Appendix C: Public Comment on EA and Responses

Two comments were received on the EA, one from John Webster Brown and one from the Nevada Chapter of the Associated General Contractors of America.

COMMENT 1: John Webster Brown

John Webster Brown
387 Chevy Chase Drive
Reno, NV 89509
May 15, 2012

The Nature Conservancy
% Patti Bakker
Nevada Field Office
1 East First Street, Suite 1007
Reno, NV 89501

Subject: Comments on DRAFT Environmental Assignments, Lower Truckee River Restoration Projects, etc.

The comments herein are based on an initial reading of the DRAFT, so the right to modify and/or expand these remarks is reserved.

I request that a copy of this be sent to all other parties that received the DRAFT, along with the comments from others.

PRIPOSED PROJECT

It appears that the purpose of this project is to increase the wild life adjacent to the delineated stretch of the lower Truckee River for a very few miles out of the 100 miles or so of length of the River.

The DRAFT would indicate that the main focus on the work is:

(a) Revamp the channel, and lower the adjacent flood plain so as to let normal high water flows (winter and spring) to inundate the flood plain to water the to be established plant life.

(b) It is suggested that the new plant life will encourage the wild life to periodically or permanently inhabit this reach of the flood plain.

(c It is postulated that over the last century the works of man have deteriorated the Lower River Canyon, specifically the channel improvements of the 1960's by the U.S. Corps of Engineers is criticized. It should be pointed out that: The project by Corps was completed by the Federal Government based on considerable study and Design and under a favorable cost/benefit ratio. Also, the McCarran Ranch as Originally established, the 102 Ranch likewise, and the Tracy Power Plant would not be considered detrimental by most of the citizens.

(d) The proposed project includes the dismantling of the channel built by the Corps of Engineers to contain major flood flows and then fill in this channel configuration with soil. All of this to accommodate a new meandering channel of about half the width and probably about half or less of capacity of that in the Corps' channel.

This , of course, defeats the original and still desirable purpose of diminishing Damage from major floods.

The DRAFT does not address how this proposed project will accommodate the major floods of the Truckee River. It does state that flood flows will exceed 20,000 cubic feet per second, but does not include any design to show what and where the distribution of the large flows outside the half sized channel might be.

If it is the intent to divert the excess flows at the entrance to the meander channel, then these high out of bank flows must be accommodated to prevent large damages.

If it is the intent to let all the flood flow only enter the meander channel, then it is obvious that when the flows increase to the top of this new channel, the water will overflow the banks all along the length with much force and volume which can cause huge damages.

The 1960 Corps' channel has had about sixty (60) years to stabilize and adjust. Also, the adjacent banks, etc. have also found their current condition to be fairly stable. (There are some changes due to cooling ponds and due to various aggregate pits that have had consequences and these need to be addressed separately and uniquely.)

The DRAFT states that the design details of the proposed project will be based on the experience record of the prior project of this type downstream of Vista. It is important to note that that project has never been subjected to a major Truckee River flood flow.

The excavation to lower the flood plain will remove all the top soil and present vegetation (and perhaps roots and seeds are also viable below the surface). This might be far worse as a consequence of removal than can be expected to be a betterment by this project.

The flood plain soils are somewhat varied, but the river bottom is predominately composed of silts and sands. In this reach of the river it is a aggrading stream which deposits sediments. This is in contrast to the river upstream from Reno which is a degrading stretch of river. Of course, this is because the slope and therefore velocity of flow is higher upstream and lower below Vista.

Where the flood plain soils are fairly impervious, the surface flows will mostly run off and not penetrate to cause a water table higher than present. Where these soils are pervious (such as silts and sands) the excess flows over same will partially penetrate and drain to the channel. The penetration into the soils and gravitation toward the channel will occur when there are high flows in the winter and spring, with the predominate high flows lasting a few weeks or a month. Basically, the high flows and any penetration in the flood plain will be over much earlier than the growing season and probably this is also true for the drainage down to channel level.

Should the above scenario be the case, then it is unlikely that the ground water will rise above the present summer level and will not irrigate the even lowered flood plain elevations.

It does not appear that a base line of the number of various species existing in the river reaches on other sections of the Truckee River below Vista which might be considered as not having been damaged by man. The set forth expected improvement in numbers is purely speculative.

