	<b>Website:</b> <a href="http://www.nevadawilderness.org">www.nevadawilderness.org</a>		
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Friends of Nevada Wilderness seeks to treat approximately 75 acres of noxious weeds on Humboldt-Toiyabe National Forest lands within the Truckee River Watershed.		
<b>Key People:</b> Nora Kaufmann	<b>Director :</b>	Shaaron Netherton	
	<b>Board Chair:</b>	Roger Scholl	
	<b>Project Contact:</b>	<b>Name:</b>	Nora Kaufmann
		<b>Position:</b>	Northern Nevada Stewardship Coordinator
		<b>Phone:</b>	775-324-7667
		<b>Fax:</b>	775-324-2677
		<b>Email:</b>	<a href="mailto:nora@nevadawilderness.org">nora@nevadawilderness.org</a>
<b>Organization Mission:</b>	Friends of Nevada Wilderness is dedicated to preserving all qualified Nevada 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.		
<b>Has your organization received other grants from the Truckee River Fund?</b> <b>Yes X No__</b> (use additional page if necessary)	If yes,		
	Date awarded:	March 2017	
	Project title:	TRF #185- Mount Rose Noxious Weed Monitoring and Treatment #5	
	Amount of Award:	\$22,405	
	Date awarded:	April 2016	
	Project title:	TRF #153- Mount Rose Noxious Weed Monitoring and Treatment #4	
	Amount of Award:	\$21,002	
	Date awarded:	September 2014	
	Project title:	TRF #153- Mount Rose Noxious Weed Monitoring and Treatment #3	
	Amount of Award:	\$15,807	
	Date awarded:	August 2013	
	Project title:	TRF #130 Mount Rose Noxious Weed Monitoring and Treatment #2	
	Amount of Award:	\$10,896	

#### 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.



Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

**NARRATIVE:**

**1. Specific project goals and measurable outcomes:**

**Goals:** The greater 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. Specifically, our goal is to treat noxious weeds at their source to mitigate their spread, monitor known weeds sites for changes and growth, and identify any new weed activity or infestations. Noxious weeds threaten the biodiversity, wildlife habitat, soil productivity, water quality, and recreational resources of the Mt. Rose Wilderness and by removing them we will help retain and improve watershed health.

**Methods:** Our methods to control weeds in the Wilderness will consist of monitoring/scouting and direct treatment. During the treatment phase, Friends of Nevada Wilderness staff will host volunteer weed pulling events in which we will use shovels and clippers to pull musk thistle (*Carduus 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. To minimize impacts to desirable land, mechanical treatments are the most appropriate way to treat these weeds in Wilderness. During the monitoring/scouting phase, FNW staff, AmeriCorps members, and volunteers will monitor known weed sites to assess outcomes and continue to document change in known populations. We have mapped the 2017 Hunter Creek Fire perimeter and will scout this area in an attempt to identify and treat new populations of invasive weeds.

**Measurable outcomes:** Friends of Nevada Wilderness staff and volunteers will monitor and treat approximately 75 acres of noxious weeds, while also scouting the Mt. Rose Wilderness for new infestations. We will host eight volunteer weed-pulling events and six volunteer weed monitoring and scouting projects. The focus areas have been identified by the Carson Ranger District as known or possible weed locals. Through the completion of these projects, we anticipate removing 10,000-15,000 invasive weeds that each have the potential to germinate and create thousands more plants. 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 stewardship of their public lands. To date we have removed nearly 100,000 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 have hosted nearly 50 projects in the past ten years with the USFS Carson Ranger District.

- 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 2-4 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 and the Hunter Creek Fire of 2017, 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 monitor previously identified and/or treated sites and scout the 2017 Hunter Creek Fire perimeter and helicopter loading points. See pages 4 and 5 for photos and a detailed map.
- 4. Permitting:** As of now this project does not require any special permits, we will be taking direction from our Carson Ranger District contacts.

Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

5. **Future phases:** Unfortunately, there will always be weeds to pull. Our hope is to work ourselves out of a job in that sense, however our foreseeable goal is simply to keep existing weed sites from spreading or traveling. The danger of Musk Thistle is that these plants create dense monocultures, drive out native plants and animals, disrupt the local ecology, degrade the soil, and enhance erosion. Their seeds can stay dormant in the soil for up to 15 years, resulting in an immediate need for continued management well into the future. While ultimately getting rid of these plants altogether is ideal, we will continue pulling as many thistles as we can, year after year, in an attempt to reduce the seed bank. We will be working with the USFS Carson Ranger District to build upon our previous five year management plan and integrate new locations and strategies if they are deemed appropriate. The changing fire regime continues to affect the spread of these weeds, and we will monitor and scout those areas so that we are sure to incorporate recent burns into our priorities. This is an effort that the Truckee River Fund has generously supported in past years and we hope will continue to find important for years to come.
6. **Principals involved:** Four staff members from Friends of Nevada Wilderness, including two Northern Nevada Stewardship Coordinators, GIS Mapping Technician, and one seasonal AmeriCorps Service Member will be involved. We will be taking direction from the USFS Carson District Botanist, Fire Management Officer and Wildlife Biologist.
7. **Number of staff positions involved in project:** Fulltime: 0 Part-time: 4
8. **Volunteers involved:** We plan to host 8 volunteer weed pull trips and six volunteer weed monitoring/scouting trips with an average of five volunteers per trip. Our outings are typically day trips ranging from 4-8 hours. In 2017, we had great success working with the Dealer Services department of Patagonia, and will reach out to Patagonia again this year to see if their staff are interested in participating in this program. We will also reach out to UNR clubs, local Meetups, the Reno Hiking Group, Keep Truckee Meadows Beautiful, Truckee Meadows Parks Foundation, One Truckee River, and the Truckee Meadows Weed Coordinating Group with whom we meet quarterly. In addition to direct contact, we use a variety of outreach methods to recruit volunteers such as tabling, flyer placement, and social media, and volunteer recruitment websites such as [www.volunteermatch.com](http://www.volunteermatch.com) and [www.idealists.org](http://www.idealists.org).
9. **Timeline:** Outreach for individual volunteers and group partners will start immediately upon project approval. Logistical planning and early site visits will begin in April, monitoring and treatment will occur in May-July, and we will also plan monitoring and treatment projects for the fall to target basal rosettes in their first year of growth. Reporting will occur in early 2019.
10. **Success:** We will let the committee know of our success with written quarterly reports accompanied by photographs. We invite the committee to join us on any of our volunteer events to see progress firsthand. We will communicate our efforts through press releases, bi-annual newsletters, monthly E-newsletters, and we will update our accomplishments often on our social media platforms such as Twitter, Facebook, and Instagram.

Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

11. Grant Match

<b>Match amount to be provided: \$15,161</b>					
<b>Match details:</b> We will be using matching funds from the National Forest Foundation, NV Energy, and Recreational Trails Program grants which we have already secured. These funds will help support and enhance funding for the Mt. Rose Wilderness noxious weed program.	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:				
	<table border="1"> <tr> <td>Cash</td> <td>Note: Cash match including overhead: <b>\$6,761</b></td> </tr> <tr> <td>In-kind</td> <td>Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. <b>\$8,400</b></td> </tr> </table>	Cash	Note: Cash match including overhead: <b>\$6,761</b>	In-kind	Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. <b>\$8,400</b>
	Cash	Note: Cash match including overhead: <b>\$6,761</b>			
In-kind	Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual. <b>\$8,400</b>				
For the cash portion of your match, is the funding already being held by the applicant for this project? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
<b>Description of matching funds/in-kind donations:</b>	Matching funds will be for transportation, volunteer supplies, tools, planning, outreach, labor, and training. In-kind matches will be made with volunteer hours.				



Figure 1 Post Fire Weed Growth



Figure 2 Post Fire Weed Growth: Close-Up

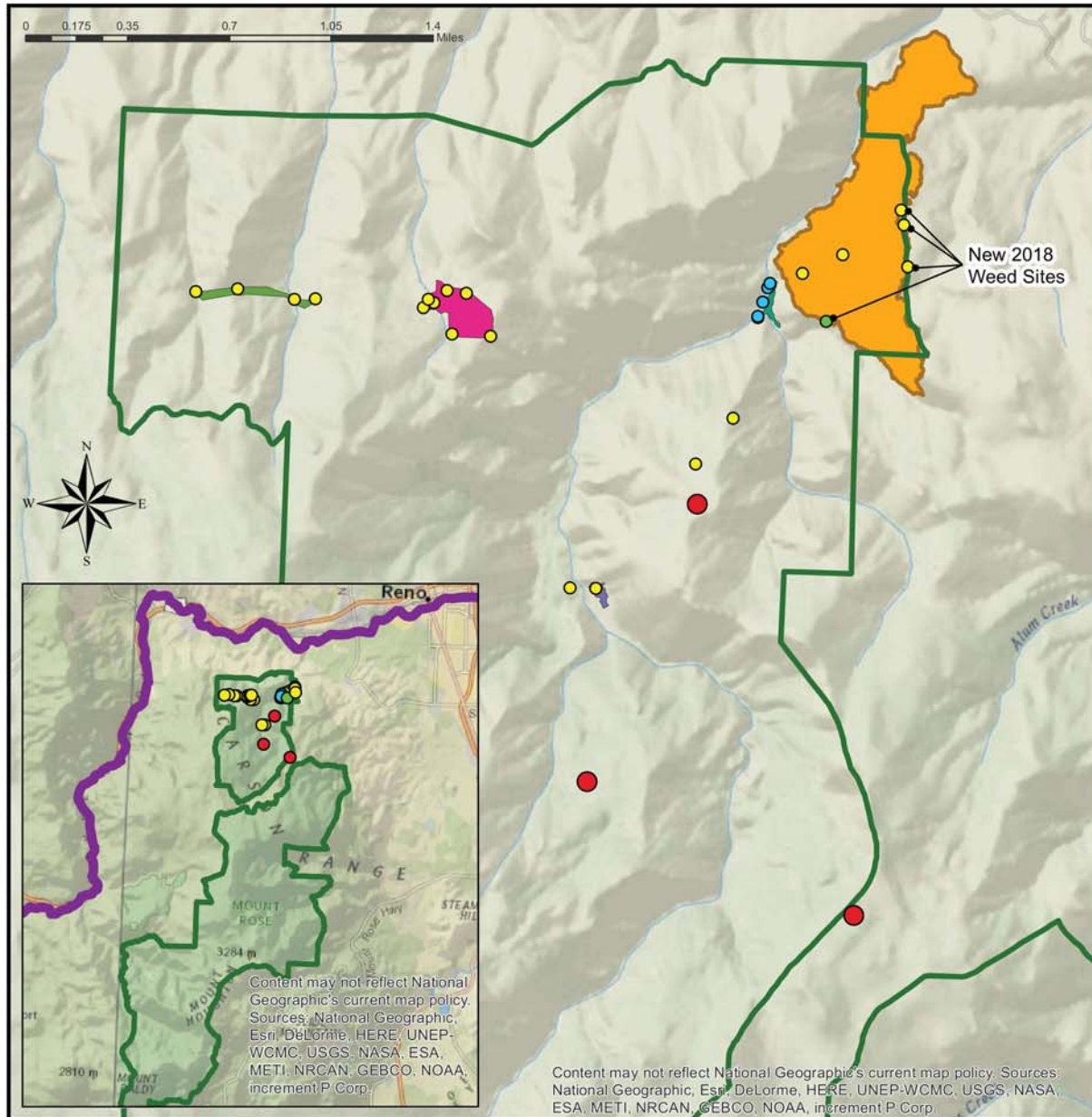


Figure 3 Excited Volunteers!



Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

# Mt. Rose Wilderness Noxious Weed Monitoring and Treatment Project



- Medusahead
- Musk Thistle
- Pepperweed
- Aviation Sites
- Truckee River
- Hunter Creek Fire
- East Fork
- Above Waterfall
- Belli Front East
- Belli Front West
- Mt. Rose Wilderness Boundary

Acres Affected:

Belli Front East ~ 18.0

Belli Front West ~ 6.4

Above Waterfall ~ 1.8

East Fork ~ 2.5

Hunter Creek fire ~204



Mount Rose Noxious Weed Monitoring and Treatment #6  
Truckee River Fund 2018

Budget Item Description	Truckee River Fund	Match Source	Match Amount	Total
Payroll Expenses	\$16,189	Cash: NFF MAP**	\$624	\$16,813
AmeriCorps Stipend	\$2,926			\$2,926
Volunteer Labor		In-kind Volunteer Labor	\$8,400	\$8,400
Printing and Reproduction	\$400	Cash: RTP 2017-01 Mt. Rose Map	\$2,800*	\$3,200
Project Supplies		Cash: NV Energy	\$1,750	\$1,750
Training Expenses	\$300	Cash: NV Energy	\$500	\$800
Vehicle Travel (300 miles at .545/mile)	\$165	Cash: NV Energy (100 miles at .545/mile)	\$55	\$220
Volunteer Food	\$650	Cash: NFF MAP	\$150	\$800
<b>Subtotal</b>	<b>\$20,630</b>		<b>\$14,279</b>	<b>\$34,909</b>
Overhead (at 15%)	\$3,094	Overhead (\$5,879 cash at 15%)	\$882	\$3,976
		<i>Cash Match Total</i>	<i>\$6,761</i>	
<b>TOTAL</b>	<b>\$23,724</b>	<b>TOTAL</b>	<b>\$15,161</b>	<b>\$38,885</b>

### **BUDGET NARRATIVE**

**Payroll Expenses:** Payroll expenses 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 14 volunteer events with at least 5 people at each event for 6 hours; \$20/hr x 5 volunteers x 6 hrs x 14 projects = \$8,400.

**Printing and Reproduction:** This will go towards printing flyers and brochures for advertising our events and volunteer recruitment as well as a portion of our twice yearly newsletter.

**Project Supplies:** This will be used to help cover the cost for first aid kits, tool/supply updates and maintenance, and volunteer appreciation, etc.

**Training Expenses:** This will cover relevant classes, possibly the Weed Warrior class hosted by the University of Nevada, Reno Cooperative Extension, and a portion of any necessary First Aid training. In addition, we will continue to update our invasive weed reference materials for staff/volunteers.

**Vehicle Travel and Volunteer Food:** 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.

**Match:** We will be using matching funds from the National Forest Foundation, NV Energy, and Recreational Trails Program grants which we have already secured. These funds will help support and enhance funding for the Mt. Rose Wilderness noxious weed program.

\* - these funds will go towards the printing of a map-brochure combo available in visitors centers encouraging responsible recreation and connecting users with volunteer opportunities like our weed pulls with the Truckee River Foundation as well as illustrate approved trails in the Mt. Rose Wilderness and Truckee River watershed.

\*\* - this time is to be spent shopping for supplies from NV Energy and ground-truthing the RTP Mt. Rose Map.

**Cover Sheet**

**Date:** January 26, 2017

<b>Organization Name:</b>	Truckee Meadows Parks Foundation		
<b>Type:</b>	<b>501(c)(3) EIN#</b> 45-4837735	<b>Governmental entity?</b> Y/ <input checked="" type="checkbox"/> N	
<b>Address:</b>	50 Cowan Drive, Reno, NV 89509		
<b>Project Name:</b>	Doggie Ambassador Project		
<b>Amount requested:</b> \$15,214	<b>Website:</b> www.tmparksfoundation.org		
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	educate citizens about the importance of proper pet waste disposal, purchase eight dog waste bag dispensers and 216,000 waste bags, and recruit more volunteers through advertising		
<b>Key People:</b>	<b>Director:</b>	Nathan Daniel	
	<b>Board Chair:</b>	Elisa Davis	
	<b>Project Contact:</b>	<b>Name:</b>	Nathan Daniel
		<b>Position:</b>	Executive Director
		<b>Phone:</b>	(775) 453-0698
		<b>Fax:</b>	N/A
<b>Email:</b>	nate@tmparksfoundation.org		
<b>Organization Mission:</b>	Truckee Meadow Parks Foundation strives to enhance the quality of life for all citizens of the greater Reno-Sparks metropolitan area by ensuring the long-term sustainability and improvement of our parks. We accomplish this by offering park-based educational and recreational programs designed to increase community-wide awareness, appreciation, and stewardship of our parks.		
<b>Has your organization received other grants from the Truckee River Fund?</b> <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> (use additional page if necessary)	If yes,		
	Date awarded:		
	Project title:		
	Amount of Award:		
	Date awarded:		
	Project title:		
	Amount of Award:		
	Date awarded:		
	Project title:		
	Amount of Award:		

**DESCRIPTION OF PROJECT UNDER CONSIDERATION**

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

- ☐ 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.<sup>3</sup>
- ☒ E. Other projects that meet the evaluation criteria.

