I CALL TO ORDER: Welcome to the Three Rivers Levee Improvement Authority (TRLIA) meeting. As a courtesy to others, please turn off cell phones, pagers, or other electronic devices which might disrupt the meeting. Thank you.

II ROLL CALL – Directors Rick Brown, Jerry Crippen, Don Graham, Mary Jane Griego, John Nicoletti

III CLOSED SESSION

Pending litigation pursuant to Government Code §54956.9(a) regarding the following:

a. TRLIA vs Naumes, Inc. YCSCCVED 08-0000361
b. TRLIA vs. Davit, et al., YCSCCVED 07-000437, Court of Appeal Case No. C060898, APN No. 013-010-014
c. TRLIA vs. Thomas A. Rice, et al., YCSCCVED 07-0000633
d. TRLIA vs. Jourbee Khang, et al., YCSCCVED 07-000313
e. TRLIA vs. Danna Investment Company, et al., YCSCCVED 08-00024
f. TRLIA vs. Mann YCSCCVED 07-0000438. APN 013-010-013

IV PUBLIC COMMUNICATIONS: Any person may speak about any subject of concern provided it is within the jurisdiction of the Levee Improvement Authority and is not already on today's agenda. The total amount of time allotted for receiving such public communication shall be limited to a total of 15 minutes and each individual or group will be limited to no more than 5 minutes. Prior to this time, speakers are requested to fill out a “Request to Speak” card and submit it to the Clerk of the Board of Supervisors.

V CONSENT AGENDA: All matters listed under the consent agenda are considered to be routine and can be enacted by one motion.

A. Approve minutes of the meeting of November 17, 2009.

VI ACTION ITEMS

A. Approve Amendment No. 14 to agreement with MBK Engineers in the amount of $569,020 for project and design management and authorize the Executive Director to execute same.

B. Authorize Executive Director to release request for qualifications for mitigation and habitat restoration for the Feather River Levee Repair Project.

C. Approve Amendment No. 4 to agreement with Handen Co., Inc. in the amount of $254,730 for construction management services and authorize the Executive Director to execute same.

VII BOARD AND STAFF MEMBERS' REPORTS

VIII ADJOURN

The complete agenda, including backup material, is available at the Yuba County Government Center, 915 8th Street, Suite 109, the County Library at 303 Second Street, Marysville, and www.trlia.org. Any disclosable public record related to an open session item on the agenda and distributed to all or a majority of the Board of Directors less than 72 hours prior to the meeting are available for public inspection at Suite 109 during normal business hours.

In compliance with the American with Disabilities Act, the meeting room is wheelchair accessible and disabled parking is available. If you have a disability and need disability-related modifications or accommodations to participate in this meeting, please contact the Clerk of the Board's office at (530) 749-7510 or (530) 749-7353 (fax). Requests must be made one full business day before the start of the meeting.
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A meeting of the Board of Directors of the Three Rivers Levee Improvement Authority was held on the above date, commencing at 2:03 p.m., within the Government Center, Marysville, California, with a quorum being present as follows: Directors Rick Brown, Jerry Crippen, Don L. Graham, Mary Jane Griego, and John Nicoletti. Also present were Executive Director Paul Brunner, Counsel Scott Shapiro, and Deputy Clerk of the Board of Supervisors Rachel Ferris. Chair Griego presided.

CLOSED SESSION

The Board retired into closed session at 2:04 p.m. to discuss the following pending litigation pursuant to Government Code §54956.9(a):

1. TRLIA vs. Danna Investment Co. YCSCCVED 08-000024
2. TRLIA vs. Heir Family YCSCCVED 08-0000242
3. TRLIA vs. Khang YCSCCVED 7-0000313
4. TRLIA vs. Naumes, Inc. YCSCCVED 08-0000361
5. TRLIA vs. Thomas A. Rice, et al. YCSCCVED 07-0000633

The Board returned from closed session at 2:21 p.m. with all Board and staff members present as indicated above.

Counsel Scott Shapiro advised direction was provided on four cases and settlement was authorized on Khang in the amount of $67,500.

CONSENT AGENDA

Upon motion of Director Nicoletti, seconded by Director Crippen, and unanimously carried, the Board took the following actions:

A. Approved minutes of the meeting of October 20, 2009, as written.
B. Approved lease agreement with Yuba County Office of Education for administrative offices and authorized the Chair to execute same.

ACTION ITEMS

1. Kim Floyd Communications/Amendment No. 1/$165,050: Following Executive Director Paul Brunner providing a brief recap and Board inquiries, upon motion of Director Graham, seconded by Director Crippen, and unanimously carried, the Board approved Amendment No. 1 to the agreement with Kim Floyd Communications in the amount of $165,050 for public outreach services through December 31, 2010 and authorized the Chair to execute same.

2. SCI Engineering/Amendment No. 3/$34,750: Following Executive Director Paul Brunner providing a recap of additional survey for formation of the Levee and Flood control Facilities Assessment Districts and Board inquiries, upon motion of Director Nicoletti, seconded by Director Brown, and unanimously carried, the Board approved Amendment No. 3 to the agreement with SCI Engineering in the amount of $34,750 for additional consulting services and authorized the Chair to execute same.

3. River Partners/Amendment No. 1/$277,144: Environmental Manager Anja Raudabaugh recapped the necessity for additional monitoring and maintenance obligations and responded to Board inquiries.

Following Executive Director Paul Brunner discussing the 404 permit requirements for maintenance of the property. Upon motion of Director Crippen, seconded by Director Brown, and unanimously carried, the Board approved Amendment No. 1 to the agreement with River Partners in the amount of $277,144 for additional maintenance and monitoring services on the Bear River setback area and authorized the Chair to execute same.

BOARD AND STAFF MEMBERS' REPORTS

Reports were received on the following:

Paul Brunner:
- Photo depicting a cross section of the original Feather River Levee
- Quarterly reports submitted to Central Valley Flood Protection Board
- TRLIA response to Mooretown Rancheria letter dated August 24, 2009
ADJOURNMENT

There being no further business to come before the Three Rivers Levee Improvement Authority Chair Griego adjourned the meeting at 2:58 p.m.

_____________________________  Chair

ATTEST: DONNA STOTTERMeyer
CLERK OF THE BOARD OF SUPERVISORS
AND SECRETARY OF THE PUBLIC AUTHORITY

_____________________________  Approved: _________________
Rachel Ferris, Deputy
December 15, 2009

TO: Three Rivers Levee Improvement Authority Board
FROM: Paul Brunner, Executive Director
SUBJECT: Consider Amending Contractual Agreement with MBK Engineers for TRLIA Project Management, Amendment 14.

Recommended Action
Approve a $569,020 14th contract amendment to the contract with MBK Engineers and delegate authority to Executive Director to sign and execute contract upon General Counsel review.

Discussion
The TRLIA Board has adopted a management organization that includes a Program Manager and a Design Manager. These services have been provided by MBK Engineers for several years. The services include program and design management; limited financial management; and state funding agreement support. This 14th amendment will extend MBK management efforts and also includes a hydraulic analysis of the flood risk from the Goldfields. The amendment also extends the end date of the MBK contract from December 31, 2009 to December 31, 2010. The estimated cost associated with 2010 additional efforts is $569,020. MBK has maintained its 2009 rate structure for 2010 as requested by Executive Director Policy Memorandum dated July 23, 2009. All other terms and conditions contained in the Agreement shall remain in full force and effect.

The specific contract amendment terms are detailed in the attached document (Attachment A).

