## Planning for Sustainable Brownfield Redevelopment REUSE ALTERNATIVES FOR THE COCHITI GRAVEL MINE COCHITI PUEBLO – NEW MEXICO, EPA REGION 6

Located along the Rio Grande River in north central New Mexico, approximately 50 miles south-west of Santa Fe, the Cochiti's culture is based around agriculture and the river. Until recently, a gravel mine was operated under an

agreement with the Cochiti on a tract of land within the Cochiti Pueblo. The former gravel mine is approximately 13 acres in area and approximately 30 feet at its deepest point. Immediately adjacent to the town of Pena Blanca, the mine site is approximately five miles from the pueblo center. The edges of the site abut several privately-owned properties. High embankments provide a physical barrier between the mine and the privately-owned properties. The U.S. Environmental Protection Agency (EPA) conducted environmental studies at the site to assess the potential risks from illegally dumped construction debris in the gravel pit portion of the mine. The detailed well and soil sampling efforts led EPA to conclude that no significant environmental impact was caused by the dumping activities. However, the Pueblo remains concerned about potential health and safety risks associated with the abandoned mine. While the tribe is in litigation against the former operator of the mine, the Pueblo is evaluating sustainable reuses for the site.

The Pueblo requested technical assistance from the EPA Land Revitalization Team to develop reuse alternatives for the site. The Team developed a stakeholder engagement process, worked with the Pueblo to create a needs assessment and reuse assessment, and developed suggestions for final reuse alternatives. The reuse planning process was based on a foundation of engagement with the Pueblo and integrates the tribe's goals and vision for the abandoned property. The team worked to understand the goals and values of the Cochiti before engaging outside stakeholders, ensuring that information gathered from outside parties was solicited in a manner that accounted for the Cochiti's guiding principles. Engaging outside stakeholders was critical to understanding the potential scope of redevelopment within the context of the existing community.

The Team identified reuse alternatives for the mine based on feedback from tribal members, recognizing tribal concerns for safety, and taking into account unknown geotechnical conditions, restoration potential, and site location. The Land Revitalization Team engaged with tribal entities including governors and the tribal council, and conducted interviews with outside stakeholders to develop a community vision for the property. The Team also worked with EPA's federal partners to identify potential funding sources for stabilizing and redeveloping the site (e.g., U.S. Department of Agriculture, Bureau of Land Management). The result of these activities included a summary of constraints that will influence how the site can be reused. Feedback from various stakeholders was used to develop illustrations to help communicate various reuse alternatives to the tribal community. Based on tribal input and analysis, the Team identified three potential reuse options: 1) restoring the site to a natural state; 2) recreational use (outdoor swimming pool, trails, picnic areas, or an active sports complex (e.g. horseshoes, skateboard park, archery)); and 3) economic development focused on agriculture.

Redevelopment options for the site are diverse. Feedback from the tribal community guided this effort to consider scenarios that provide benefit and security to the tribe. This effort presents options that meet the Cochiti's reverence for its culture and land while balancing potential economic and social benefit for its people. The technical assistance results will guide future efforts in selecting a future use for the site.



Figure 1. View of the gravel mine site from the southwest corner of the property.

## **LESSONS LEARNED**

- Planning initiatives should initially define and communicate an inclusive (including input from all areas of the tribe) community engagement process.
- Determine the goals, needs, and vision of the Tribe before engaging outside stakeholders.
- Clearly define a path forward to enable consensus based decisionmaking.

## PLANNED POST-TECHNICAL ASSISTANCE ACTIVITIES

- Perform internal due diligence to help ensure the end goals and vision are achieved.
- Coordinate with the U.S. Army Corps of Engineers, through EPA Region 6, to coordinate pre-development land grading assistance.
- Form Advisory Steering Committee, which reports to the Governor and Tribal Council, to guide site oversight and decision-making.
- Enlist staff to support economic analyses throughout project development, monitoring, and evaluation.
- Develop business plan for redevelopment venture.