**NARRATIVE REQUIREMENTS**

<sup>3</sup> For proposals related to weed control/eradication, contact Lauren Renda at the Community Foundation of Western Nevada for additional criteria. [lrenda@nevadafund.org](mailto:lrenda@nevadafund.org); 775-333-5499.





## **Doggie Ambassador Project Narrative**

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

From September 2018 to September 2019, the Parks Foundation will distribute 216,000 dog waste bags to 30 Doggie Ambassador volunteers. If funded, the Parks Foundation will include Truckee River Fund's logo on all 216,000 bags. The volunteers will refill 50 dog waste bag stations for one year (the Parks Foundation will replace the four dog waste bag stations that are damaged and add four new stations to busy riverside parks). The Parks Foundation will also educate the public about the harmful effects of pet waste on the watershed and how to properly dispose of pet waste, utilizing volunteers to facilitate the educational component of the Doggie Ambassador Project. A final report will be submitted to the Truckee River Fund on September 15th, 2019 detailing the number of bags distributed over the year, the number of stations managed and replaced, the number of volunteers recruited and managed, and the number of citizens reached through the educational campaign. All of these data will be collected by volunteers using data sheets. All volunteers will be trained on data tracking, the importance of proper pet waste disposal, and the effects of pet waste on the Truckee River watershed. Volunteers will also be taught how to effectively communicate this information to the public. Data analysis will be conducted by the AmeriCorps VISTA Volunteer and Outreach Coordinator.

### **2. Project location.**

The Doggie Ambassador Project manages 46 dog waste stations within 30 Reno parks and trails. Out of these 46 stations, 33 are regularly maintained by Doggie Ambassador volunteers, nine stations are not yet maintained, and four are damaged. The following parks and trails have dog waste bag stations: Barbara Bennett Park, Bicentennial Park, Canyon Creek Park, the Crooked Mile, Crissie Caughlin Park, Evans Park, Hilltop Park, Horseman's Park, Huffaker Park, Huffaker Park Lookout Trail, Idlewild Park, Ivan Sack Park, Jamaica Park, John Champion Park, Manzanita Park, Mary Gojack Park, Melody Lane, Mira Loma Park, Northgate Park, Riverside Drive, Schiappacasse River Pathway, Stewart Park, Summit Ridge Park, Dick Taylor Memorial Park, Virginia Lake Dog Park, Virginia Lake Park, Wheatland Park, Whitaker Park, Wilkinson Park, and Wingfield Park. The location of existing dog waste bag stations are shown in the map provided on page 8.

### **3. Project description.**

The United States Environmental Protection Agency rules pet waste as a nonpoint source environmental pollutant. This places pet waste in the same category as herbicides, pesticides, oil, grease, toxic chemicals, and acid drainage from abandoned mines (US EPA, 2017). Pet waste pollution leads to excess algal growth, increased ammonia levels, harmful biotoxins, noxious aquatic plant growth, nuisance native species growth, excess nitrogen and phosphorus levels, and dangerous pathogens, among other problems (US EPA, 2012). In addition to these detrimental effects to our natural environment, dog waste contributes to a poor experience for community members in their local parks.



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# TRUCKEE MEADOWS PARKS FOUNDATION

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**AWARENESS • APPRECIATION • STEWARDSHIP**

Truckee Meadows Parks Foundation believes the best ways to mitigate these problems are to educate the public on the harm of improper pet waste disposal and increase availability of pet waste bags. A pet waste education program implemented by the City of Santa Barbara was effective in reducing fecal input from domestic dogs living adjacent to lower AB Creek (Ervin et. al., 2014). Additionally, the City of San Diego spent \$10,000 on trash cans, signage, and dog waste bag stations at a popular dog beach in 2000. These efforts led to a measurable decrease in dog waste at the park, estimating the beach was 30%-40% cleaner than before they took action (Watson, 2002).

Both the City of Sparks and Washoe County Parks Departments have current dog waste mitigation programs in effect. These agencies have allocated the necessary resources to allow their dog waste bag dispensers to be refilled regularly. Washoe County even created legislation allowing citations if an individual doesn't pick up their pet waste on personal or county property (WCC 55.130, 2012). Despite this, efforts have been largely ineffective in mitigating the pet waste problem, therefore risking the health of the Truckee River watershed. Over 40 Reno City parks contain dog waste bag stations; these stations are not maintained by the City due to large budget cuts sustained by the Reno Parks Department.

To compensate for the lack of dog waste management in Reno, Truckee Meadows Parks Foundation implemented the Doggie Ambassador Project in the summer of 2016. Currently, the Parks Foundation manages 16 Doggie Ambassador volunteers. Every month, these volunteers obtain dog waste bags from the Parks Foundation and distribute them to assigned stations throughout Reno. The AmeriCorps VISTA Volunteer and Outreach Coordinator tracks volunteer time and dog waste bag distribution. With support from the Truckee River Fund, the Parks Foundation intends to expand the program by recruiting more volunteers through social media advertising, supplying dog waste bags and replacement stations, and conducting a volunteer-led educational campaign within Reno parks and trails.

Beginning in the spring of 2018, Parks Foundation volunteers will spend two weekends a month setting up a tent and table at trailheads around the Truckee Meadows where they will implement the community education component of the Doggie Ambassador Project. Volunteers will hand out dog waste bags in donated "dog bone" dispensers to unprepared dog owners. They will communicate with the public and will hand out dog treats and educational materials to dog owners.

#### **4. Grant priorities.**

The Doggie Ambassador Project advances priorities II, VI, VII, and VIII - Watershed Improvements,, Stewardship and Environmental Awareness, Meet Multiple Objectives, and Leverage Stakeholder Assets and Participation. Priority II refers to watershed improvements such as reducing total dissolved solids. This project will reduce fecal matter, and therefore fecal coliform in the watershed. The Doggie Ambassador Project also advances priority VI by providing educational resources that foster better environmental stewardship. Community members adopt dog waste bag stations in our parks, thereby empowering and providing them with the proper tools to encourage responsible pet waste disposal throughout the Truckee Meadows. The Doggie Ambassador Project also works with multiple



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# TRUCKEE MEADOWS PARKS FOUNDATION

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**AWARENESS • APPRECIATION • STEWARDSHIP**

stakeholders, including Keep Truckee Meadows Beautiful, Nevada Land Trust (One Truckee River), Truckee Meadows Storm Water Permit Coordinating Committee, Friends of Nevada Wilderness, Natural Paws, and the City of Reno, to encourage collaborative efforts in reducing the pet waste problem in our watershed and promote the missions of all involved agencies, thereby advancing priority VIII.

**5. Permitting.**

No permitting is required to support this project. The Doggie Ambassador Project works in cooperation with the City of Reno, so any dog waste bag stations added or replaced in parks will be worked out directly with City of Reno staff.

**6. Future land use.**

None.

**7. Future phases.**

Truckee Meadows Parks Foundation receives funding from an AmeriCorps grant, that allows for the placement of the AmeriCorps VISTA Volunteer and Outreach Coordinator. This member (with the supervision of Parks Foundation staff) will continue to implement and build this project in the years to come. Additionally, the Parks Foundation will seek alternative funding mechanisms to ensure the sustainability of the Doggie Ambassador Project. Anticipated funding sources include the City of Reno, the Truckee Meadows Storm Water Permit Coordinating Committee, Helen Close Charitable Fund, and the Patagonia Foundation.

**8. Principals involved.**

Truckee Meadows Parks Foundation is the primary organization responsible for implementing and tracking the Doggie Ambassador Project.

**9. Staff positions involved.**

Full time: 0 Part-time: 2

**10. Volunteers involved.**

Currently, Truckee Meadows Parks Foundation manages 16 volunteers through the Doggie Ambassador Project. From September 2017 to December 2017, 12 of these volunteers collectively contributed 70.8 hours of service. From August 2018 to August 2019, we anticipate managing 30 Doggie Ambassador volunteers who will each contribute an average of 18 hours in a year (540 hours total), and two education volunteers who will each contribute 72 hours in a year (144 hours total), for a grand total of 684 volunteer hours.



## 11. Timeline.

- February 2018: Submit Truckee River Fund 2018 grant proposal.
- March 2018: Purchase 10 cases of dog waste bags using existing funding.
- April 2018: Begin educational tabling in parks and continue campaign through September 2019.
- June 2018: Purchase 10 cases of dog waste bags using existing funding.
- August 2018: With funding from this Truckee River Fund grant, begin and maintain a sustained social media advertising campaign to recruit up to a total of 30 Doggie Ambassador volunteers and educate the public. Purchase 216,000 dog waste bags using Truckee River Fund grant support.
- October 2018: Purchase and install four dog bag waste stations to replace vandalized and damaged stations in John Champion Park, Manzanita Park, Northgate Park, and Whitaker Park.
- April 2019: Purchase and install four new dog bag waste stations in busy riverside parks.
- September 2019: Submit final report to the Truckee River Fund.

Possible delays in the implementation of the proposed timeline revolve around recruiting and maintaining motivated community volunteers. In order to reduce this eventuality, we will provide volunteer incentives such as a volunteer appreciation picnic and volunteer t-shirts.

## 12. Success.

Following the conclusion of the grant cycle, the Parks Foundation will provide a final report in September 2019. This report will detail volunteers managed, dog waste bag stations purchased, dog waste bags distributed, and citizens reached through the advertising and educational campaigns.

## 13. Grant match.

Through a secured federal grant, the Parks Foundation employs an AmeriCorps VISTA Volunteer and Outreach Coordinator. This member (under the supervision of Parks Foundation staff) is responsible for building and maintaining the Doggie Ambassador Project. The value of this AmeriCorps member for 10 hours spent on this project per month for 12 months is \$2,400. Community volunteers are an essential component of the Doggie Ambassador Project. Doggie Ambassador volunteers deliver dog waste bags to stations around Reno. They contribute an average of 1.5 hours of service each month and we anticipate managing 30 of these volunteers from August 2018 to August 2019. Thus, Doggie Ambassador volunteers provide an in-kind value of \$10,800. Two education volunteers will contribute an in-kind value of \$2,880. In conclusion, our total grant match value is \$16,080, or 51% of the total budget.

## 14. Project Budget.

Please see page 6.





## ORIGINAL DOGGIE AMBASSADOR PROJECT BUDGET

Budget Item Description	TRF \$	Other Funding Name	Match \$	Total
216,000 Biodegradable Dog Waste Bags (\$0.02/bag + \$80 shipping)	\$4,400			\$4,400
Dog Waste Bag Stations (\$259/station x 8 stations)	\$2,072			\$2,072
Outreach & Education Supplies	\$2,000			\$2,000
Volunteer Incentives (30 t-shirts x \$7 + \$450 volunteer appreciation event)	\$660			\$660
Advertising Costs (social media campaign)	\$2,000			\$2,000
AmeriCorps VISTA Volunteer and Outreach Coordinator (\$20/hr x 10 hrs/month x 12 months)		AmeriCorps Grant (secured)	\$2,400	\$2,400
Doggie Ambassador Volunteer Time (\$20/hr x 30 vols. x 1.5 hrs/month x 12 months)		In-kind	\$10,800	\$10,800
Education Volunteers (\$20/hr x 2 vols. x 12 hrs/month x 6 months)		In-kind	\$2,880	\$2,880
Administrative Overhead	\$4,082			\$4,082
<b>TOTAL</b>	<b>\$15,214</b>		<b>\$16,080</b>	<b>\$31,294</b>

**Grant Match**

<b>Match amount to be provided:</b>		<b>\$16,080</b>
<b>Match details:</b>	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	\$ 2,400
	In-kind	\$ 13,680
		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 this project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Description of matching funds/in-kind donations:</b>	Our AmeriCorps VISTA Volunteer and Outreach Coordinator is responsible for implementing, building, and sustaining this project. This member's time is valued at \$2,400 and this funding is already secured through an AmeriCorps grant. Doggie Ambassador volunteers contribute an average of 1.5 hours of service each month and we anticipate managing 30 of these volunteers from August 2018 to August 2019. Thus, Doggie Ambassador volunteers provide an in-kind value of \$10,800. Two education volunteers will contribute an in-kind value of \$2,880. In conclusion, our total grant match value is \$16,080, or 51% of the total budget.	

**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:**

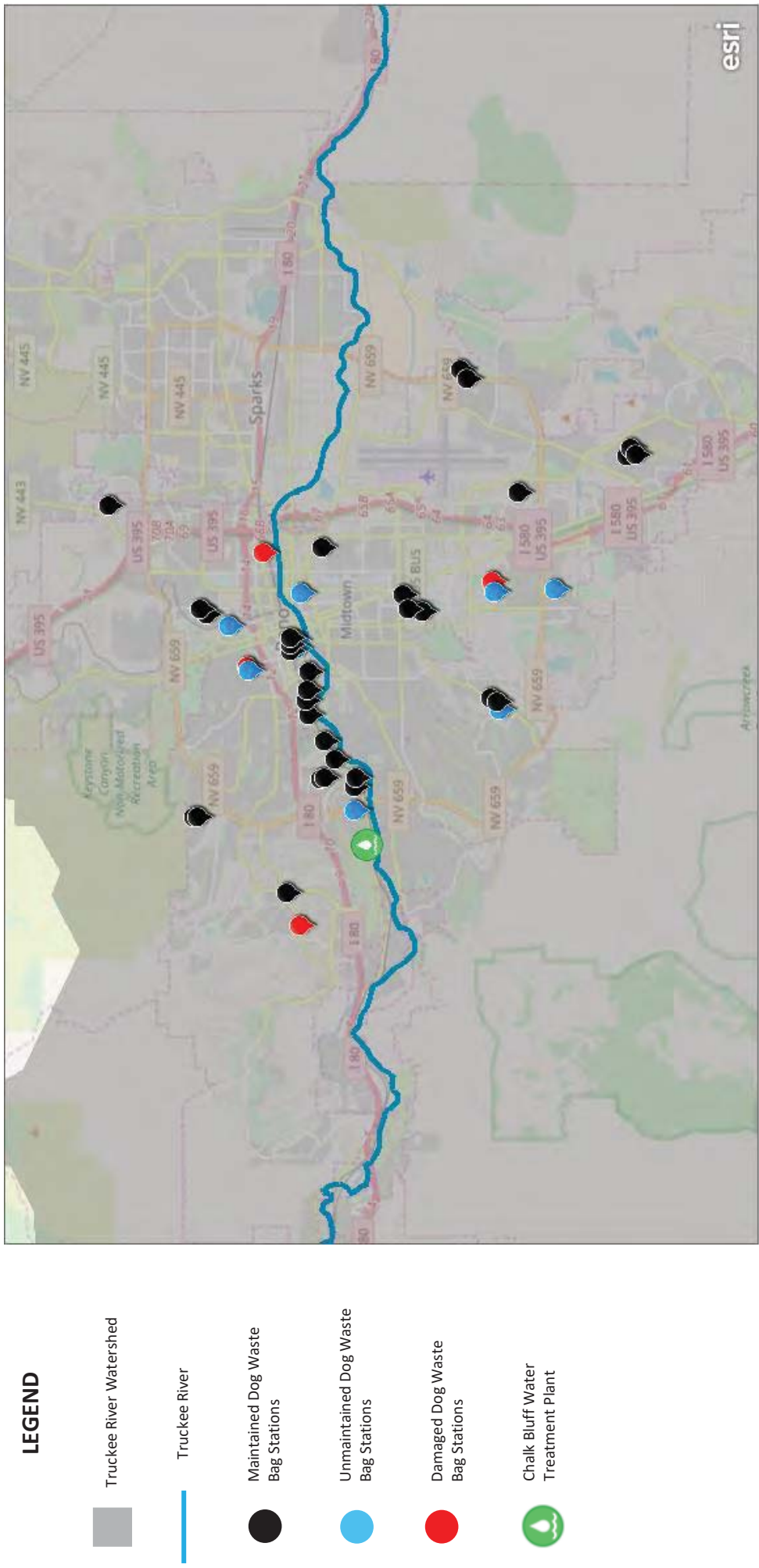
- ☒ Last audited financial statements if your organization has been audited
- ☒ List of Board of Directors
- ☒ Copy of agency's IRS 501(c)(3) Tax Determination Letter
- ☒ Copy of the agency's most recent IRS Form 990

**Governmental entities submit:**

- ☐ Departmental budget in lieu of audited financial statements



# Inventoried Dog Waste Bag Stations in Reno, Nevada (2018)



**Definitions:**  
Inventoried Dog Waste Bag Stations: stations that Truckee Meadows Parks Foundation has record of and are part of the Doggie Ambassador Project  
Maintained Dog Waste Bag Stations: there is/are volunteer(s) actively filling the station with bags  
Unmaintained Dog Waste Bag Stations: there is/are no assigned volunteer(s) to fill the station  
Damaged Dog Waste Bag Stations: the station is either broken, the key does not open the box, or there are wasps living inside the box



## Citations

Ervin, J. S., Van De Werfhorst, L. C., Murray, J. L., & Holden, P. A. (2014). Microbial Source Tracking in a Coastal California Watershed Reveals Canines as Controllable Sources of Fecal Contamination. *Environmental Science & Technology*, 48(16), 9043-9052.