Fiscal Impact
The contract amendment would increase the existing contract by $569,020 for services on a time-and-expenses basis, to a maximum amount not exceeding $3,653,237 (Current maximum amount $3,084,217) without prior authorization by TRLIA. This amendment is a time and material contract, which could be terminated at anytime. These projected expenses are included in the current TRLIA cash flow for project completion.
AMENDMENT NO. 14

AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
AND
MBK ENGINEERS

THIS FOURTEENTH AMENDATORY AGREEMENT is made and entered into this ____ day of December, 2009, by and between the THREE RIVERS LEVEE IMPROVEMENT AUTHORITY ("TRLIA") and MBK ENGINEERS ("CONTRACTOR"), who agree as follows:

1. Recitals. This Amendment is made with reference to the following background recitals:

1.1. Effective August 23, 2003, the parties entered into an agreement ("AGREEMENT") to provide basic services with a contract value of $55,800 and an end date of February 3, 2004.
1.2. Effective September 11, 2003, the parties entered into Amendment 1 to the AGREEMENT in the amount of $8,000 for a total contract value of $63,800.
1.3. Effective January 6, 2004, the parties entered into Amendment 2 to the AGREEMENT in the amount of $30,000 for a total contract value of $93,800.
1.4. Effective March 19, 2004, the parties entered into Amendment 3 to the AGREEMENT in the amount of $45,400 for a total contract value of $139,200 and to extend the contract end date to March 30, 2004.
1.5. Effective April 22, 2004, the parties entered into Amendment 4 to the AGREEMENT in the amount of $50,100 for a total contract value of $189,300 and to extend the contract end date to July 31, 2004.
1.6. Effective August 3, 2004, the parties entered into Amendment 5 to the AGREEMENT in the amount of $8,000 for a total contract value of $197,300 and to extend the contract end date to September 7, 2004.
1.7. Effective October 6, 2004, the parties entered into Amendment 6 to the AGREEMENT in the amount of $97,650 for a total contract value of $294,950 and to extend the contract end date to December 7, 2004.
1.8. Effective January 26, 2005, the parties entered into Amendment 7 to the AGREEMENT in the amount of $35,000 for a total contract value of $329,950 and to extend the contract end date to April 30, 2005.
1.9. Effective March 15, 2005, the parties entered into Amendment 8 to the AGREEMENT in the amount of $108,200 for a total contract value of $438,150.
1.10. Effective September 6, 2005, the parties entered into Amendment 9 to the AGREEMENT in the amount of $187,200 for a total contract value of $625,350 and to extend the contract end date to July 31, 2006.
1.11. Effective April 18, 2006, the parties entered into Amendment 10 to the AGREEMENT in the amount of $549,359 for a total contract value of $1,174,709 and to extend the contract end date to December 31, 2006.
1.12. Effective December 12, 2006, the parties entered into Amendment 11 to the AGREEMENT in the amount of $707,980 for a total contract value of $1,882,689 and to extend the contract end date to December 31, 2007.
1.13. Effective January 8, 2008, the parties entered into Amendment 12 to the AGREEMENT in the amount of $629,056 for a total contract value of $2,511,745 and to extend the contract end date to December 31, 2008.

1.14. Effective January 27, 2009, the parties entered into Amendment 13 to the AGREEMENT in the amount of $572,472 for a total contract value of $3,084,217 and to extend the contract end date to December 31, 2009.

1.15. The parties now desire to amend the AGREEMENT to modify the scope of services, total contract value and contract end date.

2. Fourteenth Amendment to Agreement. The AGREEMENT is hereby amended as follows:

   2.1. The scope of services is amended by the scope of work as described in Attachment A.

   2.2. The total contract value is amended in the amount of $569,020 for a total contract value of $3,653,237.

   2.3. The contract end date is extended to December 31, 2010

3. No Effect on Other Provisions. Except for the amendments in Section 2, the remaining provisions of the Professional Services Agreement shall be unaffected and remain in full force and effect.

   IN WITNESS WHEREOF, the parties hereto have executed this Agreement on ______________, 2009.

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY OF YUBA COUNTY

MBK ENGINEERS

Paul G. Brunner
Executive Director

Ric Reinhardt
Principal

ATTEST:
DONNA STOTTEMEYER
SECRETARY, THREE RIVERS

APPROVED AS TO FORM:
SCOTT L. SHAPIRO
GENERAL COUNSEL, TRLIA
AMENDMENT 14 TO TRLIA/MBK CONTRACT
Scope of Work

The following is a general level of estimated involvement from January 1, 2010 to December 31, 2010.

Task 1 – Program Management Activities

- Project Management Meetings – Coordinate agendas, participate in teleconferences, and attend meetings as required. **Effort – 4 hrs/month**
- Coordination with CVFPB – Meet with staff and coordinate on permit issues, program issues, and financing issues. **Effort – 4 hrs/month**
- Coordination with the Corps and FEMA on FEMA certification issues. **Effort – 8 hrs/month**
- General Coordination – Coordination on project issues with TRLIA staff, floodplain mapping outreach, land use adjacent to levees, public meetings, prepare PowerPoint presentations, prepare other correspondence, coordination and meetings with stakeholders, and Board Meetings. **Effort – 14 hrs/month**

<table>
<thead>
<tr>
<th>Task 1</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Principal Engineer</td>
<td>30 hrs @ $220/h</td>
<td>$6,600</td>
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<td>Expenses</td>
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<td>$200</td>
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<td>Total</td>
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<td>$6,800 per month</td>
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</table>

Total Cost = $81,600

Task 2 – Design Management Activities

- Technical Meetings and Coordination – Participate in weekly conference calls with design teams, coordinate and participate in design issues resolution, attend field conferences on design issues. **Effort – 78 hrs/month**
- Coordination with CVFPB – Prepare monthly status reports and provide information to Board as needed. **Effort – 10 hrs/month**
- General Coordination – Coordination on project issues with TRLIA staff, public meetings, prepare correspondence in support of Program Manager, coordination with RD 784, coordination and meetings with stakeholders. **Effort – 32 hrs/month**

<table>
<thead>
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<th>Task 2</th>
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<td>Supervisory Engineer</td>
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</table>

Total Cost = $269,280
Task 3 – Mapping Support

- Prepare and update maps and figures that show all project features in RD 784. **Effort – 13 hrs/month**
- Prepare maps as needed for presentation and meetings. **Effort – 13 hrs/month**

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<td>Expenses</td>
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Total Cost = $45,600

Task 4 – Grant Support

- Continue to meet with County to be certain that TRLIA invoices are coded to the correct accounts for DWR Grant purposes. **Effort – 10 hrs/month**

<table>
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<tr>
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<td>Expenses</td>
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<tr>
<td>Total</td>
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<td>$2,170 per month</td>
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Total Cost = $26,040

Task 5 – Goldfields Analysis

- Conduct surveying of the features in the Goldfields.
- Perform hydraulic modeling to determine flows that may potentially exit the Goldfields.
- Create floodplain maps showing 100-year and 200-year floodplains from the Goldfields.
- QA/QC model and mapping results
- Coordinate effort with CVFPB and Corps

<table>
<thead>
<tr>
<th>Task 4</th>
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<th></th>
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<tbody>
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<td>Principal Engineer</td>
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<td>Senior Engineer</td>
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<td>Assistant Engineer</td>
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Total Cost = $146,500
Total Amendment 14 Costs for Tasks 1-5 = $569,020 for the period January 1, 2010 to December 31, 2010.

The AGREEMENT shall be amended to extend the contract end date to December 31, 2010.

The AGREEMENT shall be amended to increase the price ceiling for basic services by $569,020 from $3,084,217 to $3,653,237.

All other terms and conditions contained in the Agreement shall remain in full force and effect.
December 15, 2009

TO: Three Rivers Levee Improvement Authority Board
FROM: Paul Brunner, Executive Director
Anja Raudabaugh, Environmental Manager
SUBJECT: Request for Qualifications for Riparian Restoration Planting, Feather River Setback Mitigation and Design Features

Recommended Action:
Authorize Executive Director to release RFQ(Attachment 1) for the planting and re-vegetating of the floodplain drainage swale, Messick Lake 404 Mitigation Area, California Yuba 5 (CA-Yub-5) Archeological site, Riparian wind-wave buffer for the Feather River setback area, and Long term monitoring and maintenance of these sites.