Along the lines of damage, it should be underscored that the existing population of invertebrates will be destroyed in the project area and will take considerable time to reestablish.

A question should be asked: "What is the magnitude of the benefits that will occur if the project is successful?" Also, it should be addressed: "Will the project be worth the risks of incurring damage during construction as well as later during normal use, and as caused by major floods."

<u>There is no cost vs. benefit analysis included in the DRAFT.</u>

If the long term picture is viewed, we must remember that as the Virginia Range moved upward, the Truckee River erosion cut down the Vista Canyon concurrently. It is also the case that the river channel has migrated back and forth across the wider sections in all sorts of configurations, during the last 1,000, 10,000, or one million years.

Should one go one quarter (Y.) mile either way from the channel centerline, it would be found to be a normal Nevada Desert with six to eight inches of precipitation. Such an area is inhabited by many species, as is the case for many miles beyond. In the overall evaluation the increased (if any) inhabitants of this small length of the Truckee Canyon seem relatively minor.

The proposed project description is included and repeated several places therein.

It seems that the DRAFT includes a disproportionate amount to mitigation measures considered for the damages the project will develop. Many of these seem inconsequential to the overall damages that could occur from the project. In fact,. it probably will be most difficult or impossible for a contractor to evaluate the volume of these things that may or may not be required and therefore effect any contingency fee to be included in a bid.

The DRAFT states that work would be done from July thru December. It is improbable that this project could be completed in that time frame. The DRAFT does not address how the work would be placed in a safe and not damageable state during periods of no work and normally high flows.

Basically, this reading of the DRAFT could yield an opinion that this project should not be built with public money.

NO ACTION ALTERNATIVE

References to a no action alternative are interspersed within the PROPOSED PROJECT descriptions. A copy of each of these has been made and gathered together in a past-up for convenient consideration. Copy of same is attached hereto.

Comments in the No Action Alternative are added below.

If funds are available for improvements to the Truckee River, they should be used to lower the "Vista Reefs" near the entrance to the lower canyon. This would allow the river to drain out of the Truckee Meadows as flood flows increase. This allows for lowering the Steamboat Creek channel and increasing its slope and carrying capacity. It would also allow the lowering of the North Truckee Drain at the river, which would allow a greater slope and help the project on this drain now underway by the city of Sparks.

Another high priority project would be to lower the river channel thru downtown Reno so as to lower the flood stage flows to below bridge and street levels.

The No-action Alternative should be recommended at this time. Thank

you for your consideration of these comments.

Sincerely,

John Webster Brown

DRAFT Environmental Assessment
Lower Truckee River

Copies from portions of the DRAFT consolidating NO ACTION Statements

Page VI

Environmental Consequences of the Proposed Action and Alternative

The consequences of the Proposed Action would be beneficial for the environment in the long term, considering the projects both individually and cumulatively. Short-term, temporary effects are foreseeable during construction. Measures to reduce adverse effects are provided. These measures are summarized in Section 2, Proposed Action, in the form of environmental commitments.

Under the No-Action Alternative, in which Reclamation would not allow use of DTL funds to fund restoration work at the Upper Mustang Ranch, West McCarran Ranch, and Tracy Power Plant sites, and to acquire the Upper Mustang restoration site, the current, limited fish and wildlife habitat values would continue to follow existing trends. Riverbank erosion and lateral instability would continue under the current hydrologic regime, and the river channel would likely become wider and shallower, possibly resulting in decreased willow and cottonwood densities and diminished native habitat that supports aquatic and terrestrial species.

Groundwater recharge needed to support and sustain riparian and wetland habitats would remain at a lower level and could decline further. Active management to control invasive plant species would likely be much less intensive and less effective. Flood attenuation benefits would not be realized. The No-Action Alternative would avoid the short-term adverse effects associated with the proposed construction work at the restoration sites, thus avoiding the construction-related effects related to air and water quality, fish habitat, and temporary increases in noise. However, longer-term consequences of the No-Action Alternative would not be beneficial for the environment.