US EPA (2012, October). Summaries Of Water Pollution Reporting Categories. Retrieved from <https://www.epa.gov/sites/production/files/2015-08/documents/34parentattainsdescriptions.pdf>

US EPA (2017, May 2). What is Nonpoint Source? Retrieved from <https://www.epa.gov/nps/what-nonpoint-source>

Washoe County Code 55. 130 (2012 April) <https://www.washoecounty.us/clerks/cco/code/Chapter055.pdf>

Watson, Traci (2002, June 6). Dog waste poses threat to water. *USA Today*.  
<https://usatoday30.usatoday.com/news/science/2002-06-07-dog-usat.htm>



**Cover Sheet**

**Date: January 8, 2018**

<b>Organization</b>	Board of Regents, NSHE, obo the Desert Research Institute																				
<b>Type:</b>	<b>501(c)(3) EIN# 88-6000024</b>	<b>Governmental entity? No</b>																			
<b>Address:</b>	2215 Raggio Parkway, Reno, NV, 89512-1095																				
<b>Project Name:</b>	Determining the role of signal crayfish in the Truckee River foodweb																				
<b>Amount requested: \$12,010</b>	<b>Website: www.dri.edu</b>																				
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Currently it is unclear how invasive crayfish impact the foodweb in the Truckee River. The evaluation of crayfish impacts, as a potential target species for management, may help to protect and enhance water quality in the Truckee River.																				
<b>Key People:</b>	<b>Director:</b>	Kumud Acharya, Ph.D.																			
	<b>Board Chair:</b>	Yvonne Rumbaugh, Business Manager																			
	<b>Project Contact:</b>	<b>Name:</b>	John Umek																		
		<b>Position:</b>	Postdoctoral Fellow																		
		<b>Phone:</b>	775-673-7493																		
		<b>Fax:</b>	775-673-7363																		
		<b>Email:</b>	John.Umek@dri.edu																		
<b>Organization Mission:</b>	DRI excels in basic and applied research and the application of technologies to improve people's lives throughout Nevada and the world. DRI implements this mission by fostering scientific and engineering talent. DRI applies scientific understanding to the effective management of natural resources while meeting Nevada's needs for economic diversification and science-based educational opportunities.																				
<b>Has your organization received other grants from the Truckee River Fund?</b> <b>Yes X No</b> (use additional page if necessary)	<p>If yes,</p> <table border="1"> <tr> <td>Date awarded:</td> <td>September 16, 2009</td> </tr> <tr> <td>Project title:</td> <td>#67 Cloud Seeding Project for Tahoe and Truckee Basins for WY2010 – Truckee River Fund - Tahoe</td> </tr> <tr> <td>Amount of Award:</td> <td>\$165,151</td> </tr> <tr> <td>Date awarded:</td> <td>October 25, 2010</td> </tr> <tr> <td>Project title:</td> <td>#81 Cloud Seeding Project for Tahoe and Truckee Basins for WY2011</td> </tr> <tr> <td>Amount of Award:</td> <td>\$155,876</td> </tr> <tr> <td>Date awarded:</td> <td>July 11, 2011</td> </tr> <tr> <td>Project title:</td> <td>#87 Integrated Water Quality Monitoring on the Truckee River</td> </tr> <tr> <td>Amount of Award:</td> <td>\$318,012</td> </tr> </table>			Date awarded:	September 16, 2009	Project title:	#67 Cloud Seeding Project for Tahoe and Truckee Basins for WY2010 – Truckee River Fund - Tahoe	Amount of Award:	\$165,151	Date awarded:	October 25, 2010	Project title:	#81 Cloud Seeding Project for Tahoe and Truckee Basins for WY2011	Amount of Award:	\$155,876	Date awarded:	July 11, 2011	Project title:	#87 Integrated Water Quality Monitoring on the Truckee River	Amount of Award:	\$318,012
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Amount of Award:	\$318,012																				

## DESCRIPTION OF PROJECT UNDER CONSIDERATION

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

- ☐ 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.<sup>3</sup>
- ☐ E. Other projects that meet the evaluation criteria.

<sup>3</sup> For proposals related to weed control/eradication, contact Lauren Renda at the Community Foundation of Western Nevada for additional criteria. [lrenda@nevadafund.org](mailto:lrenda@nevadafund.org); 775-333-5499.

## NARRATIVE REQUIREMENTS

### Truckee River Fund

#### I. Project Goals and Measurable Outcomes

Species invasions have occurred within the Truckee River Watershed for over 130 years, including the intentional introduction of species to promote fisheries. The Truckee River benthic environment are being impacted by these non-native species, particularly those that are capable of aggressive spread and predation. Unfortunately, the knowledge about water quality versus invasive species is unclear in river systems in the region. Previous research at Lake Tahoe suggest that shifts in water quality versus invasive species may be contributing the decline of native benthic invertebrate's endemic to Lake Tahoe such as the native stonefly and blind amphipods. Recent research has also shown that attached algae is a significant source of energy to crayfish, zoobenthos, and fish (Hecky and Hesslien 1995; Bootsma et al. 1996; France and Steedman 1996; Cambell et al. 2000; Vander Zanden and Vadeboncoeur 2002) and is often overlooked as a whole system primary productivity (Westlake et al. 1980; Havens et al. 2001; Vandeboncoeur et al. 2001; Vadeboncoeur and Steinman 2002, Wetzel 1964). Crayfish are an important predator on native benthic invertebrates and may directly or indirectly contribute to river algal production as the grazing pressure of benthic invertebrates is decreased. To date there have been no studies on the impacts of invasive crayfish in the Truckee River. Given the potential of crayfish to cause deleterious, unpredictable changes in not only the lower foodweb, but also impacts to the top fish species, it is vital to elucidate the role of an aquatic invasive species to determine if signal crayfish (*Pacifastacus leniusculus*), are controlling native invertebrate and periphyton communities. It is unclear if signal crayfish, in the Truckee River, are having positive or negative impacts on periphyton and benthic macroinvertebrates, and reducing the amount of food available for nongame and game fish in the Truckee River. Thus, specific objectives of this proposal are to a) determine dietary preferences of a nonnative benthic consumer (crayfish) and b) determine if these invertebrates exert traditional "top down" control of native invertebrates through predatory interactions. Because of these factors, crayfish are an important aquatic invasive species to consider for management. Depending on the extent of control, policy makers should be able to develop mechanisms to control and manage this species. Research in the Midwestern US suggests that crayfish invaders in lakes and streams can be successfully controlled, however this will depend on the growth rates and reproductive life histories of the crayfish. Thus, the findings and application of this research will allow managers

to determine potential strategies, costs, and environmental externalities to the ecology of the Truckee River as a result of management and conservation efforts related to these invasive species.

## II. Project Location

This project will be conducted at three locations during two-time periods on the Truckee River in both California and Nevada, USA (Figure 1).

## III. Project Description

Crayfish are dominant benthic consumers who alter benthic biodiversity, processes, and periphyton (Light 2003; Lodge et al. 1994; Stenroth and Nystrom 2003). When present they are widely recognized as a key component of benthic energy flow and nutrient cycling in aquatic systems (Lodge et al. 1994; Evans-White et al. 2001). Crayfish strongly influence lake and river habitats and biota with their foraging habits and can therefore have both direct and indirect effects on trophic interactions in aquatic systems. Thus, once they invade crayfish can dominate freshwater ecosystems. Annual crayfish production can exceed hundreds of kilograms per hectare, and biomass production and consumption often exceed the production and consumption of all other benthic invertebrates combined (Momot 1995; Whitley and Rabeni 1997). Although crayfish are thought to be more carnivorous than herbivorous, when benthic invertebrates are in low densities, crayfish consume large amounts of periphyton and macrophytes in lotic and lentic ecosystems (Lodge et al. 1994, Twardochleb et al. 2013).

The benthic habitats of rivers play an important role in a variety of processes. For example, periphyton communities utilize nutrients added to an ecosystem providing forage for fisheries production, and provide important habitat for native biodiversity (Vadeboncouer et al. 2002). Crayfish (*Pacifastacus leniusculus*) were introduced multiple times into the Truckee River Watershed and believed to be established by 1936, however until recently, studies of the benthic environment have largely been ignored in Truckee River. Research from other ecosystems suggest these consumers can control ecosystem dynamics in the benthic environments, and we hypothesize that crayfish may be depressing populations of invertebrates through direct predation and indirect impacts on periphyton on these communities.

Crayfish are shredder feeders and signal crayfish in particular can feed directly on periphyton and benthic invertebrates; therefore, dietary preference is difficult to determine from standard gut content examination. To characterize the foodweb dynamics, crayfish trophic position, and dietary preference on a temporal and spatial scale, stable isotopes and amino acids (carbon and nitrogen) from periphyton, benthic invertebrates, and crayfish will be collected. Specifically, primary consumers, primary producers, and crayfish will be collected from 3 locations (Figure 1) during the growing season (May/June) and replicated at the same locations at the end of the growing season (October/November). At each location and sampling period, to account for dietary variation, 6 crayfish will be taken for  $^{13}\text{C}$  and  $^{15}\text{N}$  amino acid analysis and 20 samples (5 crayfish, 10 benthic invertebrates samples, and 5 periphyton samples) will be collected for  $^{13}\text{C}$  and  $^{15}\text{N}$  stable isotope analysis. Isotopic  $\delta^{13}\text{C}$  has been used frequently to determine the flow of organic matter through food webs while  $\delta^{15}\text{N}$  has been used to determine trophic levels in the ecosystem (Gu et al. 1994; Kling, 1994; Vander Zanden et al., 1999).



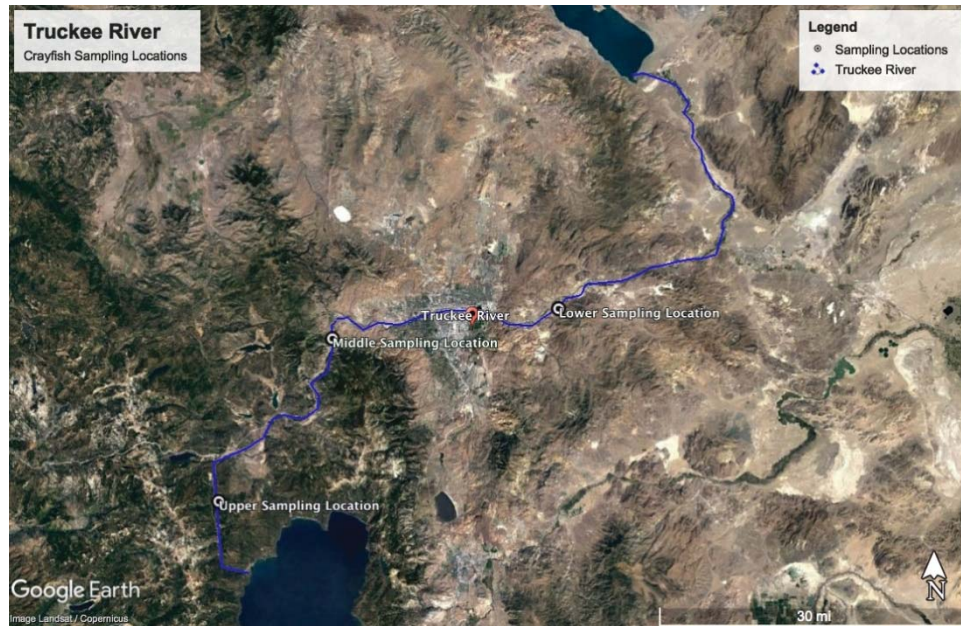


Figure 1. Locations of study sites in the Truckee River CA. and NV., USA. Sampling sites are indicated with circles where amino acid, stable isotope, and habitat information will be taken.

#### **IV. Grant Priorities**

There is a clear need to develop strategies for effective management of aquatic invasive species in the Truckee River. This proposal lends directly towards the continued work with state and federal managers in the response to aquatic invasive species. This work will elucidate the role an aquatic invasive species plays in the Truckee River ecosystem, providing needed information for management control strategies.

#### **V. Permitting**

Collection permits will be submitted to both Nevada Department of Wildlife and the California Fish and Game for benthic invertebrate sampling on the Truckee River.

#### **VI. Future Land Use**

No known or foreseeable zoning, land use, or development plans will affect the proposed project.

#### **VII. Future Phases**

There are no future phases of the proposed project.

#### **VIII. Principles Involved**

Dr. John Umek will be the primary investigator on this project.

#### **IX. Staff Positions Involved**

No staff positions will be involved in the project.

#### **X. Volunteers Involved**

One to two volunteers will be involved in the project during field collections for a total of 4 to 6 hours.



**XI. Time Line**

<b>Milestone/Deliverables</b>	<b>Start Date</b>	<b>End Date</b>	<b>Description</b>
Objective 1. Field collections	June 2018	October 2018	Field collections crayfish. Basic life history measurements of abundance, population size structure, and habitat measurements.
Objective 2: Laboratory Analysis	August 2018	January* 2019	Analysis of Compound specific <sup>13</sup> C and <sup>15</sup> N amino Acids and <sup>13</sup> C and <sup>15</sup> N stable isotopes.
Objective 3: Analysis and report write up	August 2018	May 2019	Statistical analysis of amino acids, stable isotopes, and report write up from statistical results.
Present updates to relevant agencies (TMWA, USFWS, NDOW, etc.)	October 2018	May 2019	Present brief updates to the TMWA, call a special meeting if needed to present information that may help managers develop control and management methods. Present findings at academic conferences and submit a manuscript to peer-reviewed journals.

\* Laboratory analysis may take longer depending on the availability of laboratory equipment.

**XII. Success**

Species invasions have occurred within the Truckee River Watershed for over 130 years. Recently however the river has received a series of invasions (invasive plants, warmwater and coldwater fishes) that threaten the rivers benthic environment and biodiversity. This study tests the hypotheses that crayfish control through predation processes, native benthic invertebrate abundance and richness. Depending on the extent of control, policy makers should be able to develop mechanisms to control and manage these invertebrates. For example, research in the Midwestern US suggests that crayfish invaders in lakes and streams can be successfully controlled, however, this will depend on the dietary behavior and of the crayfish. Thus, the findings and application of this research will allow managers to determine potential strategies, costs and environmental externalities to the ecology of Lake Tahoe as a result of management and conservation efforts related to these invasive species.

**XIII. Grant Match**

<b>Match amount to be provided: \$4,104</b>					
<b>Match details:</b>	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 : <table border="1"> <tr> <td>Cash</td> <td><b>\$ 3,283</b></td> </tr> <tr> <td>In-kind</td> <td><b>\$ 821</b></td> </tr> </table> 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 this project? Yes <u>X</u> No <u>    </u>	Cash	<b>\$ 3,283</b>	In-kind	<b>\$ 821</b>
Cash	<b>\$ 3,283</b>				
In-kind	<b>\$ 821</b>				
<b>Description of matching funds/in-kind donations:</b>	The cash match has been secured with DRI using internal, non-federal, discretionary/unrestricted funds. The in-kind of \$821 is the 25% indirect costs associated with the cash match/DRI funds.				

**ATTACHMENTS** – will be provided if requested.

#### XIV. Project Budget

##### DESERT RESEARCH INSTITUTE COST ESTIMATE

Sponsor: Truckee River Fund

Title: Determining the role of signal crayfish in the Truckee River foodweb

Project Dates: April 1, 2018 - March 31, 2019

	Rate	YEAR 1		TOTAL PROJECT
		TRF	DRI MATCH	
		Cost	Cost	Cost
<b>PERSONNEL (Salary/Benefits)</b>				
PI	37.78	1,568	2,508	4,076
		0	0	0
<b>TOTAL PERSONNEL</b>		1,568	2,508	4,076
<b>TRAVEL</b>				
Monthly Sampling				
DHS Motor Pool - miles	0.40	0	200	200
DHS Motor Pool - days	35	0	175	175
<b>TOTAL TRAVEL</b>		0	375	375
<b>OPERATING</b>				
Compound specific 13C and 15N analysis	195	7,020	0	7,020
13C and 15N Stable Isotopes	8.5	1,020	0	1,020
Laboratory Supplies		0	200	200
Field Supplies		0	200	200
<b>TOTAL OPERATING</b>		8,040	400	8,440
<b>CONSULTANT</b>				
		0	0	0
<b>TOTAL CONSULTANT</b>		0	0	0
<b>TOTAL DIRECT COSTS</b>		9,608	3,283	12,891
<b>MTDC</b>		9,608	3,283	12,891
<b>ICR (ON MTDC)</b>	25%	2,402	821	3,223
<b>TOTAL COST</b>		<b>12,010</b>	<b>4,104</b>	<b>16,114</b>
<b>TOTAL TRF</b>		<b>74.53%</b>		<b>12,010</b>
<b>TOTAL MATCH</b>		<b>25.47%</b>		<b>4,104</b>

February 8, 2018

Truckee Donner Land Trust is pleased to submit this proposal to the Community Foundation of Western Nevada's 2018 Request for Proposal. Thank you so very much for your consideration.