Background:
TRLIA was required by the USACE 404 permit for the Feather River Levee Repair Project to design and construct 26.4 acres of waters of the U.S., and 1.5 acres of archaeological protection for CA-Yub-5. TRLIA accomplished these actions during the summer of 2009 by designing and constructing the floodplain drainage swale, the Messick Lake mitigation area, and lightly grading in preparation for planting, the CA-Yub-5 site. Each of these areas is required to undergo long term monitoring and maintenance, including reporting requirements, much of which TRLIA has already bonded for.

Additionally, as part of design requirements for the Feather setback project, a riparian wind-wave vegetative buffer has been proposed the entire length of the water side toe of the new levee to provide a wind-wave dampening action that was assumed in the design of the setback levee. A minimum width of 100 feet (at least four rows of trees) has been qualitatively estimated as being needed. Existing trees, such as those in the Foster walnut orchards, can be used for this requirement in lieu of planting new trees. The need for buffering floodplain vegetation is most critical along the southernmost one-third of the levee, which is exposed to a larger fetch (distance waves can travel without obstruction), has less freeboard, and is aligned at a more unfavorable angle with respect to the fetch than the northern two-thirds of the levee. Once planted, the wind-wave buffer will not require any long term monitoring or reporting.

Discussion:
The RFQ will include a scope of work for seeding, planting, and monitoring of these areas, and seek qualifications based on relevant experience. Conservation easements are required by the USACE 404 permit for the floodplain drainage swale areas and the Messick Lake site. The RFQ includes relevant information seeking qualified firms to manage and control the conservation easement once TRLIA has developed the easement for the mitigation areas.

Once issued, the RFQ will be disseminated via email and mail to known qualified bidders as well as posted to the TRLIA website. Three weeks will be provided for qualified bidders to submit
DATE: December 15, 2009

TO: Prospective Habitat Mitigation/Restoration Contractors

FROM: Paul Brunner, Executive Director, TRLIA

SUBJECT: Request for Qualifications (RFQ) for the Planting of the Habitat Mitigation and Restoration Components of the Feather River Levee Repair Project in Yuba County, California

Three Rivers Levee Improvement Authority (TRLIA) is inviting contractors to submit qualifications for the planting of the Mitigation and Habitat Restoration Components of the Feather River Levee Repair Project in Yuba County, California. The project overview, submittal requirements, and additional provisions are provided below.

**Project Overview**

**Project Location**

The Feather River Levee Repair Project is located in the southwestern portion of Yuba County (Exhibit 1; all figures are located at the end of the RFQ). It encompasses a portion of the Feather River Left bank levee and lands to the east between Feather River Project Levee Mile 17.2 and Project Levee Mile 23.4 (from approximately Star Bend up stream to near Shanghai Bend, southwest of the Yuba County Airport). The project area is located in Townships 13 and 14 North, Ranges 3 and 4 East, on the U.S. Geological Survey 7.5 minute Olivehurst quadrangle. The setback levee footprint covers approximately 200 acres, and the area between the setback levee alignment and the existing levee encompasses approximately 1,300 acres (Exhibit 2). As shown in Exhibit 2, the setback levee and associated portion of the existing levee, and the area between these two features, is identified as Segment 2 of the overall multi-segment Feather River Levee Repair Project.

**Background and Purpose**

The southwestern portion of Yuba County is subject to seasonal flood threats from many rivers and creeks, including the Yuba River, Feather River, Bear River, Western Pacific Interceptor Canal (WPIC), and tributary drainages. Because of this flood risk, many local rivers have been confined by constructed levees. Most of the current levee systems in the county were built during the 1920s
using construction practices of that era. Studies over recent decades conducted by the U.S. Army Corps of Engineers (USACE) and others have concluded that substantial segments of area levees do not meet current Federal Emergency Management Agency protection standards for a 100-year flood event (i.e., a flood with 1% chance of occurring in any given year).

The primary purpose of the levee repair project is to correct identified deficiencies in the left bank levee of the Feather River, and consequently to improve flood protection in the RD 784 area of Yuba County. The goal for improved flood protection in the RD 784 area is to provide protection against the 0.5% annual exceedance probability (AEP) event. The 0.5% AEP event corresponds to the term “200-year flood protection”.

Deficiencies in Segment 2 of the Feather River left bank levee are related to a history of boils and heavy underseepage resulting from an overly porous substrate under the levee alignment. The potential for water seepage problems to occur along the existing Feather River levee in the project area is created by discontinuous layers of very loose or loose cohesionless soils (gravels, clean sand, and silty sand) found at varying depths of up to approximately 80 feet. During high-water events, water from the river can enter these pervious layers and then move laterally through these layers and under the levee. In addition, sink holes have been observed in different locations, providing evidence of the structural instability of the levee. There are also several locations along the water side of the levee segment experiencing erosion.

TRLIA’s project has been to construct and maintain a new setback levee, remove all or portions of the existing levee, and implement related activities in Segment 2. The setback levee is approximately 5.7 miles long. The new levee segment has been generally set back approximately 0.5 mile to the east of the existing Feather River levee, except near the northern and southern ends, where it joins the existing levee.

The project will be completed in two stages. Stage 1, which was completed in the fall of 2009, includes the construction of the setback levee and associated stability berms, construction of a new Pump Station No. 3 and associated facilities, filling of the Plumas Lake Canal on the water side from the setback levee to where the canal opens into the ponded area and on the land side from the setback levee to the new Pump Station No. 3; excavation of material within the borrow sites, and removal, replacement, or relocation of existing utilities and structures within the setback area. Stage 2 of the project includes degradation of all or portions of the existing Feather River left bank levee within Segment 2; backfilling borrow areas developed during setback levee construction; decommissioning of the existing Pump Station No. 3; and construction of a floodplain drainage swale along the existing Pump Station No. 3 discharge channel to facilitate drainage of water from the levee setback area toward the Feather River after flood events. Existing ditches and canals would also be used to drain the setback area. This phase is expected to be complete in the spring of 2010.

The levee setback project also provides for several planned onsite mitigation areas as part of the overall comprehensive TRLIA mitigation strategy. These mitigation areas will provide an opportunity to enhance the ecological value of the project area through the restoration of native riparian and wetland habitats in the expanded floodway. In addition, the project includes a planned design feature—a vegetated wave buffer (explained further below), which will be constructed using native riparian planting materials.
The second stage of project construction will also include the following components related to mitigation obligations in the levee setback area:

1) Restoring native habitat types in the Section 404 mitigation areas (Messick Lake and the floodplain drainage swale), a vegetated non-disturbance area, and the vegetated wave buffer. These sites will be restored per requirements of permits issued to TRLIA by the USACE, the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (DFG).

2) Monitoring and reporting requirements for the floodplain drainage swale and Messick Lake per TRLIA’s 404 requirements.

Of these restoration actions, only the habitat mitigation component and monitoring and reporting requirements will be the responsibility of the selected restoration contractor. These components are described below in the sections titled, “Mitigation Planting Sites Included in this RFQ”, and “Monitoring and Reporting Requirements.”

The environmental impacts of the levee setback, habitat restoration, and related actions were evaluated pursuant to requirements of several laws; the California Environmental Quality Act in TRLIA’s Environmental Impact Report for the Feather River Levee Repair Project, certified January 2007 (State Clearinghouse No. 2006062071), the National Environmental Policy Act in USACE’s Environmental Impact Statement for the Feather River Levee Repair Project, Segment 2, adopted December 2008 (Corps File No. 2007005778), and the Clean Water Act, Section 404 and 408 Permits, in TRLIA’s Habitat Mitigation and Monitoring Plan (HMMP, Corps File No. 2007005778). Mitigation Requirements

TRLIA has identified permanent impacts to 6.7 acres of jurisdictional habitat as follows (Final EIS, 408 Permission and 404 Permit, page 3.6-9):

- The portion of the Plumas Lake Canal within the setback levee footprint,
- Segments of the Plumas Lake Canal on either side of the setback levee alignment that were filled to minimize the potential for underseepage that could result from having an excavated feature too close to the levee, and
- The area adjacent to the Plumas Lake Canal on the east side of the setback levee where the new Pump Station No. 3 would be installed.

