

**Public Notice for Water Quality Certification and/or Waste  
Discharge Requirements (Dredge/Fill Projects)**

USDOT – FHA, Five Bridge Replacements - Van Duzen Road and Mad River Road  
WDID No. 1B10025WNTR

Trinity County

On March 25, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the Federal Highway Administration (FHWA), Central Federal Lands Highway Division (applicant), requesting Federal Clean Water Act, section 401, water quality certification for proposed activities associated with removal and replacement of five bridges in southern Trinity County. The proposed project will cause disturbances to waters of the United States associated with the Van Duzen River and Shanty Creek in the Bridgeville Hydrologic Subarea No. 111.22, and the South Fork Mad River and Van Horn Gulch in the Ruth Hydrologic Area No. 109.40.

The applicant, in cooperation with the Six Rivers National Forest and Trinity County, is proposing to replace three one-lane bridges on Van Duzen Road (a.k.a. Forest Highway 148 and County Road 511) and two one-lane bridges on Mad River Road (a.k.a. Forest Highway 149 and County Road 501). The applicant is also proposing to rehabilitate, restore, and resurface Ruth Zenia Road from near the Bar Creek steam crossing to the intersection of Zenia Lake Mountain Road, and Mad River Road from the Littlefield Creek Crossing (south of Ruth) to the end of county road at the South Fork Mad River Bridge (3R Project).

**Bridge 1 – Van Duzen River, County Road 511 at Post Mile 6.9**

Proposed activities involve removal of the existing 160-foot long one-lane steel bridge and replacement with a 211-foot long two-lane steel bridge. The existing bridge has three spans with support piers located on rock outcroppings above the stream channel. The new bridge will be longer and support structures for the new bridge will be located entirely outside the stream channel.

Construction and demolition activities will be phased. The initial phase involves construction of one lane of the new bridge adjacent to the downstream side of the existing bridge. After the first lane is completed and open to traffic the existing structure will be removed. Existing piers will be cut off at least two feet below ground, exposed steel will be removed, and the cavity will be backfilled with concrete. Once the existing bridge is removed the second lane of the new bridge will be completed in the area of the existing bridge. The roadway approaches will be realigned to tie into the new and wider bridge.

Proposed activities at this site include installation of a rock riprap rundown for erosion protection at the end of the drainage swale that runs along the southeast side of the southern bridge abutment. Riprap will be placed in an existing eroded area of the streambank along the upstream side of the existing south abutment to prevent further erosion. The proposed riprap will result in 390 square feet and 25 linear feet of permanent impacts to the streambank above and below the elevation of ordinary high water. Vegetation consisting of four tan oaks, one willow, one white oak, and two large pine trees will be impacted by the proposed bridge.

### **Bridge 2 – Shanty Creek, County Road 511 at Post Mile 7.7**

Proposed activities involve removal of the existing 54-foot long one-lane three-span concrete bridge and replacement with a 54-foot long two-lane pre-cast concrete arch structure. The two existing bridge support piers will be removed and the foundation supports for the new arch structure will be located entirely outside the stream channel.

Construction and demolition activities will be phased. The initial phase involves construction of one lane of the new arch structure adjacent to the upstream side of the existing bridge. After the first lane is completed and open to traffic the existing structure will be removed and the second lane will be completed. The roadway approaches will be slightly realigned to tie into the new bridge width and location. Riprap will be added to existing riprap along both streambanks below the new arch culvert to provide additional erosion and scour protection under the new structure.

The proposed riprap will result in 684 square feet and 146 linear feet of permanent impacts to the streambanks of Shanty Creek. The proposed new structure, including the additional riprap, will provide improved hydraulic capacity at this stream crossing. Vegetation consisting of four tan oaks, one fir, and three maple trees will be also impacted by the proposed project.

### **Bridge 3 – Van Duzen River, County Road 511 at Post Mile 10.1**

Proposed activities involve removal of the existing 260-foot long one-lane steel bridge and replacement with a 295-foot long two-lane steel bridge. The existing bridge has three spans with two support piers located on in the river channel. The new two-span bridge will have only one center pier support structure located in the river channel below the elevation of ordinary high water. The center pier support structure will consist of three 4-foot diameter round columns placed in 4.5-foot diameter drilled shafts. The roadway approaches will be realigned to tie into the new and wider bridge.

Construction and demolition activities will be phased. The initial phase involves construction of one lane of the new bridge adjacent to the upstream side of the existing bridge. After the first lane is completed and open to traffic the existing structure will be removed. The existing concrete piers will be removed flush with the top of the existing spread footings and any exposed reinforcing steel will be removed. The existing concrete pier footings are proposed to be left in place to avoid disturbance to the streambed.

An existing access road to the river channel will be used for pier removal and construction. Once the existing bridge is removed the second lane of the new bridge will be completed in the area of the existing bridge. Road closures may occur for four-hour periods, Monday through Friday, from 8:00 am to 12:00 noon and from 1:00 pm to 5:00pm during crane operations. The two 4-hour road closures will be limited to a ten consecutive day period that is currently scheduled to begin on August 22, 2011.