**Organization Name:** Truckee Donner Land Trust

**Type:** 501(c)(3) EIN# 68-0245327

**Governmental entity?** No

**Address:** PO Box 8816 Truckee CA, 96162

**Project Name:** Cold Stream Meadow Road Decommissioning and Restoration Project

**Amount requested:** \$65,000

**Website:** Tdlandtrust.org

**This funding will be used to:** Decommission and where possible, eradicate roughly five miles of eroding forest roads in the Cold Stream basin on Mt. Lola. Where possible, drainages will be reconnected, slopes re-contoured, and culverts and the broken bridge over Cold Stream Creek will be removed.

**Key People:**

**Executive Director:** Perry Norris

**Board Chair:** Jeff Brown

**Project Contact:** John Svahn, Associate Director, (530) 582-4711, john@tdlandtrust.org

**Organization Mission:** To preserve and protect scenic, historic and recreational lands with high natural resource values in the greater Truckee Donner region and manage recreational activities on these lands in a sustainable manner.

**Has your organization received other grants from the Truckee River Fund?** Yes

**Date awarded:** September 23, 2016

**Project title:** Webber Lake Little Truckee River Headwaters Management

**Amount of Award:** \$75,000

**DESCRIPTION OF PROJECT UNDER CONSIDERATION**

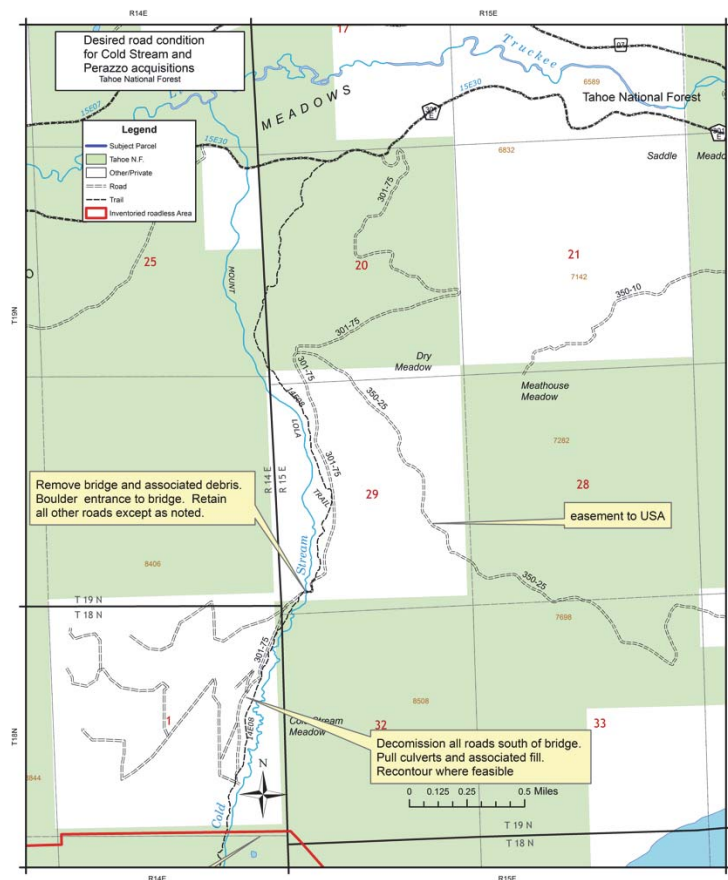
- A. Projects that improve bank or channel stabilization and decrease erosion
- B. Projects that remove pollution from the Truckee River.
- C. Other projects that meet the evaluation criteria.

## NARRATIVE

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

- Decommission for motorized use all roads in the Cold Stream drainage south of the bridge at the foot of Cold Stream Meadow.
- Remove the broken bridge over Cold Stream.
- Remove culverts in abandoned roadways.
- Reconnect drainages and re-contour slopes where feasible.
- De-compact road surfaces where necessary.

Decommissioning the roads, removing the bridge, and removing culverts are all goals that are easily measured. It will not be possible to re-contour all slopes, connect all drainages and de-compact all road surfaces; these goals will be deemed complete when the U.S. Forest Service advises that road impacts to the meadow are minimized.



2. **Project location.**

The project is located on two parcels owned by the Truckee Donner Land Trust within the Tahoe National Forest: Section 29, T 19N R 15 E and Section 1, T 18N R 14 E. Both properties are located in Sierra County, CA. Geographically the properties are located on the north slope of Mt. Lola and contain portions of Cold Stream, including the headwater meadow. Cold Stream is a major tributary to the Little Truckee River in Perazzo Meadows.

3. **Project description.**

When complete, the Cold Stream Meadow Road Decommissioning and Restoration will make unavailable roughly five miles of former logging roads to motorized vehicle trespass on Truckee Donner Land Trust land, and mitigate erosion impacts to Cold Stream Meadow, a key headwater meadow in the Little Truckee Basin.

Cold Stream is a principal tributary to the Little Truckee River System in Perazzo Meadow. It runs north from the summit of Mt. Lola, descending from over 9000 feet to its terminus below 6500 feet. Much of the creek is within a rugged canyon with several areas of meadows where the stream loses gradient. The headwater meadow, Cold Stream Meadow, occurs at roughly 7700 feet. Save for earthen forest roads and the Mt. Lola Trail there is no development above the Henness Pass Road Corridor. There is sparse evidence of legacy uses except for logging. The meadow does not bear evidence of large-scale headcutting and is the most pristine meadow in the Land Trust's portfolio.

The property sees significant summer recreation use by hikers, equestrians, and cyclists on the Mt. Lola Trail. Prior to the Land Trust's purchase of the property in 2010, the property was used by off-highway vehicles (OHV). The roughly five miles of roads above the access bridge are poorly-constructed, sometimes along fall-lines, and are built on erosive soil. Several years ago the bridge washed out and is partially submerged in Cold Stream. This led to the cessation of most OHV trespass.

Decommissioning the roads will allow the Land Trust to further reduce the amount of OHV trespass and the risks associated. Each year staff find evidence of unauthorized campfires and erosion generated from OHVs trespassing on the roads, hillsides and meadows.

According to several papers written recently by staff of The Nature Conservancy and others, dirt road maintenance and decommissioning is important for sediment reduction in the Truckee River watershed. Based on the RIOS model results, the authors found that dirt road maintenance/decommissioning was the most cost-effective activity to reach the regulatory sediment reduction goal of a 22% reduction in sediment from non-urban



areas in the Middle Truckee subwatershed (Lake Tahoe outlet to Farad gauging station). The second most cost-effective was land protection.

With this information, the Land Trust deduces that a project to decommission the roads adjacent to Cold Stream is a cost-effective way to reduce erosion impacts and reduce OHV trespass impacts. The project will also improve the visitor experience for people using the Mt. Lola Trail, as the road parallels the trail in some places a mere few feet away.

The property is likely to be conveyed to the Tahoe National Forest in the next five years. This conveyance adds to the necessity of completing the road decommissioning and restoration as it is unlikely to be a priority to the National Forest, given the long list of other restoration and land management projects already in the National Forest's pipeline.

- Podolak, K., Lowe, E., Wolny, S., Nickel, B. and Kelsey, R., 2017. Informing watershed planning and policy in the Truckee River basin through stakeholder engagement, scenario development, and impact evaluation. *Environmental Science & Policy*, 69, pp.124-135.
- McGraw, D., McKay, A., Duan, G., Bullard, T., Minor, T., Kuchnicki, J., 2001. Water Quality Assessment and Modeling of the California Portion of the Truckee River Basin. Report Prepare for the Town of Truckee and the Lahontan Regional Water Quality Control Board. Division of Hydrologic Sciences. Desert Research Institute, Reno, NV.

4. **Grant priorities.**

The project meets multiple grant priorities including Priorities II and IV: Minimizing erosion, improving source water quality, and encouraging future growth of vegetation in areas disturbed by past logging by reconnecting drainages, re-contouring slopes, de-compacting soil, and discouraging future compaction and erosion. In addition, the project advances grant priority VI, Stewardship and Environmental Awareness, with a volunteer component that will include work de-compacting road surfaces as well as a discussion on why properly-functioning headwater meadows are key to water quality and quantity in the Sierra.

5. **Permitting.**

Most of the project will occur within existing road prisms and will be below a threshold for permitting. However, the Land Trust is inquiring with the Lahontan Regional Water Quality Board and the California Department of Fish and Wildlife as to whether removal of any of the culverts or removal of the bridge pieces reach a threshold of requiring permits. Staff anticipate knowing this in the spring of 2018 and anticipate the project to be permitted in summer and completed in the fall of 2018.

6. **Future land use.**

It is likely that the property will be conveyed to the U.S. Forest Service within the next five years. The Forest Service owns the adjacent sections of land and adding these sections to the National Forest will allow for seamless management of the Cold Stream basin for wildlife habitat goals.

7. If **future phases** of the project will be needed, identify anticipated sources of funding.  
**N/A**

8. **Principals involved** in leading or coordinating the project or activity.  
The Truckee Donner Land Trust will be the project lead with consultation from the U.S. Forest Service and the Truckee River Watershed Council. The Forest Service will assist with the engineering and design of the road decommissioning and the Watershed Council will manage the volunteer service component as a part of the annual Truckee River Day.

9. Number of **staff positions involved** in project: Fulltime 1 Part-time 1  
The Land Trust will have one full-time employee dedicating a portion of his time to the project as well as a part-time summer seasonal intern. The Truckee River Watershed Council dedicates a full-time employee to the implementation of Truckee River Day.

10. Number of **volunteers involved** in project and an estimated number of volunteer hours.  
It is anticipated that 15-20 volunteers will be needed, working roughly four hours on Truckee River Day, to meet the goal of the project.

11. **Time Line** of Project. List key dates and include project milestones.
- April 2018: determination of permit needs
  - July 2018: Permits, if needed, received
  - September 2018: Roads decommissioned, bridge removed, culverts removed, re contouring and de compaction
  - October 2018: Volunteers complete project as a part of Truckee River Day

12. **Success.**  
The project will be successful when the roughly five miles of roads surrounding Cold Stream Meadow are decommissioned and are unavailable for motor vehicle use. The project will also be successful when the broken bridge is removed as well as culverts that impede proper drainage functions in the upper Cold Stream Basin.

13. **Grant match.**  
The Truckee Donner Land Trust will support the balance of the project with available funding already raised. In addition, in-kind support will be provided through volunteer hours on Truckee River Day, and from a donation from the contractor performing the work.

**Match amount to be provided: \$20,000**

- Cash \$17,800, the funding is already held by the applicant
- In-kind (volunteers) \$1200
- In-kind donation from Contractor \$1000

14. Project budget

<b>Cold Stream Budget</b>				
<b>Budget Item:</b>	<b>Funded by:</b>			
	<b>TRF \$</b>	<b>Truckee Donner Land Trust</b>	<b>In-kind</b>	<b>Notes</b>
Project Design/Engineering		\$3,000.00		
Permitting		\$5,000.00		This is an estimate. Excess funds will go to project implementation
Project implementation:				
Contractor	\$65,000.00	\$8,400.00	\$1,000.00	
Volunteers			\$1,200.00	
Project Administration		\$1,400.00		
Project Subtotal:	\$65,000.00	\$17,800.00	\$2,200.00	
<b>Project Total:</b>			<b>\$85,000.00</b>	

*Truckee River Watershed Council***Truckee Meadows Restoration Project- Phase 2 Construction**

<b>Organization Name:</b>	<b>Truckee River Watershed Council</b>																										
<b>Type: Non-Profit</b>	<b>501(c)(3) EIN# 91-1818748</b>	<b>Governmental entity? No</b>																									
<b>Address:</b>	P.O. Box 8568, Truckee, CA 96162																										
<b>Project Name:</b>	Truckee Meadows Restoration Project- Phase 2 Construction																										
<b>Amount requested:</b> \$30,000	<b>Website:</b> www.truckeeriverwc.org																										
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Fill a critical funding gap in phase 2 of construction of the Truckee Meadows Restoration project. This project will reduce erosion and sedimentation to the main stem Truckee River.																										
<b>Key People:</b>	<table border="1"> <tr> <td><b>Director:</b></td> <td colspan="3">Lisa Wallace</td> </tr> <tr> <td><b>Board Chair:</b></td> <td colspan="3">Michael Park</td> </tr> <tr> <td rowspan="5"><b>Project Contact:</b></td> <td><b>Name:</b></td> <td colspan="2">Matt Freitas</td> </tr> <tr> <td><b>Position:</b></td> <td colspan="2">Program Manager</td> </tr> <tr> <td><b>Phone:</b></td> <td colspan="2">530-550-8760, 6#</td> </tr> <tr> <td><b>Fax:</b></td> <td colspan="2">NA</td> </tr> <tr> <td><b>Email:</b></td> <td colspan="2">mfreitas@truckeeriverwc.org</td> </tr> </table>			<b>Director:</b>	Lisa Wallace			<b>Board Chair:</b>	Michael Park			<b>Project Contact:</b>	<b>Name:</b>	Matt Freitas		<b>Position:</b>	Program Manager		<b>Phone:</b>	530-550-8760, 6#		<b>Fax:</b>	NA		<b>Email:</b>	mfreitas@truckeeriverwc.org	
<b>Director:</b>	Lisa Wallace																										
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	<b>Position:</b>	Program Manager																									
	<b>Phone:</b>	530-550-8760, 6#																									
	<b>Fax:</b>	NA																									
	<b>Email:</b>	mfreitas@truckeeriverwc.org																									
<b>Organization Mission:</b>	We bring the community together for the Truckee to restore, protect, and enhance the Truckee River watershed.																										
<b>Has your organization received other grants from the Truckee River Fund?</b> <b>Yes X No</b> (use additional page if necessary)	<p>If yes,</p> <table border="1"> <tr> <td>Date awarded:</td> <td>October 2017</td> </tr> <tr> <td>Project title:</td> <td>Truckee River Tributaries Sediment Reduction Project</td> </tr> <tr> <td>Amount</td> <td>\$165,000</td> </tr> <tr> <td>Date awarded:</td> <td>March 2017</td> </tr> <tr> <td>Project title:</td> <td>Big Chief, F4M Restoration Culvert Outflows</td> </tr> <tr> <td>Amount:</td> <td>\$50,000</td> </tr> <tr> <td>Date awarded:</td> <td>September 2016</td> </tr> <tr> <td>Project title:</td> <td>Donner Creek Concept Design</td> </tr> <tr> <td>Amount:</td> <td>\$40,000</td> </tr> </table> <p>Please see Attachment A for a full list of awarded grants</p>			Date awarded:	October 2017	Project title:	Truckee River Tributaries Sediment Reduction Project	Amount	\$165,000	Date awarded:	March 2017	Project title:	Big Chief, F4M Restoration Culvert Outflows	Amount:	\$50,000	Date awarded:	September 2016	Project title:	Donner Creek Concept Design	Amount:	\$40,000						
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Amount:	\$40,000																										

**DESCRIPTION OF PROJECT UNDER CONSIDERATION**

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

- ☒ 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.<sup>1</sup>
- ☐ E. Other projects that meet the evaluation criteria.

*Truckee River Watershed Council***Truckee Meadows Restoration Project- Phase 2 Construction**

**1. Specific project goals and measurable outcomes and how you will measure and report them.** The goal of the Truckee Meadows Restoration Project is to restore an impaired meadow complex and ephemeral drainage, reducing erosion and excess sedimentation to the *main stem Truckee River*.

With the support of the Truckee River Fund (grants #75 and #142), we have completed several assessments and studies of the project site (Balance Hydrologics Inc., 2010 & 2014) which have identified that historic and modern alterations have resulted in the loss and degradation of wetland/riparian habitat, loss of hydrologic function, rapid runoff, and erosion and sedimentation to the Truckee River. To address these issues, we have completed restoration design, permitting and compliance, and phase 1 of construction.