To offset the permanent loss of approximately 6.7 acres of waters of the United States, TRLIA is creating approximately 23 acres (3.4:1 ratio) of riparian wetlands on a 24.4-acre site adjacent to Messick Lake. The permanent impacts of the project were anticipated to occur approximately 1 year before construction of the Messick Lake mitigation area. The Messick Lake mitigation area is located in a borrow area and cannot be constructed until the existing levee is degraded and delivery of fill to the borrow area is completed. The excavated borrow area would be backfilled with material from the degraded levee to reduce the potential for underseepage from open excavations waterside of the new levee. The mitigation area would be backfilled to an elevation that would allow for inundation by backwater from the floodplain drainage swale at a frequency and duration that would support characteristic ecosystem benefits.
Construction of the floodplain drainage swale and removal of the existing levee after the setback levee is complete would restore a historic hydrological connection between the Messick Lake, Plumas Lake and the Feather River. Messick Lake and Plumas Lake were separated from the Feather River by a levee which by 1942 allowed the once large lakes to be drained and filled.

The combined Messick Lake mitigation area and floodplain drainage swale mitigation efforts would restore important physical and ecological processes in the levee setback area and thereby improve overall geomorphic and ecologic functions in the watershed. The mitigation effort would thus further the goals of the recently published Mitigation Rule by “restoring an outstanding and regionally significant aquatic resource based on rigorous and scientific analysis.”

**Mitigation Planting Sites Included in this RFQ**

**Messick Lake Mitigation Area**

The Messick Lake mitigation area is located directly west of, and connects to Messick Lake in southern Yuba County (Exhibit 2). Messick Lake is characterized by a gently sloping 15-foot depression/drainage that is narrow at both the north and south ends and wider in the middle. The lake is part of a perennial drainage and is surrounded by riparian forest/scrub habitat. The year round presence of water in Messick Lake is supported by agricultural runoff, groundwater sources, and precipitation events. The area mapped as Messick Lake has an ordinary high water mark of approximately 30 feet, as mapped by EDAW as part of the wetland delineation work. Messick Lake flows south into an unnamed slough and eventually becomes a channelized remnant of Plumas Lake Canal.

The elevations of the mitigation area will be lower than the original grade of the site. This will facilitate inundation by Feather River water flowing up the floodplain drainage swale during high water events and allow for floodwater egress to prevent fish stranding. An upper terrace will be incorporated into the design to connect Messick Lake to the mitigation area and maximize edge effect while allowing for varied riparian vegetation communities within the mitigation area.

The Messick Lake mitigation area will be about 770 feet wide and 1,600 feet long (Figures 14 and 15 of the HMMP) with an upper and lower terrace. The mitigation area will drain southeast towards Messick Lake. The base elevation of the low terrace is about 28 feet while the elevation of the upper terrace is about 32 feet. The upper terrace has been designed to provide connectivity between Messick Lake and the mitigation area while avoiding impacts to elderberry shrubs located on the west side of Messick Lake. The, low terrace, and upper terrace will provide topographic diversity to the mitigation area.

To facilitate monitoring of groundwater and estimate when the roots of riparian vegetation are drawing from that groundwater (by taking the average annual growth of roots for those species, multiplying it by the number of years since planting, and comparing to groundwater levels), two shallow piezometers will be installed on the site by the selected contractor. These piezometers will be located in a line perpendicular to the long axis of Messick Lake, and spaced evenly between the western edge of the lake and the eastern edge of the site. The piezometers will be installed prior to planting. Monthly monitoring will be required by the contractor and results provided to TRLIA. The restoration ecologist may also chose to install and use soil lysimeters, and these could be placed
near the piezometers to provide a more-detailed understanding of soil moisture and groundwater through the site.

Listed below is the planting plan for Messick Lake.

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Species composition (%)</th>
<th>Density (plant/acre)</th>
<th>Total Number</th>
<th>Total Planting Acres**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box elder</td>
<td>Acer negundo L.</td>
<td>10</td>
<td>22</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>Buttonbush</td>
<td>Cephalanthus occidentalis</td>
<td>16</td>
<td>35</td>
<td>739</td>
<td>21.1</td>
</tr>
<tr>
<td>California blackberry</td>
<td>Rubus ursinus Chain. &amp; Schldl.</td>
<td>12</td>
<td>26</td>
<td>78</td>
<td>3</td>
</tr>
<tr>
<td>Clematis</td>
<td>Clematis ligusticifolia</td>
<td>4</td>
<td>9</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Coyote bush</td>
<td>Baccharis pilularis DC.</td>
<td>6</td>
<td>13</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>Dutchman's pipevine</td>
<td>Aristolochia californica</td>
<td>4</td>
<td>9</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus mexicana</td>
<td>8</td>
<td>17</td>
<td>51</td>
<td>3</td>
</tr>
<tr>
<td>Fremont cottonwood</td>
<td>Populus fremontii S. Watson ssp. fremontii</td>
<td>16</td>
<td>35</td>
<td>739</td>
<td>21.1</td>
</tr>
<tr>
<td>Dogbane</td>
<td>Apocynum cannabinum</td>
<td>12</td>
<td>26</td>
<td>549</td>
<td>21.1</td>
</tr>
<tr>
<td>Oregon ash</td>
<td>Fraxinus latifolia Benth</td>
<td>16</td>
<td>35</td>
<td>739</td>
<td>21.1</td>
</tr>
<tr>
<td>Poison oak</td>
<td>Toxicodendron diversilobium</td>
<td>12</td>
<td>26</td>
<td>549</td>
<td>3</td>
</tr>
<tr>
<td>Valley oak</td>
<td>Quercus lobata Nee</td>
<td>22</td>
<td>48</td>
<td>144</td>
<td>3</td>
</tr>
<tr>
<td>Western sycamore</td>
<td>Platanus racemosa Nutt.</td>
<td>8</td>
<td>17</td>
<td>51</td>
<td>3</td>
</tr>
<tr>
<td>Wild rose</td>
<td>Rosa californica Cham. &amp; Schldl.</td>
<td>6</td>
<td>13</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>Arroyo willow</td>
<td>Salix lasiolepis Benth.</td>
<td>10</td>
<td>22</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>Gooding's black willow</td>
<td>Salix goodingii C.R. Ball</td>
<td>16</td>
<td>35</td>
<td>739</td>
<td>21.1</td>
</tr>
<tr>
<td>Sandbar (narrow-leaf) willow</td>
<td>Salix exigua Nutt.</td>
<td>12</td>
<td>26</td>
<td>549</td>
<td>21.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100.0</strong></td>
<td><strong>218</strong></td>
<td><strong>5,254</strong></td>
<td><strong>24.1</strong></td>
</tr>
</tbody>
</table>

*Planting estimates are included as over plantings, in anticipation of probable species die off

** The total number of plantings is dependent on the location of the species; upper or lower terrace and can be found in Appendix A of the HMMP

**Floodplain Drainage Swale**

The floodplain drainage swale is located in the southern portion of the Segment 2 setback area, connecting with the Feather River (Exhibit 2). The riparian forest/scrub area in the vicinity of the floodplain drainage swale is characterized by a complex structure. The upper canopy is typically dominated by Valley oak, Fremont cottonwood, willows and Oregon ash. The lower shrub canopy is very dense and thicket-like and includes blue elderberry, Himalayan blackberry, shrub-like forms of willows and lianas such as California grape.

The floodplain drainage swale is being constructed along the alignment of the existing Pump Station No. 3 discharge channel from the existing Pump Station No. 3 location to the Feather River
swale and will connect the setback area lowlands to the Feather River. The existing channel is being enlarged and deepened to accommodate flood flows leaving the setback area and to minimize the potential for fish stranding as flood waters recede. The channel is being constructed in a manner that minimizes vegetation disturbance, fish stranding, and other environmental impacts.

