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1 November 2024

Justin Riggs
U.S. Army Corps of Engineers, Regulatory Division
Runnels Federal Building
200 E. Griggs Ave.
Las Cruces, NM 88001

RE: Rio Chama Channel Restoration; NMERT Project No. NMERT-3964

Dear Mr. Riggs,

The New Mexico Department of Game and Fish (Department) has reviewed the Rio Chama Channel Restoration project (Project) for which the project proponents, the New Mexico Interstate Stream Commission (NMISC) and the Albuquerque Bernalillo County Water Utility Authority (ABCWUA), submitted a request for channel maintenance activities (i.e., removal of sediment via dredging). Department staff entered information on the Project into the New Mexico Environmental Review Tool (NMERT), which generated an automated project report. The project report contains several recommendations regarding mitigating potential impacts to wildlife or their habitats from the proposed Project and is also attached for your review.

The Department's Fisheries Management Division (FMD) has records of Rio Grande chub (*Gila pandora*), a Species of Greatest Conservation Need (SGCN) in New Mexico, in and near the proposed Project area. Additionally, brown trout (*Salmo trutta*), a species of high recreational importance in New Mexico, may also occur in the Project area. The NMISC and ABCWUA plan to remove large amounts of sediment from the Rio Chama using bulldozers and excavators operated within the stream channel and they do not mention conducting salvage fish operations from the Project area prior to Project initiation. As a result, the Department anticipates significant adverse impacts to local Rio Grande chub and brown trout populations as a result of direct take of individuals and significant loss of habitat. Further, brown trout spawning, which occurs in late fall, may also be significantly impacted by the presence of construction equipment in the Rio Chama during this season. Equipment could crush eggs and larval trout and may trigger an increase in sediment loads and sedimentation, which can smother and kill trout eggs.

Beyond these species-specific impacts, the Department also anticipates significant adverse impacts to local aquatic and riparian habitats from Project activities. Dredging the Rio Chama to a standard cross section of 60 foot wide by 4.75 foot deep along a 7mile reach will remove heterogeneity in channel shape and form, effectively removing mesohabitats (e.g., riffles, pools, glides, point bars, etc.) for fish and other aquatic species. Without this habitat heterogeneity, aquatic biodiversity will likely decrease within the Project area. Riparian habitat health may also be negatively impacted by the proposed channelization of the Rio Chama. Digging a deeper riverbed is likely to reduce, and potentially fully sever, the connection of the Rio Chama to its adjacent floodplains. This reduced river-floodplain connection will likely result in a loss of native riparian vegetation that requires overbank flows and/or moist soil conditions to survive. Had the Department been invited to submit comments earlier in the Project planning process, it would have been happy to collaborate with the NMISC and ABCWUA to provide technical guidance on using the dredge material from, and construction equipment for, the proposed Project to build instream habitat features and maintain riparian habitat health while still meeting the overall Project goal of increasing channel water holding capacity.

As referenced above, construction areas and other impervious surfaces can have significant impacts on surface waters by increasing the amount of sediment and other pollutants that are washed into these surface waters, increasing the velocity and volume of water, and reducing infiltration into groundwater. Reducing the amount of impervious surfaces and phasing construction will reduce these impacts. To prevent pollutants from entering the Rio Chama during construction, the Department recommends developing a Storm Water Pollution Prevention Plan (SWPPP) for the Project and provides the following additional recommendations to minimize or eliminate impacts to wildlife and wildlife habitat:

- Divert water around the construction site whenever possible.
- Preserve natural areas within the Project site. Strive to maintain the natural drainage system of the site, including natural stream channels, wetlands, and floodplains. Design, construct, and maintain the site to protect (or restore) the natural hydrology.
- Following construction, disturbed areas should be re-vegetated using native species that approximate the pre-disturbance plant community composition or native plant communities appropriate for the site, including from a region that represents potential future climatic conditions at the site, whichever is more beneficial to wildlife. Short-term erosion control seed mixes are available for temporary control of surface erosion during Project implementation; native mixes should be used for temporary as well as permanent erosion control. Native plants and materials should also be used for landscaping. All seed mixtures should be certified as weed-free. New Mexico grass ecotypes for commercial seeding are available through the Los Lunas Plant Materials Center and New Mexico State University. Seeding guidelines are available from the Natural Resources Conservation Service and the Colorado Natural Areas Program.
- If erosion control blankets are used post-construction, burying the blanket edges, and using blankets without fused mesh corners (e.g., use woven mesh) can

reduce the chances of unintentional wildlife entanglement. Regularly check the erosion control blankets after applying them to identify and release any wildlife that does become entangled.

- Maintain a vegetated buffer zone along all watercourses, including ephemeral arroyos, sufficient to minimize erosion and sediment delivery.
- Use properly engineered drainage swales and other vegetated channel systems instead of storm sewers, lined channels, curbs, and gutters. Vegetated swales should be gently sloped (4:1) so that small wildlife is able to maneuver them.
- Efforts should be made during construction to minimize impacts on vegetative communities. Existing roads and rights-of-way should be used for all transportation. Off-road driving should be avoided. Staging areas should be located in previously disturbed sites, where possible, and kept as small as possible.

The New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) have been documented near, and may be present within, the Project area. Therefore, the Department recommends consulting with relevant species leads at the United States Fish and Wildlife Service's (USFWS's) New Mexico Ecological Services Office (NMESO) prior to Project initiation.

The current Project area appears to be within Crucial Habitat as identified in the Crucial Habitat Assessment Tool (CHAT) layers provided in the NMERT. This indicates that a diversity of species of conservation concern and sensitive or important habitats for wildlife are likely to be found in the Project area. The Department recommends completion of a thorough environmental assessment prior to, and exercising care during, implementation of Project activities to avoid adverse impacts to sensitive wildlife and habitats.

Thank you for the opportunity to review your Project. Please contact Jack Marchetti, Aquatic/Riparian Habitat Specialist, at jack.marchetti@dgf.nm.gov or (505) 479-1269 if you have any questions.

Sincerely,

Virginia Seamster, Ph.D. Assistant Chief for Technical Guidance Ecological and Environmental Planning Section

Attachments: NMERT-generated report