The measureable outcomes for the project are:

- Restoration or enhancement of 15 acres of wetland habitat
- Improved hydrologic function the wetland complex and 0.75mile ephemeral drainage, a tributary to the Truckee River.
- Reduction in excessive erosion from upland, wetland, and instream areas supporting attainment of the Truckee River Sediment Total Daily Maximum Load (TMDL; Lahontan Regional Water Quality Control Board, 2008)
- Reduced stormwater runoff rate and increased attenuation of high flows

These outcomes will be monitored via the project's pre/post monitoring program which includes groundwater, surface water, vegetation, and rapid assessment parameters.

This request is to fill a critical funding gap in phase 2 construction.

**2. Project location.** The project site is located east of downtown Truckee, CA on Brockway Road. The meadow complex occupies a broad terrace above the Truckee River. It is fed by two springs, and drains northeast via an ephemeral drainage to the Truckee River. The project addresses the impairments on meadow and drainage, so there are 5 distinct work areas ("sites") between the meadow and the Truckee River (see attached location map).

**3. Project description.**

Plans and Previous Work. The project was initiated in 2010 when TRWC convened a partnership of 8 public and private landowners that collectively owned the entire wetland complex and ephemeral drainage (i.e. from the springs to the Truckee River). Working with that partnership, we completed a feasibility study and assessment, four years of pre-project monitoring, 100% restoration designs, and environmental compliance and permitting. In 2017, we completed phase 1 construction, which included sites 2 to 5 (from Brockway Rd to the Truckee River; see attached map).

The Problem. The issues facing the wetland and ephemeral drainage were various, but most centered around altered hydrology and land-use impacts. Our pre-project studies (Balance Hydrologics Inc. 2010 & 2014) found rapid runoff from the meadow due to constructed ditches that drained the site. This contributed to dewatering of the meadow and limited attenuation of high flows. Various portions of the wetland had also been filled over the last 60 years. Downstream, along the ephemeral drainage (Sites 3 and 5), land-uses had altered the flow path and the Truckee River floodplain. Coupled with the relatively rapid run-off from the meadow upstream, these alterations caused significant erosion impacting water quality in the Truckee River.

The Solution. The overall restoration approach is centered on fixing the surface water hydrology. Within the meadow (Site 2), we filled the constructed ditches that promoted rapid runoff; dispersing flows across the meadow surface. We also removed the artificial fill from several locations in the wetland. Phase 2 of



*Truckee River Watershed Council***Truckee Meadows Restoration Project- Phase 2 Construction**

construction will employ similar tactics at Site 1. Downstream of the meadow (Sites 3-5) the project restored several sections of the ephemeral drainage. This included re-establishing a historic channel, installing a sediment detention basin, and restoring the Truckee River floodplain topography and hydrology.

Overall, this approach will slow surface water within the upstream meadow, enhancing that habitat and attenuating high flows. This promotes more natural hydrology in the downstream ephemeral channel, where the channel and floodplain enhancements will reduce sediment erosion and promote deposition before reaching the main stem Truckee River.

Filling a Critical Funding Gap. In the years preceding phase 1 construction, TRWC raised over \$1.5million in construction funding for this project from cost share from project partners, the California Department of Fish and Wildlife (CDFW), and several foundations grants.

However, the record breaking 2016/2017 winter created site conditions which required additional construction costs during the first phase of construction. We now have a critical funding gap for phase 2 construction that we seek to fill.

The \$30,000 requested in this proposal leverages a much larger result. The strength of this project is its comprehensive nature. It addresses the issues facing this entire sub-basin and the Truckee River. Thus by supporting phase 2 construction, this proposal supports the larger restoration effort, including the water quality benefits.

**4. Grant priorities.** The project addresses:

- II. Watershed Improvements.** The project will decrease sedimentation to the Truckee River and support attainment of the a 303(d) listed TMDL pollutant to the Truckee River.
  - III. Local Stormwater Improvements.** Due it is urban surroundings, the project site receives stormwater inputs from adjacent roads, residential, and commercial developments. The project's approach and engineered solutions will provide natural treatments for those inputs before reaching the main stem of the Truckee River.
  - VII. Meet Multiple Objectives.** The project meets the watershed and water quality objectives listed above. It also benefits wetland and instream habitat, native fish and wildlife species, flood attenuation, and carbon sequestration.
  - VIII. Leverage Stakeholder Assets and Participation.** The project has leveraged stakeholder participation and assets from the outset. Project partners (public agencies, governments, and private landowners) were critical in starting and funding this project. All have contributed cost-share to the project (total \$300,000) and participated for 7 years.
- 5. Permitting.** All environmental compliance (CEQA) and permits have been completed. The Town of Truckee is the CEQA lead. All project permits have been obtained including Section 401 water quality certification, Construction General Stormwater Permit, Lake and Streambed Alteration Permit, Section 404 Permit, Grading Permit, and Development/Minor Use Permit.
- 6. Future Land Use.** There are no foreseeable zoning, land use, or development plans that will affect the project or project site. All landowners are project partners and have committed to the restoration.

*Truckee River Watershed Council***Truckee Meadows Restoration Project- Phase 2 Construction**

- 7. Future Phases of the project:** The anticipated future phases of the project (i.e. post-project monitoring and adaptive management) are already funded by grants from the CDFW and National Fish and Wildlife Foundation.
- 8. Principals involved in leading or coordinating the project or activity.** Matt Freitas will be the lead from TRWC. He is responsible for coordinating project activities with project landowners. TRWC has received project approval from all eight project landowners (provided to TRF with grant #142).
- 9. Number of staff positions involved in project:** Matt Freitas and Lisa Wallace (TRWC) will work part time on this project.
- 10. Number of volunteers involved in project and an estimated number of volunteer hours.** Volunteers participated in native replanting during phase 1 construction. Approximately 20 volunteers (80 person hours) will participate in the same activity as a Truckee River Day project in 2018.
- 11. Time Line.** The project timeline is included below. Please note that for the sake of clarity and context, the timeline includes several completed project tasks as well as the current and upcoming work. There are no anticipated delays for phase 2 construction or completing post-project monitoring and adaptive management.
- |                           | <b>Task</b>                                     | <b>Start Date</b> | <b>Completion Date</b> |
|---------------------------|---|-------------------|------------------------|
| Completed work            | Pre-project monitoring                          | Sept 2015         | Sept 2017              |
|                           | Environmental compliance & permitting           | June 2015         | Sept 2017              |
|                           | Restoration design                              | March 2015        | April 2017             |
|                           | Construction phase 1                            | Sept 2017         | Nov 2017               |
| Current and upcoming work | Construction phase 2                            | Sept 2018         | Oct 2018               |
|                           | Post-project monitoring                         | Nov 2017          | Nov 2019               |
|                           | Adaptive management                             | Nov 2017          | Nov 2020               |
|                           | Stakeholder coordination and project management | 2010              | 2020                   |
- 12. Success.** Post- project monitoring will confirm habitat enhancement, restoration of hydrology, reductions in sedimentation, and attenuation of runoff. This monitoring program is already funded by outside sources. Early observations following phase 1 construction suggest the project has been successful towards these goals thus far.

*Truckee River Watershed Council***Truckee Meadows Restoration Project- Phase 2 Construction****13. Grant match.**

<b>Match amount to be provided:</b>		<b>\$47,750</b>
<b>Match details:</b>	Match is:	
	Cash	\$47,750
	In-kind	None
	For the cash portion of your match, is the funding already being held by the applicant for this project? Yes	
<b>Description of matching funds/in-kind donations:</b>	<p>The matching funds are from the California Department of Fish and Wildlife (CDFW) Wetland Restoration for Greenhouse Gas (GHG) Reduction Grant Program. Grant Agreement #P1496010. Grant amount \$1,495,551.</p> <p>Matching funds are allocated for personnel services, restoration design, pre-project monitoring, environmental compliance/permits, restoration construction, and post-project monitoring, and adaptive management. TRWC will manage funds provided by the CDFW and by the Truckee River Fund to ensure maximum project efficiency and cost effectiveness.</p>	

**Citations**

Balance Hydrologics. 2010. Preliminary assessment of restoration options for the Hilltop-Ponderosa wetland complex, Town of Truckee, Nevada County, California. Prepared for the Truckee River Watershed Council.

Balance Hydrologics. 2014. Truckee Wetlands Restoration Partnership Conceptual Design Basis Report. Prepared for the Truckee River Watershed Council.

Lahontan Regional Water Quality Control Board. 2008. Total maximum daily load for sediment. Middle Truckee River Watershed. Placer, Nevada, and Sierra Counties. Includes Gray and Bronco Creeks.

**Attachments**

- A. Extended list of past TRWC projects funded by the Truckee River Fund.
- B. Truckee Meadows Restoration Project: Location Map and Site Photos

Documents noted below are available and can be submitted upon request.

- 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

Grant application to the *Truckee River Fund*  
from the

#200

*Truckee River Watershed Council*

**Truckee Meadows Restoration Project- Phase 2 Construction**

**BUDGET**

<b>ITEM</b>	<b>TRF \$</b>	<b>OTHER FUNDING NAME</b>	<b>MATCH \$</b>	<b>TOTAL</b>
Project management and reporting	\$1,800	CDFW GHG Reduction Grant	\$9,520	\$11,320
Environmental compliance measures	\$1,080	CDFW GHG Reduction Grant	\$10,000	\$11,080
Restoration earthwork	\$20,000	CDFW GHG Reduction Grant	\$18,100	\$38,100
Engineered log features	\$7,120	CDFW GHG Reduction Grant	\$4,680	\$11,800
Native seeding and planting		CDFW GHG Reduction Grant	\$5,450	\$5,450
<b>Totals:</b>	<b>\$30,000</b>		<b>\$47,750</b>	<b>\$77,750</b>

Grant application to the *Truckee River Fund*  
from the Truckee River Watershed Council

**Attachment A**  
**Continued list of grants to TRWC from the Truckee River Fund**

Date awarded:	September 2016
Project title:	Donner Creek Bank Stabilization Downstream of Railroad Culvert Final Design
Amount of Award	\$90,000
Date awarded:	March 2017
Project title:	F4M Restoration Culvert Outflow
Amount of Award	\$50,000
Date awarded:	September 2016
Project title:	Donner Creek Concept Designs
Amount of Award	\$40,000
Date awarded:	September 2016
Project title:	Donner Creek Bank Stabilization
Amount of Award	\$92,000
Date awarded:	April 2016
Project title:	Johnson Canyon West #2
Amount of Award	\$67,000
Date awarded:	October 2015
Project title:	Johnson Canyon West #1
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



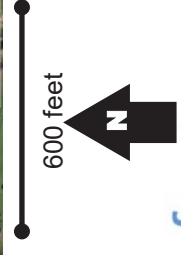
Grant application to the *Truckee River Fund*  
from the Truckee River Watershed Council

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
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





***Truckee Meadows Restoration Project  
Location Map and Project Site Overview  
Attachment B***







Figures 1 and 2: This is Site 1, the location of phase 2 construction of the Truckee Meadows Restoration Project (facing east and west respectively). The proposed funding will be used to fill a critical funding cap for construction at this site. It will support the overall project which will reduce erosion and sedimentation to the main stem Truckee River.



Figures 3 and 4: Site 2, before (Fig 3) and after (Fig 4) phase 1 construction of the project. The project removed approximately 2000CY of fill from the wetland and filled a constructed ditch, dispersing and slowing flows on the meadow surface. This will contribute to less sediment loss, reduced runoff rates, and increased attenuation of high flows.





Figures 5 and 6: Site 3, before (Fig 5) and after (Fig 6) phase 1 construction. The project created this detention basin which will slow streamflow and force deposition of sediment before continuing downstream to the Truckee River. Upstream of this site, the project restored a historic channel, blocking an eroding artificial channel across a road.



Figures 7 and 8: Site 5 on the floodplain of the Truckee River, before (Fig 7) and after (Fig 8) phase 1 construction. The project removed a concrete lined ditch (Fig 7), restoring the floodplain processes. These improvements will disperse and slow surface water. The majority of water quality improvements will have been made upstream of this site.





**COMMUNITY  
FOUNDATION**  
of Western Nevada

**TRUCKEE RIVER FUND**  
Enhancing and protecting our water resources

**Cover Sheet****Date: 2/5/18**

<b>Organization Name:</b>	National Forest Foundation		
<b>Type:</b>	501(c)(3) EIN# 52-1786332	<b>Governmental entity?</b> No	
<b>Address:</b>	3079 Harrison Ave #18, South Lake Tahoe, CA 96150		
<b>Project Name:</b>	Perazzo Meadows Watershed Restoration & Erosion Control Project		
<b>Amount requested:</b> \$189,099.40	<b>Website:</b> www.nationalforests.org		
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Restore the upper watershed by adding erosion controls along 3.5 miles of Henness Pass Road and restoring natural flow regimes in the greater Perazzo meadow area to reduce pollutants to the Little Truckee River and Stampede Reservoir.		
<b>Key People:</b>	<b>Director:</b>	Mary Mitsos, NFF President	
	<b>Board Chair:</b>	Craig R. Barrett	
	<b>Project Contact:</b>	<b>Name:</b>	Kim Carr
		<b>Position:</b>	California Program Director
		<b>Phone:</b>	(530) -902-6416
		<b>Fax:</b>	N/A
<b>Email:</b>	kcarr@nationalforests.org		
<b>Organization Mission:</b>	The National Forest Foundation, chartered by Congress, engages Americans in community-based and national programs that promote the health and public enjoyment of the 193-million-acre National Forest System, and administers private gifts of funds and land for the benefit of the National Forests.		
<b>Has your organization received other grants from the Truckee River Fund?</b> Yes <input type="radio"/> No <input checked="" type="radio"/> (use additional page if necessary)	If yes,		
	Date awarded:		
	Project title:		
	Amount of Award:		
	Date awarded:		
	Project title:		
	Amount of Award:		
	Date awarded:		
	Project title:		
	Amount of Award:		

**DESCRIPTION OF PROJECT UNDER CONSIDERATION**

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

- ☒ 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.<sup>3</sup>  
☐ E. Other projects that meet the evaluation criteria.



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## 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:**

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

The specific goals of the project are to:

- 1) Improve water quality for on-site and downstream beneficial uses by reducing erosion, sediment loading, and other pollutants to the Little Truckee River and Stampede Reservoir.
- 2) Increase water storage in the upper Truckee River watershed by restoring the floodplain and hydrologic function of the meadow tributaries to the Little Truckee River.
- 3) Improve riparian and aquatic habitat for sensitive species.

Progress towards achieving these goals will be measured and reported through the following metrics: miles of road improved, number of culverts installed, number of drainage dips installed, number of low water crossings installed, miles of stream channel enhanced/restored, and acres of riparian meadow enhanced/restored (Appendix I).

2. **Project location.**

The proposed project is located in Sierra County, California, roughly 10 miles south of Sierraville, and roughly 15 miles north of Truckee, about 5 miles west of Highway 89. Nearly the entire project is located on U.S. Forest Service lands, in the Sierraville Ranger District. This request for funds is for meadow restoration in the greater Perazzo Meadow area, and erosion control measures along Henness Pass Road (a designated California Historical Landmark). The project is focused on enhancing and protecting water quality and water resources of the Little Truckee River, a tributary to the Truckee River (303d listed for sediment).

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.

This project will reduce the potential for sedimentation to the water system by stabilizing eroding areas and capturing sediment and other pollutants at its source, along Henness Road. In addition, improve the quality of surface water runoff, restore floodplain function in the meadow tributaries to the Little Truckee River, and improve and increase the riparian and aquatic habitat in the area. Please see Appendix II for a map of the project site with respect to Henness Pass Road, the Little Truckee River, and other recently completed restoration efforts.

The project will restore natural flow to four small intermittent streams and some perennial springs flowing from the upper watershed onto a terraced meadow area. The streams were historically diverted from their natural path, causing disruption of the natural flow regime and degradation of the meadow. Henness Pass Road, the primary disturbance to the meadow system, maintained by Sierra County, runs through the meadow and a ditch along the road has intercepted the flow from a perennial stream on the terrace. The flow crosses under the road in an unnatural location which cuts through the terrace above the



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Little Truckee River floodplain. Excessive erosion continues to supply sediment to the river from this site. This project will fill existing unnatural eroded channels to reconnect the flow back into the natural channels, repair a head cut along one of the channels, and install culverts in multiple locations to reconnect the streams across the Henness Pass Road, to restore the natural historic flow regime. The road bed will need to be raised in multiple locations to allow for appropriate drainage across the road. Restoring the natural flow regimes will improve roughly 80 acres of meadow, improving the water storage capabilities of the meadow and surrounding ecosystem.