The floodplain drainage swale will be about 170 feet wide and approximately 1,600 feet long (Figures 17 and 18 of the HMMP). It will drain northwest, cutting through the area of higher floodplain adjacent to the Feather River to join the river channel at an elevation of 18 feet. The thalweg (18.0 feet) of the swale rises gradually upstream to meet the existing floodplain elevation at about 20.2 feet. The thalweg of the swale at the outlet to the Feather River is at an elevation that will be inundated year round. Floodplain inundation having this timing, duration, and frequency is known to provide substantial ecological benefits for key native aquatic species such as Chinook salmon and Sacramento splittail.

The floodplain drainage swale will act to allow backwater to flow into the setback floodplain from the Feather River, increasing the inundation frequency of the setback area and resulting in increased habitat values. Hydrodynamic model results (completed for analysis of the levee setback designs) show that during the 2-year flood event, floodwaters inundate the Messick Lake mitigation area via flow from the Feather River (flowing east, roughly along the alignment of Country Club Road) and via backwater inundation coming north from the Star Bend point bar area. This backwater inundation also inundates the floodplain swale and areas upstream of the swale that until recently were protected by the old levee. Larger flood events (i.e., the 10-year event and larger) will inundate the entire floodplain. Modeling suggests that the floodplain should drain back to the river via the existing topography, drainage features, and the floodplain swale.

Listed below is the planting plan for the Floodplain Drainage Swale.
### Summary of Proposed Plant Species: Floodplain Drainage Swale

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Species composition (%)</th>
<th>Density (plant/acre)</th>
<th>Total Number**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box elder</td>
<td>Acer negundo L.</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Buttonbush</td>
<td>Cephalanthus occidentalis</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>California blackberry</td>
<td>Rubus ursinus Chain. &amp; Schildl.</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Clematis</td>
<td>Clematis ligusticifolia</td>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Coyote bush</td>
<td>Baccharis pilularis DC.</td>
<td>8</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Dogbane</td>
<td>Apocynum cannabinum</td>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Dutchman's pipevine</td>
<td>Aristolochia californica</td>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus mexicana</td>
<td>8</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Fremont cottonwood</td>
<td>Populus fremontii S. Watson ssp. fremontii</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Oregon ash</td>
<td>Fraxinus latifolia Benth.</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Poison oak</td>
<td>Toxicodendron diversilobium</td>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Valley oak</td>
<td>Quercus lobata Nee</td>
<td>8</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Western sycamore</td>
<td>Platanus racemosa Nutt.</td>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Wild rose</td>
<td>Rosa californica Cham. &amp; Schildl.</td>
<td>8</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Arroyo willow</td>
<td>Salix lasiolepis Benth.</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Gooding's black willow</td>
<td>Salix goodingii C.R. Ball</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>Sandbar (narrow-leaf)  willow</td>
<td>Salix exigua Nutt.</td>
<td>6</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0</td>
<td>217</td>
<td>868</td>
</tr>
</tbody>
</table>

*Planting estimates are included as over plantings, in anticipation of probable species die off

** Total Number of plantings is dependent on planting design on 4 total acres in the floodplain drainage swale. A complete planting plan is located in the HMMP as Appendix A.

### Non-Disturbance Area

There is a specific sensitive environmental site in the setback area where vegetation plantings are required. Plantings will consist of native species and will be designed to stabilize the soils at the site and prevent erosion, as well as discourage human entrance (e.g., include dense blackberry thickets). The planting area will cover approximately 1.5-acres. The sensitive nature of this site precludes TRLIA from specifying the location, but this will be disclosed to the selected contractor.

### Vegetated Wave Buffer

The Vegetated Wave Buffer is a project design feature intended to reduce the overall wave action and erosion that could potentially occur on the waterside of the new levee (Exhibit 3). The design
includes a 100-foot-wide buffer of riparian plantings beginning at the edge of the 50-foot toe-access corridor of the new levee. The buffer would exist all along the setback levee for a length of approximately 30,000 feet. It is estimated that this design feature will include 70 acres of plantings within the setback area. Ultimate tree density is determined by a planting matrix of six rows (20-feet apart) with plant spacing of 10 feet between plants in the rows. Not all 70 acres will need to be planted, since currently about one half of the buffer zone is currently planted in orchards.

The contractor will also be required to implement long term maintenance and monitoring on the vegetated buffer. Although this project feature is a design feature and not a mitigation requirement, the vegetated buffer will be expected to conform to the performance criteria of Years 1 and 2 of the Performance Criteria in Table 1.

Proposed riparian plant species and density per acre would consist of the following:

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Species composition (%)</th>
<th>Density (plant/acre)</th>
<th>Total Number*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box elder</td>
<td><em>Acer negundo</em> L.</td>
<td>8</td>
<td>22</td>
<td>1,515</td>
</tr>
<tr>
<td>California blackberry</td>
<td><em>Rubus ursinus</em> Chain. &amp; Schldl.</td>
<td>3</td>
<td>9</td>
<td>620</td>
</tr>
<tr>
<td>Clematis</td>
<td><em>Clematis ligusticifolia</em></td>
<td>3</td>
<td>9</td>
<td>620</td>
</tr>
<tr>
<td>Coyote bush</td>
<td><em>Baccharis pilularis</em> DC.</td>
<td>10</td>
<td>26</td>
<td>1,791</td>
</tr>
<tr>
<td>Dutchman’s pipevine</td>
<td><em>Aristolochia californica</em></td>
<td>5</td>
<td>13</td>
<td>895</td>
</tr>
<tr>
<td>Fremont cottonwood</td>
<td><em>Populus fremontii</em> S. Watson ssp. fremontii</td>
<td>8</td>
<td>22</td>
<td>1,515</td>
</tr>
<tr>
<td>Oregon ash</td>
<td><em>Fraxinus latifolia</em> Benth.</td>
<td>11</td>
<td>30</td>
<td>2,066</td>
</tr>
<tr>
<td>Valley oak</td>
<td><em>Quercus lobata</em> Nee</td>
<td>25</td>
<td>65</td>
<td>4,477</td>
</tr>
<tr>
<td>Western sycamore</td>
<td><em>Platanus racemosa</em> Nutt.</td>
<td>13</td>
<td>35</td>
<td>2,410</td>
</tr>
<tr>
<td>Wild rose</td>
<td><em>Rosa californica</em> Cham. &amp; Schldl.</td>
<td>8</td>
<td>22</td>
<td>1,515</td>
</tr>
<tr>
<td>Arroyo willow</td>
<td><em>Salix lasiolepis</em> Benth.</td>
<td>3</td>
<td>9</td>
<td>620</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>262</strong></td>
<td><strong>18,044</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Planting estimates are included as over plantings, in anticipation of probable species die off

**Summary of Vegetation Plantings**

As described above, the project design includes planting native habitat types within the mitigation areas in the floodway and adjacent to the Feather River. The acres of mitigation plantings are as follows: approximately 24.4 acres of riparian wetland acres on the Messick Lake site, 6 acres of riparian and mixed Shaded Riverine Aquatic (SRA) habitat in the Floodplain Drainage Swale, 70 acres of mixed woody riparian along the vegetated wave buffer, and 1.5 acres of dense riparian habitat in the Non-Disturbance Area.
Following is a further summary of the planting acreages.

<table>
<thead>
<tr>
<th>Location and Planting Category</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messick Lake</td>
<td></td>
</tr>
<tr>
<td>Mitigation for waters of the U.S.</td>
<td>24.4</td>
</tr>
<tr>
<td>Floodplain Drainage Swale</td>
<td></td>
</tr>
<tr>
<td>Mitigation for waters of the U.S.</td>
<td>4.0</td>
</tr>
<tr>
<td>SRA habitat enhancement, including mitigation for waters of the U.S.</td>
<td>2.0</td>
</tr>
<tr>
<td>CA-Yub-5</td>
<td></td>
</tr>
<tr>
<td>New riparian plantings</td>
<td>1.5</td>
</tr>
<tr>
<td>Wind Action Reduction Buffer</td>
<td></td>
</tr>
<tr>
<td>Riparian plantings in the expanded floodplain</td>
<td>70</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>101.9</strong></td>
</tr>
</tbody>
</table>

**Monitoring and Reporting Requirements**

Of the sites listed above, two include monitoring and reporting requirements per TRLIA’s 404 permit, Messick Lake and the Floodplain Drainage Swale sites. The selected contractor will be expected to implement the monitoring and reporting requirements as described in the Habitat and Mitigation Monitoring Plan 2008, detailed in Table 2. In addition, TRLIA is requiring that the selected contractor be responsible for monitoring and success criteria of the non-disturbance area and the vegetated buffer for 3 years.