Page 2-11

2.2 No Action Alternative

Under the No-Action Alternative, TNC would not be allowed to use federal Desert Terminal Lakes Program grant funds provided by Reclamation for the restoration projects or the acquisition of the Upper Mustang site. The federal funding is necessary to implement the ecosystem and river restoration projects, and no restoration activities would occur at the sites unless sufficient non-federal funding was obtained by TNC. The No-Action Alternative is essentially equivalent to continuing the existing conditions and management approach at the Tracy Power Plant, West McCarran Ranch, and Upper Mustang Ranch sites along the lower Truckee River. The No-Action Alternative provides a baseline against which the benefits and adverse effects of the Proposed Action can be compared.

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Page 3-5

No Action Alternative

Without restoration of native riparian vegetation and aggressive treatment of invasive weed species, the sites would remain in their current degraded condition indefinitely, or possibly deteriorate further with increasing dominance of invasive weeds and declining riparian vegetation. Linking to previously restored areas would not occur, thereby limiting the overall benefits of a contiguous restored corridor of habitat.

Page 3-9

No Action Alternative

Existing hydrology, geomorphology, and water quality would not be affected by proposed restoration work, but could change from natural events or unrelated human-caused effects. It is likely the river would remain in its current channel and there would be few or no changes in the groundwater system and floodplain size and function, or the ability to withstand high flow events.

Page 3-16

No Action

Under the No-Action Alternative, the two federally listed fish species discussed, and their habitat, would likely remain unchanged or possibly decline as riparian vegetation diminishes, water quality and habitat degrades, and water temperatures possibly increase. Because flows in the river are highly regulated, changes in regulated flow regimes, particularly sustained increases, could result in some positive environmental effects independent of the Proposed Action, including improved cottonwood recruitment and cooler water temperatures.

Page 3-24

No action alternative-

Wildlife populations and habitat would remain the same or change in ways unrelated to the proposed restoration work. Riparian habitat would remain limited and of generally poor quality. Desired wildlife species, particularly those dependent on riparian communities, would not be expected to increase in diversity and numbers. Historic floodplains would continue to be dominated by upland desert vegetation, agricultural crops, and non-native weeds, and would be used by wildlife species adapted to these vegetation types. Species dependent on large contiguous areas of riparian vegetation would not benefit from the connectivity that would have been created by the three proposed restoration sites.

RESPONSE TO COMMENT 1: John Webster Brown

The Nature Conservancy (TNC) received the comment letter dated May 15, 2012. The following are the responses to the comments.

Comment: I request a copy of these comments be sent to all other parties for the EA, along with comments from others.

Response: Reclamation has created a new Appendix to the EA chronicling the Public Comment and Response and is posting it on the Reclamation website with the EA. Notification of this new Appendix is included in the text of the letter being sent to the mailing list of Interested Parties that have received all previous notifications.

Comment: The purpose of the project appears to increase wildlife adjacent to the river for a very few miles out of the 100 miles of the lower Truckee River.

Response: The purpose and goal of the Truckee River Flood Management Authority's ecosystem restoration program (http://truckeeflood.us/233/restoration_projects.html) is to restore 50 miles of the lower river. The 20 most feasible sites were identified in a 2007 report by Otis Bay Ecological Consultants, which was prepared for the Army Corps of Engineers (ACOE). To date, over eight river miles have been restored and the proposed project would bring the total to over 11 miles. TNC intends to continue restoring additional sites as they become accessible and funding is available. The project will be considered complete when the river and riparian system are healthy and resilient.

Comment: The ACOE flood control project of the 1960s was based on considerable design and study, and would not be considered detrimental by most people.

Response: The degraded condition of the lower Truckee River is a result of many human-caused factors, one of which was straightening and channelization by the 1960s Truckee River and Tributaries Project. Resulting conditions have been recognized by the ACOE as a major problem in several reaches of the river. The ACOE was a partner in TNC's 2006 McCarran Ranch restoration project and prepared the EA for that project (later adopted and issued with a Finding of No Significant Impact by the Bureau of Reclamation). The McCarran Ranch project was originally identified as a "Section 1135 continuing authorities" project. This authority acknowledges the need to restore ecosystem functions impaired by past ACOE projects. The ACOE has been involved in the Truckee River Flood Management Authority's ecological restoration program and in TNC's implementation of projects designed to meet the goals of the program.

Comment: The proposed project would dismantle the ACOE-built channel and construct a meandering channel of about half the width and capacity, which would lead to damaging floods.