A work platform will be constructed to allow equipment access for the removal of the existing piers and installation of the new pier. The proposed platform will be constructed of earthen fill or gravel placed on a geotextile mat of adequate strength and dimensions to ensure the mat extends beyond the limits of the earth fill platform. The fill and geotextile will be removed following completion of pier removal and installation. If

necessary a coffer dam and clear water diversion will be installed and the stream will be conveyed through this area in a temporary culvert.

The proposed new pier will result in permanent impacts to 38 square feet and 32 linear feet of permanent impacts to the streambed. The proposed work platform and temporary diversion will result in 7,009 square feet and 108 linear feet of temporary impacts to the streambed and streambank. Vegetation consisting of one manzanita and one willow will also be impacted by the proposed project.

#### **Bridge 4 – Van Horn Gulch, County Road 501 at Post Mile 24.9**

Proposed activities involve removal of the existing 60-foot long one-lane single-span timber bridge structure and replacement with a 60-foot long two-lane pre-cast concrete arch structure. The supports for the new arch structure will be located outside the stream channel. Riprap will be added along both streambanks, between the base of the new arch walls and the low-flow stream channel, to provide erosion and scour protection under the new structure. If necessary a coffer dam and clear water diversion will be installed and water will be conveyed through this area in a temporary culvert.

The proposed riprap will result in 823 square feet and 127 linear feet of permanent impacts to the Van Horn Gulch streambanks. All work within the ordinary high water mark will be returned to pre-construction contours to maintain flow and existing stream channel characteristics. The proposed new structure, including the additional riprap, will provide improved hydraulic capacity at this stream crossing. The roadway approaches will be slightly realigned to tie into the new bridge width and location. An existing detour is available downstream which will allow the road to be closed during bridge replacement activities. This is a detour bridge used by vehicles that are unable to use the existing one-lane bridge and it will serve as a detour route during construction of the new structure. Once the new bridge is complete, the existing temporary detour structures will be removed. Vegetation consisting of one whitethorn, three willows, two white oaks, one tan oak, and one manzanita will also be impacted by the proposed project.

#### **Bridge 5 – South Fork Mad River, County Road 501 at Post Mile 27.4**

Proposed activities involve removal of the existing 38-foot long one-lane single-span timber bridge structure and replacement with a 54-foot long two-lane pre-cast concrete arch structure. The supports for the new arch structure will be located outside the stream channel. Riprap will be added along both streambanks, between the base of the new arch walls and the low flow stream channel, to provide erosion and scour protection under the new structure. If necessary a coffer dam and clear water diversion will be installed and water will be conveyed through this area in a temporary culvert.

Construction and demolition activities will be phased. The initial phase involves construction of one lane of the new arch structure adjacent to the downstream side of the existing bridge. Once the existing bridge is removed the second lane of the new arch structure will be completed in the area of the existing bridge. The roadway approaches will be slightly realigned to tie into the new bridge width and location. The proposed riprap will result in 694 square feet and 96 linear feet of permanent impacts to the South Fork Mad River streambanks. The temporary coffer dam and clear water diversion will result in 80 square feet and 40 linear feet of temporary impacts to the streambed.

Compensatory mitigation is required for proposed impacts to riparian vegetation. In conjunction with the 3R Project, a Vegetation Management Plan will be created in coordination with FHWA, USFS, and a California Registered Landscape Architect. Mitigation for impacts to riparian vegetation associated with the bridge replacement activities and 3R Project will be implemented prior to completion of the 3R Project. If the 3R Project is not undertaken within one year of completing the bridge replacement project the Vegetation Management Plan will be amended and the impacts associated with the bridge replacement project will be mitigated within one calendar year.

Post-construction storm water treatment will be provided to mitigate for the direct discharge of storm water from the decks of Bridges 1 and Bridge 3. The total area of impervious surface to be treated is 15,686 square feet. A vegetated buffer strip measuring 16 feet wide and 1,000 feet long (16,000 square feet) will be installed concurrently with the 3R project along Ruth-Zenia Road near the intersection of Ruth-Zenia Road and Zenia Bluff Road (near Post Mile 26.4). If the 3R project is not undertaken within one year of completing the bridge replacement project, the vegetated buffer strip will be installed within one calendar year.

The applicant has applied for authorization from the U.S. Army Corps of Engineers to perform the project under Nationwide Permit No. 14, pursuant to Clean Water Act, section 404. A Lake or Streambed Alteration Agreement from the California Department of Fish and Game is not required for this federal project. On March 11, 2010, the Trinity County Planning Commission approved a Mitigated Negative Declaration (SCH No. 2010011081) for the project in order to comply with CEQA. The Regional Water Board has considered the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment.

The information contained in this public notice is only a summary of the applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed activities including maps and detailed design drawings. The application and Regional Water Board file are available for public review.

Regional Water Board staff are proposing to regulate this project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. In addition, staff will consider all comments submitted in writing and received at this office by mail during a 21-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions, please contact staff member Dean Prat at (707) 576-2801 within 21 days of the posting of this notice.