The performance criteria that will be used to determine mitigation area successes are shown in Table 1. The monitoring will include both quantitative surveys to check survival and percent cover, and qualitative surveys for overall condition and success of mitigation efforts, Table 2.

<table>
<thead>
<tr>
<th>Year</th>
<th>Survival of Trees and Shrubs (%)</th>
<th>Total Cover (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>75</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>65</td>
<td>15</td>
</tr>
</tbody>
</table>
### Table 2. Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Activity</th>
<th>Approximate Date or Frequency</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative Monitoring</td>
<td>Annually</td>
<td>• Assess general plant health, excessive weed competition, appropriate hydrological conditions, signs of herbivory, use by wildlife, and vandalism. Monitoring&lt;br&gt;• Document through fixed photo points.</td>
</tr>
<tr>
<td>Quantitative Monitoring</td>
<td>Annually</td>
<td>• Conduct a census during the first growing season to note survivorship. During implementation, changes in the planting design are possible and should be noted. Deviations in planting shall be recorded during the census. Quantitative&lt;br&gt;• Collect data on overall survivorship, height, and cover in subsequent years utilizing permanent plots. Plant status, cover, and height of all shrubs and trees inside the 20 m x 50 m plot will be measured. Because restoration activities often create conditions that favor the survivorship and natural recruitment of native plants, newly recruited native riparian woody species will be noted. Natural recruitment will contribute toward meeting the performance criteria. Data analysis will calculate absolute cover, relative cover by wetland indicator species, and relative cover by native species. Quantitative&lt;br&gt;• If performance criteria are not being met during annual monitoring surveys, identified remedial actions such as remedial plantings will be implemented as needed. Remedial measures may include replanting, weed control, or other measures to increase the number of surviving plants.</td>
</tr>
<tr>
<td>Wetland Delineation</td>
<td>Years 3</td>
<td>• A wetland delineation will be performed in Year 3 and will be submitted to the Corps for verification.</td>
</tr>
<tr>
<td>Reporting</td>
<td>Annually by December 31st</td>
<td>• Submit monitoring reports to Corps. &lt;br&gt;• Submit an additional monitoring report to the Corps at the end of the 3-year period demonstrating continued success of the mitigation program without human intervention. The only exception to this last requirement shall be if the 3-year period occurs wholly within the 8-year monitoring period. In which case, the 8-year report may be used to meet this requirement.</td>
</tr>
</tbody>
</table>

During this 3-year monitoring period, the following actions will be the responsibility of the selected contractor:

- Annual general maintenance inspections will be conducted that include the assessment/remedy of any weed, vandalism, or erosion problems and trash removal.
- A monitoring biologist will conduct annual qualitative (reconnaissance and photo documentation) inspections.
- A monitoring biologist will conduct annual quantitative (census or permanent plot sampling) inspections to evaluate progression towards meeting the annual performance criteria.

### Goal and Objectives

The goal of the mitigation of the Feather River Levee Repair Project is to restore high-quality riparian habitat for wildlife within the levee setback area and the current floodplain area. The primary objectives of the habitat design are to:

- Offset the temporary and permanent impacts of the Segment 2 project in accordance with the Corps regulations,
• Achieve no net loss of aquatic resource functions and values,
• Provide additional wildlife habitat,
• Develop land uses compatible with TRLIA’s project objectives, and
• Provide protection for a known sensitive site within the levee setback area
• Comply with vegetation requirements pursuant to MOA with Corps of Engineers for an archaeological site
• Provide vegetative buffer to reduce wave action and erosion potential on the setback levee

Scope of Work

Implementation of the Mitigation Planting and Monitoring of the 404 Mitigation Sites of the Feather River Levee Repair Project will include the following tasks:

1. Preparing areas for planting (e.g., minor grading, disking, ripping, contouring) (spring/summer 2010).
2. Installing and operating a temporary irrigation system on approximately 101.9 acres (spring/summer 2010).
3. Planting riparian vegetation, including required species in the 404 mitigation areas (spring/summer 2010).
4. Planting herbaceous understory in the 404 mitigation areas and planting the vegetated wave buffer (spring 2010).
5. Installing fencing around designated mitigation areas and ensuring that other protection requirements are met for these areas as specified in project permits (spring 2010).
6. Conducting plant establishment maintenance (mowing, spraying, irrigating, weed control) (3-year period).
7. Conducting monthly monitoring and reporting results annually (winter 2010 through winter 2013 or 3 years after last planting, whichever is later) per the 2008 404 permit and HMMP requirements, the non-disturbance area, and for the vegetated buffer.
8. Replanting as necessary where plantings do not meet performance criteria (fall/winter 2010 and spring/summer 2010/2011 if necessary).
9. Completion of and/or development of irrigation sources (TRLIA will provide location of power sources and wells).
10. Provide a cost budget for each portion of the work on the attached budget worksheet (Attachment A)
11. Submittal of As-Built drawings in accordance with the HMMP.
The plant materials will be procured for the project by the selected contractor for installation; the contractor will be responsible for procuring and installing seed materials.

The above tasks, and all required incidental work, will be conducted in accordance with the design prepared for TRLIA and described in the 2008 Habitat Mitigation and Monitoring Plan, including planting designs.

**Construction Schedule**

The selected contractor will begin site preparation and installation of the irrigation system in spring/summer 2010. Mitigation planting in the 404 mitigation areas would begin in summer 2010 and continue through the winter of 2010.

**Submittal Requirements**

**Contents**

The qualifications submittal must include the items summarized below:

- A cover letter (one page maximum) describing the qualifications for performing the referenced planting, monitoring, and reporting services, as well as the firm name, address, and contact person.
- Section 1. Brief discussion of the understanding of the project.
- Section 2. Summary of similar past projects implemented by the firm within and out of the Sacramento Valley region. Include at least three projects that are of similar or larger scope, i.e., projects with at least 100 acres of riparian habitat restoration.
- Section 3. Explanation of the firm’s proposed management structure and organization for the project, qualifications of key staff who will be working on the project, and any expected subcontractor services. Indicate the success of project management in the past with regard to schedules and costs in relation to similar project organization.
- Section 4. Discussion of ability to meet project schedule and stay within a budget.
- Section 5. Discussion of ability to meet license and insurance requirements.
- Resumes of key personnel and hourly rates (include as an appendix).
- The statement of qualifications shall not exceed 20 pages (single-sided), excluding the appendix and cover letter.

**Submittals**

Submit six (6) copies of the statement of qualifications in a sealed envelope. The statement of qualifications shall be submitted in writing and shall be mailed or hand-delivered to the following address:

Three Rivers Levee Improvement Authority
Paul Brunner
1114 Yuba Street, Suite 218
Statements of qualifications will be received until 4:45 p.m. on Tuesday January 26th, 2010. Electronic submissions will not be accepted.

The firms submitting the most highly rated qualifications may be invited for an interview at the TRLIA office. However, TRLIA reserves the right to invite a proposal without further discussion and will negotiate with the selected firm to meet mutually acceptable contract terms, including price. If agreement cannot be reached with the selected firm, then TRLIA will begin negotiating with the next ranked firm.

Pre-submittal Meeting

A mandatory pre-submittal job walk meeting will be held at 10:00 a.m. on Wednesday, January 13th, 2010, beginning at the Beckwourth Room 213A in the Yuba County One-Stop Center, 1114 Yuba Street, Marysville, CA 95901.

Minimum Qualifications

Submitting firms must have a minimum of five (5) years of experience in revegetation planting. As a part of their submittals, contractors will submit documentation of their experience in the implementation of three (minimum) projects of similar scope and magnitude. This will be a factor in evaluating all submittals. The selected contractor must hold or subcontract with a firm that possesses a C-27 Landscape Contractor’s license in good standing from the State of California.