Response: The1960s-era channel was narrower than the proposed channel. The previous widening and straightening ultimately led to channel downcutting and an inability of flood flows to spread out over the floodplain, which actually exacerbated flood concerns. The planned restored floodplain, along with the recently restored floodplain projects, allows the river to spread out, thereby dissipating flood flow energy over the floodplain, as intended. Overbank flooding into the restored floodplain would be limited to the restored properties specifically designed to allow for flooding in these reaches of the river.

Comment: The EA does not address how the proposed project will accommodate major floods. Channel restoration, including constructed meanders, would accomplish certain environmental objectives at the expense of flood damage and downstream sedimentation.

Response: The scientific research regarding the flood attenuation benefits of river restoration is well established and extensive. The project's design engineers, Graham Matthews and Associates, cited several of these publications in their conceptual design report. The relevant section of the design report and the references are available upon request from TNC.

Flood control issues are under the authority of the ACOE through their Truckee Meadows Flood Control Project and the inter-agency Truckee River Flood Management Authority (TRFMA). TNC and its contractors have coordinated with the ACOE on the three restoration projects analyzed in the EA as well as previously implemented restoration projects. The mission of the TRFMA, a cooperator in TNC's current and past restoration projects and a project funding source, includes reducing the impact of flooding and restoring the Truckee River ecosystem. The TRFMA was closely involved in the identification and prioritization of the restoration sites (see http://truckeeflood.us/233/restoration_projects.html and the previous response). The ACOE and the TRFMA recognize the benefits of TNC's Truckee River Project and have supported implementation of the projects.

The earlier restoration sites, which are near the three new proposed sites, have functioned as designed during high flow events. The river stayed within its channel, occasionally overtopping the banks and filling the floodplain within the restored properties, but not affecting other ownerships. The inundation of the flood plain rejuvenated the native riparian species (cottonwood, willows), which helped absorb and slow subsequent high flows. The performance of the earlier restoration sites was used as information in the design of the proposed sites.

Preliminary flood modeling of the four more recent restoration sites shows minor or no rise from pre-project conditions. The restoration designs are not expected to exacerbate existing flood conditions.

Comment: The current channel had about 60 years to stabilize and is fairly stable now.

Response: As documented in the 2007 Otis Bay Ecological Consultants report for the ACOE, there are many places along the lower river where the channel is deeply incised and the banks are actively eroding. For the proposed restoration sites, these areas are documented in detail in the engineering report. The 1960s channel work is one of several factors that led to degraded conditions. 2007 Otis Bay Ecological Consultants report for the ACOE identified areas in need of restoration based on their existing condition, not the presence of past flood control work.

Comment: The excavation will remove all the top soil and vegetation, which might have worse consequences than benefits.

Response: Most of the existing vegetation at the three new restoration sites is invasive, non-native species, which would be replaced by desirable native riparian species. Where there is existing desirable vegetation, it would be protected or salvaged and replanted after construction. At the previously restored sites, desirable vegetation became established quickly, particularly if overbank flooding occurred.

Comment: Groundwater and vegetation response to the timing of the flood plain inundation.

Response: The four restoration projects previously constructed illustrate the success of the project designs in terms of floodplain, channel and wetland elevations. Revegetation efforts there have been highly successful. Particularly, cottonwood and willow regeneration along the banks responded well to the flow regime typically present in spring (high flows getting them wet for a period, then receding), to which they are adapted. Floodplain swales and wetland areas of previous projects contain the expected amount of water throughout the year. The desired vegetation, floodplain, and wetland response occurred because restoration design was determined to be appropriate for each specific site.

Comment: The expected improvement from the baseline number of species is purely speculative.

Response: Conservation targets for the projects include riparian woodland and riparian nesting birds; baseline data was collected for all project areas and includes vegetation mapping and bird surveys.

Comment: There is no cost/benefit analysis included in the EA.

Response: A benefit/cost ratio analysis is not required with the projects' funding sources. Every effort is made to minimize costs for the maximum restoration benefits.

Comment: Species inhabiting such a small length/area of the Truckee canyon seem relatively minor compared to the surrounding desert area.

Response: As explained on page 3-16 of the EA "Riparian habitat accounts for a very small percentage of land area in the Great Basin region, but contains a majority of the total native wildlife species, including many rare species." The land area is relatively small, but the ecological significance is quite large. That is the reason why TNC and other organizations and agencies have made desert riparian restoration a high priority. Historically, the riparian corridor along the lower Truckee River was much larger in size and has been significantly degraded over time.