In addition, the project will reduce sediment and erosion along three and one half miles of the Henness Pass Road from Webber Lake to the current terminus of this portion of the road. The road is an historic wagon road that never had designed drainage and erosion control measures. The road disrupts the natural flow regime and hydrologic function of the greater Perazzo meadow. There are many areas in the road that capture and concentrate surface and shallow subsurface runoff creating erosion and supplying sediment directly to tributary drainages to the Little Truckee River. Treatments to reduce sediment include:

- Reshaping the road prism to improve drainage and reduce water capture.
- Adding cross drains to convey water across road at a frequency designed to prevent concentration of flow getting high enough to initiate erosion. These include:
  - Drainage dips.
  - Rocked drainage dips.
  - Low water crossings.
  - Culverts.
- Filling and draining puddled areas of the road.
- Placing road rock on highly erosive sections of the road.

Please see Appendix III for a site specific map of planned actions within the Perazzo Meadow Unit 5, and ~1 mile of Henness Pass Road. An additional 2.5 miles of road (not pictured) will be treated as appropriate.

While the project will benefit from all proposed actions being funded concurrently and implemented together, it is possible for the project to be separated into phases if needed, as explained in Narrative Requirement (7), below.

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.

The project fulfills grant priorities (II), (III), (VII), and (VIII). Through retrofitting and adding appropriate erosion control infrastructure and restoring natural flow regimes, the project will mitigate storm water runoff and reduce sediment discharges to the Little Truckee River and subsequently Stampede Reservoir. The project adopts an innovative planning approach by combining road improvements with complimentary meadow restoration to maximize efficiency with project implementation and costs, and provide sustainable, lasting benefits. Such multifaceted actions will result in significant water quality improvement to both local and downstream waters, and advance the resilience of the overall Truckee River watershed.

The project meets multiple objectives, specifically (A), (B), and (C) listed on page 1 on the Truckee



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River Fund 2018 Request for Proposals. The project will also improve riparian and aquatic habitat, providing potential benefit to numerous at-risk species in the area, including the Sierra Yellow Legged Frog, Lahontan Cutthroat Trout, and Willow Flycatcher.

Finally, the project will leverage support and/or assets from the Tahoe National Forest (USDA Forest Service), Sierra County, and Sierra Valley Resource Conservation District. Match funding will be provided by the Tahoe National Forest and Sierra County through in-kind services. The project enjoys additional support from the Sierra Valley Resource Conservation District. Please see attached Letters of Support from the Tahoe National Forest and Sierra Resource Conservation District, as well as a Sierra County Board Resolution, indicating authorization of the project.

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.

Additional permitting for road improvements will not be required. Permits for meadow restoration work (401,404) are anticipated to be obtained in the Summer 2018 at the latest. See Appendix IV, below.

6. **Future land use.** List any known or foreseeable zoning, land use, or development plans that may affect your proposed project.

Due to federal land ownership, there are no foreseeable changes to zoning, land use, or development plans that may affect the proposed project.

7. If **future phases** of the project will be needed, identify anticipated sources of funding.

This project is the last phase of the greater Perazzo Meadows Restoration effort and future phases of the project are not anticipated. That said, the proposed actions within the project could be phased or prioritized if the full funding request is not met. For instance, the funding could be used to implement road work only, meadow work only, or a combination of both, dependent upon the funder's preferences.

8. **Principals involved** in leading or coordinating the project or activity.

National Forest Foundation: Kim Carr, California Program Director; Evan Ritzinger, California Program Associate

USDA Forest Service, Tahoe National Forest: Quentin Youngblood, District Ranger, Sierraville Ranger District

Sierra County: Tim Beal, Director of Public Works, Planning and Roads

9. Number of **staff positions involved** in project: Fulltime      Part-time      ("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)

The project anticipates 6 part-time staff members: 4 Equipment Operators, 1 Road Superintendent, and 1 Forest Service Project Supervisor. Dedicated hours will vary by staff member, however, all staff members are expected to work on multiple projects. As a result, no staff member will be committing 100% of their time to this project.



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10. Number of **volunteers involved** in project and an estimated number of volunteer hours.

Utilizing volunteers has been, and will continue to be, an important aspect of forest management in the region. However, due to the required skillset and safety hazards involved in the proposed actions, this particular project will not involve volunteers.

11. **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.

An anticipated timeline for the Perazzo Meadows Watershed Restoration & Erosion Control Project is detailed in Appendix IV, below. Meadow Restoration work will begin in 2018. Road improvements do not need further permitting and may begin as soon as funding becomes available. Factors that may delay the project include, but are not limited to: permitting, weather, and contractor availability. In developing a timeline, an effort was made to set ambitious but realistic goals, while at the same time accounting for potential setbacks that could hinder progress.

12. **Success.** Tell the committee how we will know you succeeded in what you proposed to do.

There are multiple ways this project may measure the success of its proposed actions. First, the project will use the measureable outcomes detailed in Narrative Requirement (1), above. The project will also measure success through continued implementation and effectiveness monitoring, pursuant with the Perazzo Meadows Watershed Restoration and Grazing Allotment Management Project Environmental Assessment and 1990 Tahoe National Forest Land and Resource Management Plan.





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**Project Budget: Perazzo Meadows Watershed Restoration & Erosion Control Project.**

Budget Item Description	TRF \$	In-kind	Match \$	Total
Permitting & Design/Engineering		US Forest Service	\$ 5,000.00	\$ 5,000.00
Labor - paid		Sierra County	\$ 34,726.55	\$ 34,726.55
Traffic Control		Sierra County	\$ 1,800.00	\$ 1,800.00
FS Project Supervisor	\$ 2,510.00	US Forest Service	\$ 1,000.00	\$ 3,510.00
Materials	\$ 79,170.60	US Forest Service	\$ 9,000.00	\$ 88,170.60
Mobilization	\$ 7,200.00			\$ 7,200.00
Trucking costs	\$ 10,560.00			\$ 10,560.00
Equipment Costs	\$ 51,838.92			\$ 51,838.92
Indirect	\$ 22,691.93			\$ 22,691.93
Implementation Staff Time	\$ 15,127.95			\$ 15,127.95
<b>TOTAL</b>	<b>\$ 189,099.40</b>		<b>\$ 51,526.55</b>	<b>\$ 240,625.95</b>
(% match)			(27%)	



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### Grant Match

<b>Match amount to be provided:</b>	<b>\$ 51,526.55</b>				
<b>Match details:</b> Please provide the form of your matching funds. If match is made up of both cash and in-kind, fill in both sections.					
<p>Match is:</p> <table border="1"> <tr> <td>Cash</td> <td>\$</td> </tr> <tr> <td>In-kind</td> <td>\$ 51,526.55</td> </tr> </table> <p>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.</p> <p>For the cash portion of your match, is the funding already being held by the applicant for this project? Yes    No ____</p>		Cash	\$	In-kind	\$ 51,526.55
Cash	\$				
In-kind	\$ 51,526.55				
<b>Description of matching funds/in-kind donations:</b>	Labor (Road Superintendent, Equipment Operators, Forest Service Project Supervisor), traffic control equipment, permitting, design/engineering and materials.				

### 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



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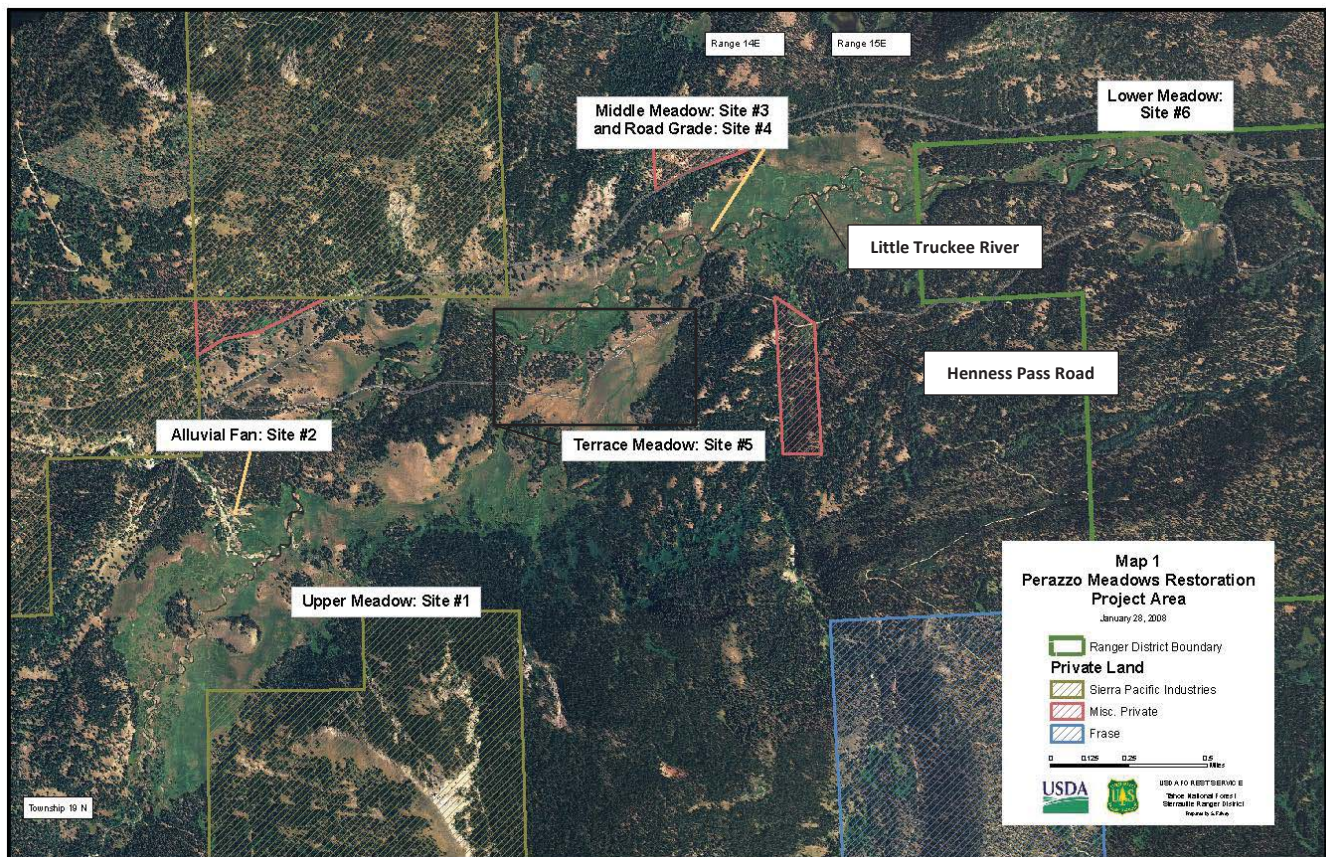
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## Appendices:

### Appendix I: Anticipated outcomes of the Perazzo Meadows Watershed Restoration & Erosion Control Project

Metric	Estimated Total in Project Area
Miles of road improved	3.5
Culverts installed	15+
Drainage dips installed	60+
Low water crossings installed	4-6
Miles of stream channel enhanced/restored	2
Acres of riparian meadow enhanced/restored	80



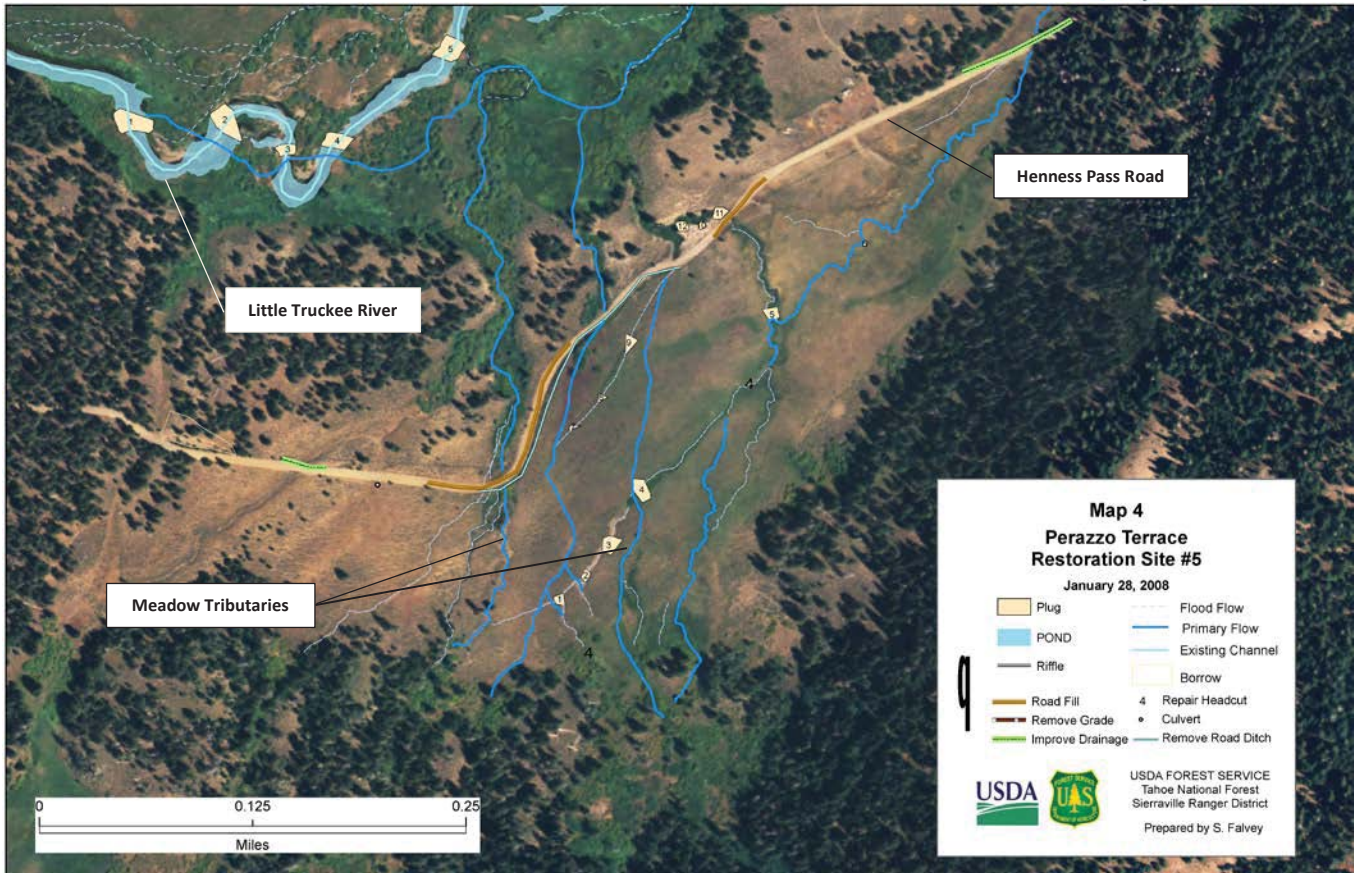
**Appendix II:** A map depicting the Perazzo Meadows Watershed Restoration & Erosion Control Project among multiple restoration projects in the greater Perazzo Meadows area. Actions pertaining to this grant request will be encompassed within *Terrace Meadow: Site #5* outlined with a black box (expanded in Appendix II, below). All other surrounding project sites (#1, #2, #3, #4, and #6 ) have been completed or are fully funded and in progress.





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**Appendix III:** A site specific map of the Perazzo Meadows Watershed Restoration & Erosion Control Project, detailing planned actions to reduce erosion along Henness Pass Rd and restore natural hydrologic connectivity in the adjacent meadow. Roughly 1 mile of road is shown. An additional 2.5 miles of road will be treated using similar actions under the proposed project plan.

**Appendix IV:** Anticipated timeline for the completion of project tasks associated with the Perazzo Meadows Watershed Restoration & Erosion Control Project.

	Winter 2018	Spring 2018	Summer 2018	Fall 2018	Winter 2019	Spring 2019	Summer 2019	Fall 2019
Permitting*								
Road Improvements								
Meadow Restoration								

\*No additional permitting is necessary for road improvements; the chart reflects the anticipated timeline for obtaining permits for meadow restoration only (401, 404).

**BOARD OF SUPERVISORS  
COUNTY OF SIERRA  
STATE OF CALIFORNIA**

**IN THE MATTER OF AUTHORIZING GRANT  
APPLICATION TRUCKEE RIVER FUND AND  
NATIONAL FOREST FOUNDATION FOR  
DRAINAGE IMPROVEMENTS ON HENNESS PASS ROAD**

**Resolution 2018- 014**

**BE IT HEREBY RESOLVED** by the Board of Supervisors of the County of Sierra, State of California, that this Board authorizes a grant application to the Truckee River Fund and National Forest Foundation for drainage improvements on Henness Pass Road.