Questions

Firms shall submit all questions arising during the submittal period in writing to TRLIA. Questions should be submitted to Anja Raudabaugh at the address provided above or via email: akraudabaugh@pbsj.com

Responses will be provided to all firms that advise TRLIA that they plan to respond to this RFQ.

Evaluation

Prospective contractors will be evaluated according to the following criteria:

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past experience with similar projects</td>
<td>25</td>
</tr>
<tr>
<td>Qualifications of key personnel</td>
<td>25</td>
</tr>
<tr>
<td>Proposed management structure/project organization</td>
<td>10</td>
</tr>
<tr>
<td>Project understanding/Budget</td>
<td>20</td>
</tr>
<tr>
<td>Ability to meet project schedule</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Additional Selection Provisions

1. **Understanding of Project Site.** Before submitting a statement of qualifications, firms will become familiar with the project site and all conditions that may directly or indirectly affect their work.

2. **Delivery of Submittal.** The submittal will be delivered by the time and to the place specified herein. It is the firm’s sole responsibility to see that his/her submittal is received in proper time. Any submittal received after the scheduled closing time for receipt of statements of qualifications will be returned to the contractor unopened.

3. **Rejection of Submittals.** Any submittal that contains special stipulations may not be accepted.

4. **Competency of Firms.** In selecting a firm, consideration will be given to the general competency for the performance of the work covered by this RFQ.

Contract Provisions

1. **Award of Contract.** Primary elements to be considered in the award of the contract will include the firm’s past performance on similar projects, qualifications of key personnel, understanding of the project, management structure, and ability to meet the project schedule in a professional and timely manner.

2. **Time of Completion.** Upon receiving the Notice to Proceed from TRLIA, the contractor will be responsible for beginning work in a timely manner and conforming to the specified schedule. The contractor will perform all work in a good faith effort for completion according to this schedule, as summarized in this request for qualifications.

3. **Execution of Contract.** The contractor to whom award is made will execute a written contract with TRLIA, will secure all insurance, and will furnish all certificates and bonds required for the project within 10 calendar days after receipt of the agreement forms from TRLIA, and before the contract is signed. Failure or refusal to enter into a contract or to conform to any of the stipulated requirements in connection therewith will be just cause for annulment of the award.

**Insurance.** The following summarizes the insurance requirements of the project to be provided by the contractor:

- Commercial general liability: $1,000,000 (each occurrence)
- Automobile liability: $1,000,000 (combined single limit each accident)
- Worker’s compensation: $1,000,000
- Umbrella/excess liability: $1,000,000
- Builder’s risk: Total limits for the full cost of replacement

**Bonds.** The contractor must agree to furnish, at the contractor’s expense, the following bonds with sureties approved by TRLIA within 10 working days from the date of written
Notice of Award of Contract: (1) Performance Bond in the amount of the contract price; and (2) Labor and Materials Payment Bond in the amount of the contract price.

4. **Cooperation with Others.** The project described in this request for qualifications will be conducted concurrently with ongoing construction and/or agricultural activities at the site. The contractor will conduct the work so that there is no interference with these activities.

5. **Construction Staging and Water Supply.** A designated staging area will be located on or adjacent to the project site at the direction of TRLIA. Construction and irrigation water will be available from existing wells in the setback area in coordination with TRLIA. Condition of existing wells is “as-is”. TRLIA will make well sites available to bidders for site visits on an as-needed basis.

6. **Staking.** Any staking required will be provided by the contractor. All stakes, marks, and other information will be carefully preserved by the contractor, and in case of their careless or unnecessary destruction or removal by him/her or his/her employees, such stakes, marks, and other information will be replaced at the contractor’s expense.

7. **Dust Control.** The contractor will be responsible for dust control during the implementation period; dust control will conform to the provisions in Section 10, “Dust Control,” of the California State Standard Specifications and the guidelines of the Feather River Air Quality Management District.

8. **Health and Safety.** The contractor will be solely and completely responsible for conditions on the job site, including health and safety of all persons (including employees, subcontractors, service personnel, and site visitors) and property during performance of the work. This requirement will apply continuously and will not be limited to normal working hours. Health and safety provisions will conform to U.S. Safety Orders, Title 8, U.S. Environmental Protection Agency Standard Operations Safety Guides and all other applicable federal, state, county, and local laws, ordinances, codes. Where any of these are in conflict, the more stringent requirement will be followed. The contractor's failure to thoroughly familiarize himself/herself with the aforementioned safety provisions will not relieve him/her from compliance with the obligations and penalties set forth by TRLIA.

9. **Plant Survivorship.** The contractor will be responsible for attaining minimal plant survivorship to be determined before the award of contract; this may require replacement planting and other adaptive management during the plant establishment maintenance period. The contractor will be responsible for adhering to the stipulations (including plant survivorship) as provided in the Habitat Mitigation and Monitoring Plan for the Feather River Levee Repair Project. This document will be made available to contractors (electronically) via written request. It is also available on the TRLIA website, www.trlia.org

10. **Permits.** The contractor will be responsible for adhering to the terms and conditions of all permits issued to TRLIA that are applicable to the project.
LEGEND

- Wind Wave Reduction Buffer
- Existing Levee
- Approximate Intermediate
- Setback Levee Alignment
- Applicant Preferred Alternative
- Setback Levee Centrline
- Approximate Setback
- Levee Toe
- Ordinary High Water Mark
- Frequently Activated Floodplain (FAF) Inundation Area
- Filled Portion of the Plumas Lake Canal
- Messick Lake Mitigation Area

Note: This figure expresses conditions following implementation of the project. The FAF inundation area shown in this figure is based on hydrodynamic modeling and analysis prepared by Philip Williams & Associates (2008a). With implementation of the project, the FAF inundation area would be expanded to include the proposed Messick Lake mitigation area. The portion of the FAF area that would extend up the Plumas Lake Canal without the project would be filled as part of construction of the setback levee.

Jurisdictional Feature
- Intermittent Drainage
- Perennial Drainage
- Orchard
- Riparian Forest/Scrub
- Elderberry Savanna

Note: This figure expresses conditions following implementation of the project. The FAF inundation area shown in this figure is based on hydrodynamic modeling and analysis prepared by Philip Williams & Associates (2008a). With implementation of the project, the FAF inundation area would be expanded to include the proposed Messick Lake mitigation area. The portion of the FAF area that would extend up the Plumas Lake Canal without the project would be filled as part of construction of the setback levee.

Note: This figure expresses conditions following implementation of the project. The FAF inundation area shown in this figure is based on hydrodynamic modeling and analysis prepared by Philip Williams & Associates (2008a). With implementation of the project, the FAF inundation area would be expanded to include the proposed Messick Lake mitigation area. The portion of the FAF area that would extend up the Plumas Lake Canal without the project would be filled as part of construction of the setback levee.
Wind Wave Reduction Buffer
Massick Lake Mitigation Area
Elderberry Transplant Mitigation Site
Feather River
Mitigation Area
Existing Levee
Approximate Intermediate
Setback Levee Alignment
Applicant Preferred Alternative
Approximate Setback Levee Toe
Areas Requiring Federal Approval Prior to Construction

Feather River Mitigation Areas inside Floodway, including Vegetated Wind Wave Buffer

Exhibit 3
Attachment A

Budget Worksheet

Messick Lake

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil/Site preparation</td>
<td>$</td>
</tr>
<tr>
<td>Irrigation</td>
<td>$</td>
</tr>
<tr>
<td>Planting</td>
<td>$</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$</td>
</tr>
<tr>
<td>Monitoring</td>
<td>$</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

Floodplain Drainage Swale

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil/Site preparation</td>
<td>$</td>
</tr>
<tr>
<td>Irrigation</td>
<td>$</td>
</tr>
<tr>
<td>Planting</td>
<td>$</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$</td>
</tr>
<tr>
<td>Monitoring</td>
<td>$</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