Comment: It is improbable that the construction work can be completed in the July to December time frame.

Response: All four of the previous restoration projects have been constructed during this time window. Fully developed Best Management Practice (BMP) plans and construction sequence ensure minimal impacts during construction. BMPs protect river from runoff from any storm event happening during the construction period, and until vegetation is established.

Comment: Funds should be used to lower "Vista Reefs" or lower the river channel through downtown Reno.

Response: The funding sources to be used for the proposed restoration work would not qualify for such projects; other entities are evaluating needs to address concerns of the river channel through downtown Reno. The proposed restoration projects provide a variety of benefits in addition to wildlife habitat, including flood attenuation, water quality improvement, and recreation.

Comment: The No Action alternative is supported.

Response: Comment noted.

COMMENT 2: John Madole, Executive Director, Nevada Chapter of the Associated General Contractors of America

May 15, 2012

Patti Baker
Nature Conservancy
Nevada Field Office
1 East 1st Street, Suite 107
Reno, NV 89501

Re: comments on draft environmental assessments lower Truckee River restoration projects

Dear Ms. Baker,

The draft assessment does not appear to address how major floods on the Truckee River occurring in the Truckee Meadows will be accommodated downstream.

Meandering pattern of channels proposed would accomplish certain environmental objectives at the cost of additional flood damage and possible damage to newly created banks and washing topsoil and silt further downstream.

A cost benefit assessment which addresses not only downstream benefits but benefits or additional costs to upstream residents and businesses in the Reno Sparks area should be considered.

Our association supports the no action alternative at this time and recommends that any further study of this proposal should include a comprehensive cost-benefit study that addresses upstream user concerns as well as downstream environmental issues.

Sincerely,

Madole John

John Madole

Executive Director

RESPONSE TO COMMENT 2: John Madole

The Nature Conservancy (TNC) received the comment letter dated May 15, 2012. The following are the responses to the comments.

Comment: The EA does not address how the proposed project will accommodate major floods occurring in the Truckee Meadows will be accommodated downstream. A meandering pattern of channels proposed would accomplish certain environmental objectives at the cost of additional flood damage and possible damage to newly created banks and washing topsoil and silt further downstream.

Response: The scientific research regarding flood attenuation benefits of river restoration is well established and extensive. The project's design engineers, Graham Matthews and Associates, cited several of these publications in their conceptual design report. The relevant section of the design report and the references are available upon request from TNC.

Flood control issues are under the authority of the U.S. Army Corps of Engineers (ACOE) through their Truckee Meadows Flood Control Project and the inter-agency Truckee River Flood Management Authority (TRFMA). TNC and its contractors have coordinated with the ACOE on the three restoration projects analyzed in the EA as well as previously implemented restoration projects. The mission of the TRFMA, a cooperator in TNC's current and past restoration projects and a project funding source, includes reducing the impact of flooding and restoring the Truckee River ecosystem. The Flood Project was closely involved in the identification and prioritization of the restoration sites (see http://truckeeflood.us/233/restoration_projects.html and the previous response). The ACOE and the TRFMA recognize the benefits of TNC's Truckee River Project and have supported implementation of the projects.

The earlier restoration sites, which are near the three new proposed sites, have functioned as designed during high flow events. The river stayed within its channel, occasionally overtopping the banks and filling the floodplain within the restored properties, but not affecting other ownerships. The inundation of the flood plain rejuvenated the native riparian species (cottonwood, willows), which helped absorb and slow subsequent high flows. The performance of the earlier restoration sites was used as information in the design of the proposed sites.

Preliminary flood modeling of the four more recent restoration sites shows minor or no rise from pre-project conditions. The restoration designs are not expected to exacerbate existing flood conditions.

Comment: A cost benefit assessment which addresses not only downstream benefits but benefits or additional costs to upstream residents and businesses in the Reno Sparks area should be considered.

Response: A benefit/cost ratio analysis is not required with the projects' funding sources. Every effort is made to minimize costs for the maximum restoration benefits. No impacts are expected to occur from the restoration projects to any upstream residents or businesses in the Reno Sparks area.

Comment: The No Action alternative is supported.

Response: Comment noted.