

Ambitious Reclamation Can Unearth New Opportunities



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FROM THRIVING GRASSLANDS AND forests to distinctive hiking trails, quarry reclamation can take many final forms. After extraction activities cease, the land can be backfilled and used for industry and agriculture, for recreation and education or to reinstate wildlife habitat. Given the potential for corporate sites to support conservation and community engagement efforts, reclamation work can address more than one of these pursuits.

For more than 30 years, Wildlife Habitat Council (WHC) has promoted and certified environmental

stewardship on corporate lands. Among the more than 1,000 conservation programs that have achieved WHC Conservation Certification® are many successful reclamation efforts. While these programs represent a variety of end uses, they share common attributes: a reverence for local environmental and community needs, a dedication to restoring native plant communities and the ambition to voluntarily exceed regulatory requirements.

With time and money as universal drivers, conventional reclamation strategies involve backfilling an



A red-tailed hawk mid-flight at the Clear Creek Quarry, operated by Vulcan Materials in Charlotte, North Carolina.

expended site and covering it with fast-growing, non-native grasses. While this may be the most expeditious way to meet regulations, this land reclamation strategy isn't always the best value for the surrounding community and wildlife habitat. However, when reclamation goes above and beyond what's required, it can create new opportunities for habitat and unique ways to engage external stakeholders, while still minding deadlines and budgetary considerations.

Given financial and time constraints, early planning is key. Choosing a site-appropriate end use before extraction begins allows operations to occur with restoration in mind. Excavated topsoil, which often contains a seedbank for native vegetation, can be set aside for filling and contouring. Invasive species can be monitored and controlled while the quarry is active to help foster a native plant community when operations have ceased. Many companies choose to extract resources

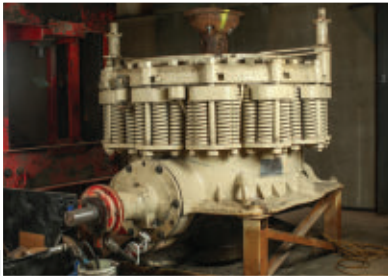
and restore land in phases, which provides an early chance to gauge if their reclamation strategy and chosen end uses are feasible. This allows them to revise their strategy along the way if issues arise.

WHC recently published a white paper, Conservation and Community Through Site-Specific Reclamation, which explores how enhancing mandated reclamation work with voluntary action benefits companies, ecosystems and communities in which they operate. The paper features multiple aggregates companies who are paving the way toward environmentally minded reclamation. Here are four takeaways from the publication:

1. **There's no one-size-fits-all approach.** While a corporate-level commitment to robust reclamation lays a strong foundation for site-level action, site teams should be given freedom to adopt the reclamation practices most appropriate to their location. The team at the CEMEX Lipówka Quarry in southern Poland identified a need for environmental education in their area and accordingly established an educational trail along land that once served as a limestone quarry. Meanwhile, CEMEX's Canteras Norte facility in Panama is being restored into a biodiverse deciduous forest featuring mahogany, bay cedar and soursop trees to support national reforestation initiatives. Both efforts demonstrate an awareness of regional needs, leading to more meaningful reclamation work.
2. **On-site reclamation work can keep evolving.** Once permit conditions have been met, there may be additional ways to enhance the reclamation work that's already been completed. A decommissioned portion of Vulcan Materials' Azusa Rock site, located outside of Los Angeles, California, was initially contoured with 20-foot-high vegetated steps, but the surrounding community expressed a distaste for the steep land features. In response, Vulcan



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reshaped the land using micro-bench topography to create more shallow steps, vegetated with native plants, to simulate a more natural-looking slope. The site now hosts a healthy chaparral ecosystem, providing habitat for species like the California scrub jay and western fence lizard while also meeting the expectations of external stakeholders.

3. **Quarries aren't the only features needing reclamation.** While the term "reclamation" is closely associated with mines and quarries, many other operations perform similar restoration tasks. Aggregate companies that offer diverse services often have unique opportunities for reclamation. Hamm Companies, a subsidiary of Summit Materials, operates not only aggregate facilities, but also the Hamm Sanitary Landfill in Kansas. Inactive parts of the landfill are covered with a thick level of soil, which prevents water from infiltrating into the

contained waste while laying the foundation for flourishing grassland and forest habitats.

4. **Partnerships help maximize impact.** Voluntary action often requires extra time, resources and knowledge. Working with consultants, conservation groups and other partners can provide the bandwidth a company needs to succeed. Covia's Dividing Creek facility in southern New Jersey mines and processes silica sand. While the site's warm season grasslands are maintained as a regulatory requirement, the team has exceeded these requirements by transforming the land into habitat for pollinators and the bobwhite quail, a species which has been in decline in the region. Local youth groups helped add native wildflowers to the habitat, and the South Jersey Quail Project and the New Jersey Division of Fish and Wildlife have helped the team develop quail-friendly land features and practices, like feathering the edges

between the forests and adjacent grassland to give the quails escape cover. Quails have recently been seen and heard on-site, indicating that the collective efforts are paying off.

While conducting reclamation with wildlife or community in mind requires some extra planning, the benefits are immense. To learn more about what is possible when site teams take an ambitious approach to reclamation, please read Conservation and Community Through Site-Specific Reclamation. This and other WHC white papers are available for download through the WHC website, www.wildlifehc.org/whitepapers.

While our newest white paper features work from WHC-Certified conservation programs all over the world and from a diverse array of industries, all case studies contain insights that can be applied to aggregate operations in the U.S. To discover how WHC can help transform your company's approach to reclamation, please email WHCConsulting@wildlifehc.org. ■

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