CA-YUBA-5

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil/Site preparation</td>
<td>$</td>
</tr>
<tr>
<td>Irrigation</td>
<td>$</td>
</tr>
<tr>
<td>Planting</td>
<td>$</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$</td>
</tr>
<tr>
<td>Monitoring</td>
<td>$</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

Wind Action Reduction Buffer

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil/Site preparation</td>
<td>$</td>
</tr>
<tr>
<td>Irrigation</td>
<td>$</td>
</tr>
<tr>
<td>Planting</td>
<td>$</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$</td>
</tr>
<tr>
<td>Monitoring</td>
<td>$</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

**TOTAL** $
December 15, 2009

TO: Three Rivers Levee Improvement Authority Board
FROM: Paul Brunner, Executive Director
SUBJECT: Consulting Agreement with Handen Company, Inc. for Consulting and Construction Management Services to TRLIA Phase 4, Feather River Levee Improvements, Yuba River Levee Improvements, and General Consulting

Recommended Actions: Approve a $254,730 4th contract amendment to the contract with The Handen Company, Inc for construction management consulting services for ongoing and pending TRLIA projects and delegate authority to Executive Director to sign and execute contract upon General Counsel review.

Discussion: Construction Management consulting services are needed by TRLIA for the following projects:
- Upper Yuba River levee construction between Simpson Lane and the Goldfields
- Feather River existing levee degrade
- Completion of punch list items for Feather River Segments 1, 2, and 3
- Completion of punch list items for the Yuba River Slope Flattening project
- Winter management of construction sites
- Land Management activities in the Feather River Setback area

The Construction Management amendment scope of services includes costs associated with contract administration, progress reporting, coordination with Corps Staff, Contractor Submittals, Agency Coordination, Requests for Information (RFI's), Inspection Coordination, NPDES Compliance, Change Order Administration, Conflict Resolution, Community Interaction, and various other functions as outlined in the attached proposal. The amendment also extends the end date of The Handen Company, Inc. contract from December 31, 2009 to December 31, 2010.

The Handen Company, Inc. has maintained its 2009 rate structure for 2010 as requested by Executive Director Policy Memorandum dated July 23, 2009. All other terms and conditions contained in the Agreement shall remain in full force and effect.

The Handen Company has previously successfully provided Construction Management and other Consulting Services to TRLIA. The scope of work for this effort is appropriate and commensurate with the proposed fees.
**Fiscal Impact:** The contract amendment would increase the existing contract by $254,730 for services on a time-and-expenses basis, to a maximum amount not exceeding $907,370 (Current maximum amount $652,640) without prior authorization by TRLIA. This amendment is a time and material contract, which could be terminated at anytime. These projected expenses are included in the current TRLIA cash flow for project completion.
AMENDMENT NO. 4

AGREEMENT FOR PROFESSIONAL SERVICES
FOR
CONSTRUCTION MANAGEMENT
BETWEEN
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY AND
THE HANDEN COMPANY, INC.

THIS FOURTH AMENDATORY AGREEMENT is made effective December ____, 2009, by and between Three Rivers Levee Improvement Authority ("TRLIA") and the Handen Company, Inc. ("Consultant"), who agree as follows:

1. **Recitals.** This Amendment is made with reference to the following background recitals:

1.1. Effective March 15, 2006, the parties entered into an Agreement for Professional Services relating to Construction Management for TRLIA’s Construction Program.

1.2. Effective December 12, 2006, the parties entered into Amendment 1 to the AGREEMENT in the amount of $144,000 for a total contract value of $311,200 and to extend the contract end date to December 31, 2007.

1.3. Effective January 29, 2008, the parties entered into Amendment 2 to the AGREEMENT in the amount of $143,800 for a total contract value of $455,000 and to extend the contract end date to December 31, 2008.

1.4. Effective January 27, 2009, the parties entered into Amendment 3 to the AGREEMENT in the amount of $197,640 for a total contract value of $652,640 and to extend the contract end date to December 31, 2009.

1.5. The parties now desire to amend the Professional Services Agreement to extend the term of services, amend the scope of services.

2. **Fourth Amendment to Agreement.** The Professional Services Agreement is hereby amended as follows:

2.1. The Termination Date in Clause 2 and A.2 is amendment to extend to December 31, 2010.

2.2. The scope of services (Attachment A to the Agreement for Professional Services between TRLIA and The Handen Company, Inc.) is replaced by the scope of services attached to this amendment agreement.
2.3. The payment, budget, and not-to-exceed amounts (Professional Services Agreement Attachment A) are amended to include the additional amount of $254,730 for a total contract amount of $907,370.

3. **No Effect on Other Provisions.** Except for the amendments in Section 2, the remaining provisions of the Professional Services Agreement shall be unaffected and remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on __________________, 2009.

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY OF YUBA COUNTY

________________________________________
Paul G. Brunner
Executive Director

THE HANDEN COMPANY, INC.

________________________________________
Douglas J. Handen
President

ATTEST:

________________________________________
DONNA STOTTLIMEYER
CLERK OF THE BOARD OF DIRECTORS

APPROVED AS TO FORM:

________________________________________
SCOTT L. SHAPIRO
GENERAL COUNSEL
Exhibit A
SCOPE OF WORK

Services Provided - Project Management Consulting:

1. Attend TRLIA management meetings
2. Participate in construction meetings
3. Participate in weekly design meeting/conference calls
4. Participate in construction budget review
5. Conduct regular site visits to current projects
6. Conduct site visits to future project sites
7. Coordinate with Construction Management team and Contractors
8. Provide contract oversight
9. Review and process contract change orders
10. Assist in the preparation of future bid and contract documents
11. Track construction schedules
12. Assist in the preparation of reimbursement requests
13. Prepare staff reports and make presentations to the TRLIA Board as necessary
14. Assist in coordination and compliance with project Environmental Permits and requirements
15. Assist in coordination with property owners associated with construction activities and project requirements.
**Fee and Payment:**

The above referenced services shall be billed monthly at the following rates:

- Principal $165/hour
- Construction Mgr/Inspector $152/hour
- Transportation $0.445/mile

**Budget**

Please refer to the table below for time/effort budgets for the following time periods:

<table>
<thead>
<tr>
<th>PRINCIPAL SCOPE</th>
<th>2009 hours</th>
<th>January-April 2010 avg. hrs./mo</th>
<th>May-December 2010 avg. hrs./mo</th>
<th>total hours</th>
<th>$ @ 165/hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 4 Segment 3- certification</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>40</td>
<td>6,600</td>
</tr>
<tr>
<td>Phase 4 Segment 1- crack repair</td>
<td>40</td>
<td>0</td>
<td>5</td>
<td>60</td>
<td>13,200</td>
</tr>
<tr>
<td>Phase 4 Segment 1- certification</td>
<td>0</td>
<td>10</td>
<td>3</td>
<td>64</td>
<td>10,560</td>
</tr>
<tr>
<td>Yuba-Slope Flattening</td>
<td>60</td>
<td>2</td>
<td>5</td>
<td>108</td>
<td>17,820</td>
</tr>
<tr>
<td>Phase 4- SMARA compliance</td>
<td>85</td>
<td>0</td>
<td>0</td>
<td>85</td>
<td>14,025</td>
</tr>
<tr>
<td>Phase 4- Upper Yuba design</td>
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<td>0</td>
<td>45</td>
<td>7,425</td>
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<tr>
<td>Phase 4- Upper Yuba CM- principal</td>
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<td>65</td>
<td>520</td>
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<td>Phase 4- Feather setback planting/mit.</td>
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<td>15</td>
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<td>240</td>
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<tr>
<td>Phase 4 Segment 2 element 4 degrade</td>
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<td>42,900</td>
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<tr>
<td></td>
<td>310</td>
<td></td>
<td></td>
<td>1,522</td>
<td>251,130</td>
</tr>
</tbody>
</table>

**Total Labor base budget** = 251,130

**Expenses: budget $300/month** = 3,600

**Total Budget** = $254,730