**BE IT FURTHER RESOLVED** that the Director of Transportation is authorized to execute all documents necessary including but not limited to applications, agreements, payment requests which may become necessary for the completion of the Drainage Improvement Project.


**ADOPTED** by the Board of Supervisors of the County of Sierra, States of California on the 6<sup>th</sup> day of February, 2018.

AYES: Supervisors Adams, Huebner, Roen, Beard, Schlefstein  
NOES: None  
ABSTAIN: None  
ABSENT: None

COUNTY OF SIERRA

  
SCOTT A. SCHLEFSTEIN  
CHAIRMAN, BOARD OF SUPERVISORS

ATTEST:

  
HEATHER FOSTER  
CLERK OF THE BOARD

APPROVED AS TO FORM:

  
DAVID PRENTICE  
COUNTY COUNSEL

The foregoing document is a  
correct copy of the original on  
file in this office.

Attest: 2/16/18

County Clerk and Ex-Officio Clerk  
of the Board of Supervisors

In and for Sierra County, California  
By:  Deputy





**SIERRA VALLEY RESOURCE  
CONSERVATION DISTRICT**

PO Box 882 ☞ Loyalton, CA 96118  
sierravalleyrcd@gmail.com  
www.sierravalleyrcd.com

**Date:** February 6, 2018

Truckee River Fund  
Attention: Lauren Renda  
50 Washington Street, Suite 300  
Reno NV 89503

The purpose of this letter is to provide support for the Perazzo Meadows Watershed Restoration and Erosion Control Project for the 2018 Truckee River Fund - Request for Proposals. The National Forest Foundation is placing forward the application and this project is a partnership project which involves the County of Sierra, the Sierra Valley Resource Conservation District, the Tahoe National Forest and the National Forest Foundation. We are excited about the potential partnership opportunities this grant application may potentially afford.

The primary objectives are to reduce the potential for future erosion, reduce sediment loading to the Little Truckee River, improve the quality of surface runoff, restore floodplain function on the meadow tributary to the Little Truckee River, and to improve riparian/aquatic habitat.

We are extremely excited about the potential of continuing our partnership efforts within Sierra County and the assistance of the Truckee River Fund. We look forward to our collective future partnership. If you have any questions regarding the project or in need of further clarification, please feel free to contact me at (775) 800 - 3610.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Goicoechea". The signature is fluid and cursive.

DAVID GOICOECHEA  
Sierra Valley RCD Chairman



United States  
Department of  
Agriculture

Forest  
Service

Sierraville  
Ranger  
District

317 South Lincoln St.  
Sierraville, CA  
96126  
530 994-3401

---

File Code: 2400  
Date: February 6, 2018

Truckee River Fund  
Attention: Lauren Renda  
50 Washington Street, Suite 300  
Reno NV 89503

The purpose of this letter is to provide support for the Perazzo Meadows Watershed Restoration and Erosion Control Project for the 2018 Truckee River Fund - Request for Proposals. The National Forest Foundation is placing forward the application and this project is a partnership project which involves the County of Sierra, the Sierra Valley Resource Conservation District, the Tahoe National Forest and the National Forest Foundation. We are excited about the opportunity to place forward this grant application as well as the potential for future implementation.

Specifically, this project emphasizes watershed improvement projects on the historic Henness Pass Road (Sierra County Road 350) and a meadow within the Perazzo Meadow area. Restoration activities will focus on enhancing and protecting water quality and water resources of the Little Truckee River, a tributary to the Truckee River (303d listed for sediment). The Perazzo Meadows area provides habitat for a number of critical aquatic and terrestrial species including the federally listed Lahontan cutthroat trout and mountain yellow-legged frog as well as the largest remaining population of willow flycatchers in northern California. Implementation of this project would augment the restoration activities accomplished by the U.S. Forest Service and private landowners which have been ongoing within the watershed for the last ten years. The primary objectives are to reduce the potential for future erosion, reduce sediment loading to the Little Truckee River, improve the quality of surface runoff, restore floodplain function on the meadow tributary to the Little Truckee River, and to improve riparian/aquatic habitat.

We are extremely excited about the potential of continuing our restoration efforts with the assistance of the Truckee River Fund and look forward to our collective future partnership. If you have any questions regarding the project or in need of further clarification, please feel free to contact me at (530) 994-3401.

Sincerely,

  
QUENTIN L. YOUNGBLOOD  
Sierraville District Ranger





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**Cover Sheet****Date:** 02-05-2018

<b>Organization Name:</b>	Mountain Area Preservation																				
<b>Type:</b>	<b>501(c)(3) EIN#</b> 68-0148964	<b>Governmental entity? Y/N</b>																			
<b>Address:</b>	10116 Jibboom Street Unit 1 & 2 Truckee, CA 96161 Po Box 25 Truckee, CA 96160																				
<b>Project Name:</b>	Trout Creek Pocket Park Stewardship & Service Learning Program																				
<b>Amount requested:</b> \$8,000.00	<b>Website:</b> www.mapf.org																				
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Support an outdoor stewardship and education program for local students at the Trout Creek Pocket Park in Truckee.																				
<b>Key People:</b>	<table border="1"> <tr> <td><b>Director:</b></td> <td colspan="2">Alexis Ollar, Executive Director</td> </tr> <tr> <td><b>Board Chair:</b></td> <td colspan="2">Ronnie Colby</td> </tr> <tr> <td rowspan="5"><b>Project Contact:</b></td> <td><b>Name:</b></td> <td>Nikki Riley</td> </tr> <tr> <td><b>Position:</b></td> <td>Development Director</td> </tr> <tr> <td><b>Phone:</b></td> <td>530-582-6751</td> </tr> <tr> <td><b>Fax:</b></td> <td></td> </tr> <tr> <td><b>Email:</b></td> <td>Nikki@mapf.org</td> </tr> </table>			<b>Director:</b>	Alexis Ollar, Executive Director		<b>Board Chair:</b>	Ronnie Colby		<b>Project Contact:</b>	<b>Name:</b>	Nikki Riley	<b>Position:</b>	Development Director	<b>Phone:</b>	530-582-6751	<b>Fax:</b>		<b>Email:</b>	Nikki@mapf.org	
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	<b>Position:</b>	Development Director																			
	<b>Phone:</b>	530-582-6751																			
	<b>Fax:</b>																				
	<b>Email:</b>	Nikki@mapf.org																			
<b>Organization Mission:</b>	MAP's mission is to preserve and protect the Truckee-Tahoe region's Mountain Character and Natural Environment for present and future generations.																				
<b>Has your organization received other grants from the Truckee River Fund?</b> <b>Yes                  No</b> (use additional page if necessary)	If yes, <table border="1"> <tr> <td>Date awarded:</td> <td>May 2016</td> </tr> <tr> <td>Project title:</td> <td>Trout Creek Pocket Park</td> </tr> <tr> <td>Amount of Award:</td> <td>\$25,000.00</td> </tr> <tr> <td>Date awarded:</td> <td></td> </tr> <tr> <td>Project title:</td> <td></td> </tr> <tr> <td>Amount of Award:</td> <td></td> </tr> <tr> <td>Date awarded:</td> <td></td> </tr> <tr> <td>Project title:</td> <td></td> </tr> <tr> <td>Amount of Award:</td> <td></td> </tr> </table>			Date awarded:	May 2016	Project title:	Trout Creek Pocket Park	Amount of Award:	\$25,000.00	Date awarded:		Project title:		Amount of Award:		Date awarded:		Project title:		Amount of Award:	
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Amount of Award:																					

**DESCRIPTION OF PROJECT UNDER CONSIDERATION**

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

- ☐ 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.<sup>3</sup>  
☒ E. Other projects that meet the evaluation criteria.

**NARRATIVE REQUIREMENTS**

<sup>3</sup> For proposals related to weed control/eradication, contact Lauren Renda at the Community Foundation of Western Nevada for additional criteria. [lrenda@nevadafund.org](mailto:lrenda@nevadafund.org); 775-333-5499.



mountain area preservation  
ESTABLISHED IN 1987

## **Trout Creek Pocket Park Stewardship & Service Learning Program**

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

- Include Local Youth in Environmental Education & Stewardship Projects

Mountain Area Preservation (MAP) seeks to introduce a youth focus to our work and provide Truckee students with a hands-on educational experience to the benefits of environmental restoration, stewardship and community service. This project will combine two existing community assets, the Trout Creek Pocket Park (TCPP) and the Tahoe Truckee Unified School District's (TTUSD) Downtown Historical Tour to bring awareness to the many benefits the park provides. Through collaboration, MAP intends to enhance the historical tour with a place for students to see firsthand how interconnected our environment is, from the water to the land to the air and to our people and wildlife. The park creates an outdoor classroom with picnic tables and benches, allowing students to sit, learn and engage in watershed restoration. They will see Trout Creek as it flows along the park and learn how it is a tributary of the Truckee River. Last year during MAP's strategic planning process, we highlighted the importance of including youth education in our outreach. We see a natural connection between promoting the many benefits of the Pocket Park and engaging our local youth. As a first step towards establishing the park as a stop on the Downtown Tour, MAP will work with the Sierra Expeditionary Learning School (SELS), a charter school within the TTUSD. SELS has two classes with both second and third graders who participate every other year in the Downtown Tour. We believe we will have success creating an ongoing program throughout the district if we start small and pilot the program with SELS. Once the program takes root in fall 2018, we will work with TTUSD to include the other schools in the district, starting with Truckee Elementary in fall 2019. We will be able to measure our outcomes in fall 2018 upon completion of the first tours to the Pocket Park. Fifty students will participate in the tour in addition to the two teachers and multiple parent volunteers. Students will be given a pre- and post-evaluation to determine if their knowledge of the environmental topics covered has increased. Teachers at SELS and the parent volunteers will also be supplied evaluations to provide feedback. We will utilize this information to enhance portions of the program as needed. MAP will report on the outcome of our first educational program in our monthly Enews blast to our database of 2,000+ people.

- Promote the Park & Increase Awareness for Environmental Protection & Restoration

With financial support from the Truckee River Fund in 2016, the Pocket Park was completed in September 2016. Prior to completion, the site was a neglected, environmental disaster. Compacted dirt, crumbling asphalt and garbage covered much of the area. Dirty snow, road debris and toxic runoff was deposited along Trout Creek, a tributary of the Truckee River and source for drinking water for Truckee, Tahoe and Reno. The site cleanup was extensive and expensive. MAP fundraised every dollar to execute and complete the project with a goal of turning the park into a Sustainable Site featuring native drought tolerant landscaping, permeable pavers, a storm water drainage facility and a solar light fixture. We provided garbage and recycling collection, a mutt-mitt dispenser, an interpretive kiosk with panels done by a local artist featuring the flora and fauna of the area as well as the watershed path the creek takes from its headwaters to the Truckee River. A hand forged Art Bike Rack serves as a place to park your bike and a work of art to admire. Truckee's rich Native American history is noted in the art panel depicting how the Washoe Tribe utilized local pinon pine nuts and goji berries for their diet. An authentic Washoe



grinding stone has been relocated to the park and commemorated with a plaque honoring its cultural value. Topics such as infill, environmental restoration, native landscaping, flora, fauna, watershed ecology, sustainable design and stewardship will be covered in the experiential education program. Each student will receive a bilingual activity sheet to take home with educational themes and games to reinforce the program. This small park is a model for successful site rehabilitation. Its addition to Truckee's downtown tour will be an invaluable resource to our youth population. We will measure success with our ability to promote the Pocket Park with the increased visitor numbers that will occur as the project gains traction throughout the school district, and the participating students' increased knowledge of environmental topics. Upon completion of the fall 2018 tour, we will have added at least 60 new visitors to the park and if we are successful with the addition of Truckee Elementary School's third grade classes that will add an additional 125 new visitors. A key outcome of this project is the creation of a rack card by the students highlighting the park's attributes. This card will not only be distributed at the schools but at the Truckee Train Depot, site of the Town's Visitor Center. This will increase the number of visitors who will be educated by the interpretive facets at the park. Additionally, at least 75% of student participants will increase their knowledge of environmental topics by 25%.

- Increase Cultural Awareness & Diversity Around Environmental Stewardship

The Pocket Park offers a wonderful opportunity to cross cultural lines and open up a field of study to a population that is often marginalized and left out of land use planning conversations. Including the park on the school tour will allow our Latino community to be exposed to topics such as watershed stewardship and environmental restoration. As we expand our scope of outreach to include people from diverse backgrounds, we will see more young people who care about the natural world around them and they in turn will share this knowledge with their friends and family. MAP will work with TTUSD to create project materials that are written in Spanish and culturally sensitive. As we expand the tour each year, this will increase in our ability to promote cultural awareness and diversity around environmental stewardship.

- 2. Project Location:** This project will take place at the Trout Creek Pocket Park located at the crossroads of Jibboom Street and Bridge Street in historic, downtown Truckee.
- 3. Project Description:** MAP highlighted a goal in our 2016 Truckee River Fund grant request to include youth education as part of the overall plan for the Pocket Park. We are following through with this goal and initiating the Stewardship and Service Learning Program in fall 2018. We will host SELS' second and third graders at the park and introduce them to all of the amazing attributes afforded by the park and described in the goals and priorities section of this request.
- 4. Grant Priorities: VI. Stewardship and Environmental Awareness:** This project utilizes a successful model of stewardship and site rehabilitation to highlight a variety of watershed improvements. MAP will demonstrate to Truckee students what steps were taken to achieve the water quality benefits and restoration measures seen at the park today.

**VII. Meet Multiple Objectives:** The project will achieve multiple objectives including a real-time picture of how a neglected and contaminated site can be restored and revitalized with water quality implementation measures such as permeable pavers. Students will learn about slope stabilization, the importance of drought tolerant plant species and how to avoid polluting our creeks and rivers with storm water run-off. We will identify aquatic invasive plants, explain why they are detrimental to the health of our watershed and how to test our water for contaminants.



**VIII. Leverage Stakeholder Assets and Participation:** MAP was able to leverage significant stakeholder assets to develop the park and we plan to continue to work with the Town of Truckee and the Martis Fund for support. We will work with collaborative partners such as the Truckee River Watershed Council, the Sierra Watershed Education Partnership and the Tahoe Institute for Natural Science as we develop our programming for this project and to assist us as we grow this outdoor educational resource.

5. **Permitting:** This project requires no additional permitting.
6. **Future Land Use:** This site is Town of Truckee property and as far as we know it will never be rezoned from its current land use designation as a park.
7. **If future phases of the project will be needed:** This grant request covers the cost to execute this project for fall 2018 and fall 2019. Our goal is to continue this project as a collaboration with all of the local schools, including private schools, charter schools and home schooling groups. We believe our funding needs will decrease after the first year and will focus on staff time and small material expenses.
8. **Principles involved:** MAP will have one staff member serve as the principle project lead. This person will coordinate with the teachers at SELS and Truckee Elementary School and be the liaison with the TTUSD to help facilitate the continuation of this program in the future.
9. **Number of staff positions:** One staff member will serve as the project director and we will have two staff members present for the program days.
10. **Number of volunteers:** As this is a collaborative project with a local school, MAP will not need any volunteers. Any parent volunteers will be recruited by the teachers.
11. **Timeline:** MAP will begin this project in June 2018 with the development of the materials needed for the first site tour in September 2018. The first phase of this project will end in fall 2019 with the second round of site tours.
12. **Success:** MAP will define success with the inclusion of the Pocket Park on the Downtown Historic Tour in fall 2018. We already have buy-in from SELS to participate. The excitement expressed by both teachers, Diane Welch and Dana Seaborg furthered our sense that the park is an amazing opportunity to bring awareness to a wide array of important, educational learning targets. There was support for the creation of the two-sided, bilingual activity sheet with educational themes and games to bring home to share what the students learn with their parents. This take home sheet will benefit 50 kids in our first year of the program and at least as many parents and relatives who may have never heard of the Pocket Park. SELS' teachers want to incorporate the park into their curriculum and have the students create a rack card about the Pocket Park as part of their expedition work. Last year, students made a professional looking card called 10 Things for Kids Under 10 to Do in Truckee and next year it will focus on the park with graphics, photos and a list of the park's key attributes. The inclusion of Truckee Elementary in fall 2019 will be another indicator of success. This will be accomplished via outreach by MAP to the elementary school. We will work to have a rep from the school attend the tour in 2018 in order to see the program. Our hope is to inspire these third grade teachers to include the park in their downtown tour in 2019. This will add an additional 100 students to the tour with all of the associated benefits. We achieved our goal of completing the Pocket Park in 2016 and we are confident in our ability to create an ongoing outdoor education program at the park to engage local youth and inspire a new generation of environmental stewards.



**COMMUNITY  
FOUNDATION**  
of Western Nevada

**TRUCKEE RIVER FUND**  
Enhancing and protecting our water resources



#### Grant Match

<b>Match amount to be provided:</b>		<b>\$ 2000.00</b>
<b>Match details:</b>	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	<b>\$ 2000.00</b>
	In-kind	<b>\$</b>
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 this project? Yes <u> X </u> No <u> </u>		
<b>Description of matching funds/in-kind donations:</b>	We have received a grant from the Epic Promise Program via Vail Resorts to support our stewardship and educational efforts at the Trout Creek Pocket Park in 2018.	

#### 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

# Truckee River Fund

## PROJECT BUDGET FORM

Applicant: Mountain Area Preservation

Program/Project: Trout Creek Pocket Park Stewardship & Service Learning Program

### SECTION ONE – PROJECT INCOME

<b>Funding Sources</b>			
List each actual and/or anticipated source of funding for this project ONLY.	Amount	Funds committed	Funds requested
<b>Box 1:</b> Truckee River Fund	\$8,000		X
Vail Resorts Epic Promise Grant Program	\$2,000	X	
<b>Project Income</b> Box 2	\$ 10,000		

### SECTION TWO – PROJECT EXPENSES

<b>Expense Items</b>		
Project Expenses, including staff time	Amount	Amount of item to be funded by Truckee River Fund grant
Staff Time: program development, outreach, material development, program execution	\$8,550	\$8,000
Materials: Activity Sheet/Rack Card	\$1,200	\$0
Translation Services to take activity sheet and translate information into Spanish	\$250	\$0
<b>Project Expense</b>	\$ 10,000	\$ 8,000

Should match Box 2      Should match Box 1

## TRUCKEE RIVER FUND APPLICATION

## Cover Sheet

Date: February 8, 2018

<b>Organization Name:</b>	One Truckee River (Through Nevada Land Trust, OTR Partner and Fiscal Agent)																				
<b>Type:</b>	501(c)(3) EIN#88-0287591	<b>Governmental entity? Y/N</b> NO																			
<b>Address:</b>	PO Box 20288, Reno, NV 89515																				
<b>Project Name:</b>	One Truckee River: Watershed Management and Source Protection Plan & OTR Partnership Support																				
<b>Amount requested: \$273,580</b>	<b>Website:</b> <a href="http://www.onetruckeeriver.org">www.onetruckeeriver.org</a> (NLT: <a href="http://www.nevadalandtrust.org">www.nevadalandtrust.org</a> )																				
<b>This funding will be used to (complete this sentence with a max of 2 sentences):</b>	Leverage federal, state, and local funds to develop the Truckee River Watershed Management and Source Protection Plan with strong stakeholder engagement to ensure successful implementation of priorities to protect water quality. Ensure that One Truckee River successfully navigates the shift to shared leadership among the One Truckee River Partners while continuing implementation of Phase I Management Plan priorities.																				
<b>Key People:</b>	<b>Director:</b>	Alicia Reban																			
	<b>Board Chair:</b>	Karen Ross																			
	<b>Project Contact:</b>	<b>Name:</b>	Alicia Reban																		
		<b>Position:</b>	Executive Director, Nevada Land Trust																		
		<b>Phone:</b>	775-851-5180																		
		<b>Email:</b>	a.reban@nevadalandtrust.org																		
		<b>Project Partner:</b>	Christi Cakiroglu Executive Director, Keep Truckee Meadows Beautiful christi@ktmb.org																		
<b>Organization Mission:</b>	OTR: Ensure a healthy, thriving, sustainable Truckee River NLT: Protecting open spaces and special places of Nevada for future generations.																				
<b>Has your organization received other grants from the Truckee River Fund?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (use additional page if necessary)	If yes, <table border="1"> <tr> <td><b>Date awarded:</b></td> <td>Please see Attachment A</td> </tr> <tr> <td><b>Project title:</b></td> <td></td> </tr> <tr> <td><b>Amount of Award:</b></td> <td></td> </tr> <tr> <td><b>Date awarded:</b></td> <td></td> </tr> <tr> <td><b>Project title:</b></td> <td></td> </tr> <tr> <td><b>Amount of Award:</b></td> <td></td> </tr> <tr> <td><b>Date awarded:</b></td> <td></td> </tr> <tr> <td><b>Project title:</b></td> <td></td> </tr> <tr> <td><b>Amount of Award:</b></td> <td></td> </tr> </table>			<b>Date awarded:</b>	Please see Attachment A	<b>Project title:</b>		<b>Amount of Award:</b>		<b>Date awarded:</b>		<b>Project title:</b>		<b>Amount of Award:</b>		<b>Date awarded:</b>		<b>Project title:</b>		<b>Amount of Award:</b>	
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<b>Amount of Award:</b>																					

## DESCRIPTION OF PROJECT UNDER CONSIDERATION

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

- ☒ 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.<sup>1</sup>  
☒ E. Other projects that meet the evaluation criteria.

1. **Project goals, measurable outcomes, measurement, reporting:**

**Activity 1: Watershed Management/Source Water Protection Plan.** To achieve water quality objectives, the OTR plan identifies collaboration with NDEP and community partners to develop Source Water Protection and Watershed Management plans for the Truckee Meadows. OTR has been asked to bring the OTR partnership approach and expertise aboard to deepen community support and understanding, further engage stakeholders, and help weave together the elements already underway into a cohesive plan. Phase 1 of this broad water quality protection effort was initiated in October 2016 through commitment of funding and services from multiple sources including the BSDW ISWPP, the WRWC, and the NDEP 319 NPS Program. Continuing Phase 1 activities include: third party contractor (Resource Concepts, Inc.) engaging stakeholder support, coordinating a community - wide plan framework, and groundwater/source water characterization; inventory of water quality data gaps for Truckee River tributaries; and leveraging 319 grants funds to begin addressing those data gaps. OTR is requesting funding for a portion of Phase 2 to provide water quality protection strategies and design an implementation program to prioritize actions consistent with the planning and regulatory framework in the Truckee Meadows. If successful, this requested TRF funding will be used to leverage NDEP 319 program funds which require a non-federal match, and BSDW has already committed contracted services to complete portions of Phase 2.

**Outcomes:** (1) Application to leverage match funding from the NDEP 319 program (2017 cycle) for Phase 2 completion. (2) Complete Phase 2, Task 6, 7, and 8 of the Watershed Management/Source Protection Plan (WM/SPP): an inventory of actions desired to protect and improve water quality with a draft prioritization scheme vetted through the community for coordination, collaboration, and consensus. (3) Documented community engagement through our stakeholder meetings reported through ISWPP Contractor. (4) Ongoing identification of funding for Phase 3 (approval of watershed management/ source water protection plan and prioritized action list for implementation).

**OTR Phase I Action Items: 1.2.a, 1.3.d, 3.3.h, 4.3.b**

**Activity 2: OTR Partnership Coordinator & Leadership Support** NLT and KTMB continue to co-lead and provide administrative, fundraising, government relations, and communications support to the OTR Partnership. It remains the strong desire of both organizations and the members of the OTR partners to shift multiple responsibilities to an OTR Coordinator on the way to a long-term home within a local or regional agency. Though part of OTR's 2017 funding request, final reductions included \$54,000 for the Coordinator position which is included here for TRF's consideration. As reflected in the new RFP issued 2/6/18, roughly half of the OTR Coordinator's time will be spent on the Watershed Management/Source Protection Plan process as described above on behalf of the OTR Partnership, and half on the facilitation of the Partnership itself and related OTR priorities implementation. OTR Partners met in early December to set priorities for 2018, and will reconvene in March to report on progress, renew commitments, and make any necessary adjustments to the OTR implementation schedule. To ensure a smooth transition, staff anticipates a period of increased oversight, cross-training and engagement as the leadership model shifts.

**Outcomes:** Progress will be measured against the OTR action items identified in the Phase I OTR Management Plan and against the OTR Priorities established for 2018. Outcomes will include: selection and contract with new OTR Coordinator; well-informed local, state, and federal stakeholders; quarterly reporting of progress toward goals; identification and pursuit of new funding opportunities for OTR; and a stronger support system to enhance the function and capacity of the OTR Partnership.

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



**Activity 3: OTR Education & Community Outreach** This activity represents a continuation of the AmeriCorps program that allows for public education and outreach about the Truckee River watershed. Together the team provides watershed education to K-12 students through the Watershed Warriors program, and implements the OTR Community Watershed Education Plan through public engagement at both OTR and community events. The team is also responsible for implementing “One Truckee River Month” (beginning May 2018) which OTR partners are presenting thanks to a 2017 grant from Renown.

**Outcomes:** Continued delivery of key messages to target audiences as identified in the OTR Community Watershed Education Plan; coordination of safety messages and programs (such as the lifejacket stations); engagement with the “Take Care” campaign and other elements, and otherwise meeting the relevant action items outlined in the Phase I One Truckee River Management Plan. Longer term, the Community Watershed Knowledge Survey completed with support from the Truckee River Fund will be repeated to determine the effectiveness of the messaging and methods being used.

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

2. **Project location:** Truckee River Watershed within the Truckee Meadows area, Washoe County, NV
3. **Project description.** One Truckee River (OTR) is concerned with the Truckee River in Nevada from the state line to Pyramid Lake. OTR’s Phase I Management Plan covers the urban section of the Truckee from the vicinity of Chalk Bluff and McCarran (western boundary) to Vista Boulevard in Sparks (eastern boundary). The WM/SPP area includes the Truckee River watershed within Washoe County, from the state line on the west to just downstream of the junction with Steamboat Creek. Supplemental map available.
4. **Grant priorities:** TRF grant priorities will be included in the prioritization criteria developed for the Action Plan for the Project Profiles, which are primary deliverables in Phase 2 of the WM/SPP. Because the WM/SPP is an existing stakeholder-driven process and the requested funds will leverage federal funds available through two Nevada state programs, Item VIII, Leverage Stakeholder Assets and Participation, is immediately addressed. The overarching goal of the WM/SPP is to mitigate threats to water quality and the Truckee River watershed related to identification of necessary Watershed Improvements (II), opportunities for and prioritization of Local Stormwater Improvements (III), as well as opportunities for and prioritization of practical projects to support Rehabilitation of Local Tributary Creeks and Drainage Courses (V). TRF priorities I-VIII are reflected in the One Truckee River (OTR) Management Plan developed by the OTR partners and adopted by Washoe County and the Cities of Reno and Sparks. As OTR founders, NLT and KTMB are continuing to provide staff support to OTR and the implementation of OTR priorities. As the new OTR Coordinator comes on board, NLT and KTMB staff will begin to shift responsibility to that individual for the partnership management and facilitation but shall remain members of the OTR partnership and engaged in project implementation. Education and outreach to engage the community in understanding and caring for the Truckee River is the focus of the AmeriCorps team members managed by KTMB. Staff of both KTMB and NLT are engaged in facilitating partnership activities and handling communications for the OTR partners. While this role is expected to shift over the year ahead, communications and community outreach will continue. For all the reasons stated above, the requested funds clearly Meet Multiple Objectives (VII).
5. **Permitting:** No permitting required.
6. **Future land use:** Not applicable to this project.
7. **Future phases:** Completion and implementation of the WM/SPP planning effort will be largely funded through the NDEP 319 grant program; the NDEP Integrated Source Water Protection Program, WRWC

grants, and municipal in-kind or funded project implementation. Identification of long-term funding and a permanent “home” for One Truckee River is included in OTR’s priorities for 2018. #203

8. **Principals involved:** Executive Directors of Nevada Land Trust and Keep Truckee Meadows Beautiful, in consultation with the One Truckee River Partnership and the new One Truckee River Coordinator; Birgit Henson, NDEP Bureau of Water Quality Planning, Non-Point Source Supervisor, Kim Rigdon, NDEP Bureau of Safe Drinking Water Source Water Protection Program Manager, Resource Concepts, Inc (Technical Assistance provider).
9. Number of **staff positions involved** in project: Fulltime **0** Part-time **7**
10. Number of **volunteers involved:** 2 AmeriCorps Team volunteers at 1700 hours each for 2018-2019 if funded; 2 current AmeriCorps Team volunteers at 1700 hours each for 2017-2018. OTR Partners and WM/SPP provide significant contributions of time and in-kind services not accounted for here. National Park Service facilitator Barbara Rice continues her contribution of in-kind hours to the OTR Partnership.
11. **Time Line of Project:**

Spring through Summer 2018

- One Truckee River Coordinator contract awarded
- One Truckee River Month May, 2018 (Including Public Forum)
- Prioritization of data needs, establish general plan development/strategy for filling data gaps, begin data collection as applicable.
- Identify priority areas/reaches, level of modeling efforts, load reduction targets.
- Coordinate funding from WRWC

Fall through Winter 2018/2019

- Application for 319 funding by September 2018.
- AmeriCorps Team members on board September 2018.
- Identify priority areas/reaches, level of modeling efforts, load reduction targets. Drafts available for stakeholder review by December 2018.
- Evaluate effectiveness of current management measures, identify critical areas, opportunities/constraints, potential strategies, cost/benefit, alternatives ranking, evaluation criteria and measurements of success, finalization. Drafts available for stakeholder review by December 2018.

Ongoing

- Identify/pursue additional funding for OTR Plan implementation and for Phase 3 of WM/SPP
- Coordination of OTR Partnership
- Continued implementation of OTR Plan priorities, including measurement and reporting
- Facilitation of stakeholder and public engagement process for WM/SPP.

(Note, timing is dependent on receiving a complete data gap analysis being completed by TMSWPCC).

12. **Success:** TRF will know OTR has succeeded when 1) a strong, competitive application to NDEP for \$100,000+ in new funding for these purposes has been submitted to NDEP, 2) Tasks 6,7, and 8 of the Watershed Management/Source Protection Plan have been completed, 3) Evidence of documented community involvement through stakeholder meetings for the WM/SPP is presented, 4) Additional funding has been identified and diligently pursued for both OTR Phase I implementation and Phase 3 of WM/SPP, and 5) evidence is presented that demonstrates the OTR Partnership continues to take committed steps toward a strong and sustainable future, such as progress on OTR Plan Action Items.

## 13. Grant match:

<b>Match amount to be provided:</b>	<b>\$243,780</b>					
<b>Match details:</b>	<p>Please provide the form of your matching funds. If match is made up of both cash and in-kind, fill in both sections.</p> <p>Match is:</p> <table border="1" data-bbox="383 336 1349 501"> <tr> <td data-bbox="383 336 513 371">Cash</td> <td data-bbox="513 336 1349 371"><b>\$99,780</b></td> </tr> <tr> <td data-bbox="383 371 513 407">In-kind</td> <td data-bbox="513 371 1349 407"><b>\$144,000</b></td> </tr> </table> <p>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.</p> <p>For the cash portion of your match, is the funding already being held by the applicant for this project? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> *Award has been made but funds are available on a reimbursement basis so are therefore not, technically, being <i>held</i> by applicant.</p>		Cash	<b>\$99,780</b>	In-kind	<b>\$144,000</b>
Cash	<b>\$99,780</b>					
In-kind	<b>\$144,000</b>					
<b>Description of matching funds/in-kind donations:</b>	<p><b>Cash: NDEP 319 Grant award in the amount of \$99,780</b></p> <p><b>In-kind: Technical assistance provided through funding from the State of Nevada, Bureau of Safe Drinking Water, Integrated Source Water Protection Program for initial stakeholder development and coordination for the WM/SPP from July 2016-January 2018</b></p>					

**PROJECT BUDGET**

ORIGINAL PROJECT BUDGET					REIMBURSEMENT REPORT	
Budget Item Description*	TRF \$	Other Funding Name**	Match \$	Total	Expenditures to date TRF	Expenditures to date (other sources)
KTMB & NLT OTR Staffing & Coordination	\$95,800	NDEP 319 (Awarded, not yet received)	\$99,780	\$99,780	\$	
AmeriCorps Stipends (2)	\$24,000	Individual Donor (ANON)		\$10,000		\$
Contracted: WM/SPP Technical Assistance	\$99,780					
Contracted: OTR Coordinator	\$54,000	TMPF AmeriCorps Program		\$25,000		
		NDEP Source Water Protection Program In-kind	\$144,000	\$144,000		
TOTAL	\$273,580	TOTAL	\$243,780	\$278,780		
Indirect costs may not be counted as match.					\$	\$



Attachment A: NLT TRF Grant History (page 7)

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

Please  
ADD: + TRF #188 2017 \$256,220 for OTR  
Master Signage Plan, Phase I Implementation,  
Data Analysis @ UNR for survey, Coordination & Advocacy

2018