Mile-High and Community-Wide Enhancement Reclamation



By Libby Pritchard NSSGA Director, Safety Policy

IF YOU DRIVE NORTHWEST from Denver, CO on Highway 36 as one of 4.5 million annual visitors to Rocky Mountain National Park or Estes Park, you would marvel at the striking red rock formations, meander alongside clear mountain streams and pass through historic small towns like Lyons, CO. You would also see a cement plant and quarry integrated into this gateway to the Rockies, operating seamlessly alongside wildlife and preserving nature, thanks to decades of concurrent reclamation. Bears, deer, bald eagles and mountain lions are among the many species that also visit the area or call it home.

CEMEX's Lyons Cement Plant is in Boulder County, a county that sets a high bar for reclamation requirements. In the United States, reclamation requirements can vary from state to state, even on the local level from county to county. With sustainability and community engagement being strong company values, CEMEX often exceeds local requirements at Lyons and views it as a unique opportunity for collaboration.

Reclamation at the CEMEX Lyons Plant has been ongoing for 20-plus years. The Lyons Plant is divided into two areas: the plant itself, where cement manufacturing occurs, and Dowe Flats Quarry, where limestone and shale are extracted. Historically, quarrying occurred on the plant side as well, but it concluded years ago and became the first completed section of reclamation, while concurrent reclamation continues at the Dowe Flats site. Some reclamation features include beautiful ponds that the company stocks with native fish to maintain aquatic diversity, large-scale grasslands planted with a robust native seed and grass mixture, 1.25 acres of targeted pollinator habitat, bat boxes, and goats — yes, goats.





Vladimir and Bubbles are just two goats in a herd of 40 (protected by Vinny the llama) that help support the local ecosystem by grazing on invasive species. Some of the herd can be seen here at CEMEX's annual Family Day.



Reclaimed quarries are now ponds stocked with native aquatic species at the Lyons Plant where CEMEX hosts tours, school projects and events.

"The use of goats for controlling invasive species is a relatively unique and innovative approach for the industry," said Sustainability & Public Affairs Manager Matt Silveira. The goats, from a local company called Mutton Mowers (plus quard llama Vinny protecting the herd against large predators), support the ecosystem in numerous ways, including breaking up the previous vears' overburden, fertilizing the land, and grazing on invasive weeds like thistle, knapweed, and canary grass.

The Lyons Plant partners with their local community in many other ways too, from hosting tours, to releasing rehabilitated animals on their land with the Greenwood Wildlife Rehabilitation Center and working with students. The plant has a longstanding partnership with Lyons Middle/Senior High School's Habitat class where students receive formal classroom education on sustainability topics and complete projects at the Lyons Plant such as creating/installing interpretive wildlife signs, building/ hanging bat boxes, and harvesting willows for restoration projects.

While many of these efforts positively affect the community, arguably their work with willow trees has the most widespread impact because willows are an extremely effective flood mitigation resource. In 2013 a devastating flood almost destroyed the town



Tens of thousands of coyote willows have been harvested from the Lyons Plant and transplanted for local flood mitigation projects.

of Lyons and the work of rebuilding has continued for years. "The flood had a big impact on our community engagement priorities. Many willows have been used for erosion control and streambank stabilization which helps with flood mitigation," said **CEMEX Corporate Social Responsibility** Specialist Michael Clausen. The Lyons Plant has worked with the local school district, restoration firms, NGOs and other groups for years to provide free willows for restoration and flood mitigation projects, and CEMEX's focus continues to adapt based on community needs. In recent months, a series of unprecedented forest fires struck the region, and the Lyons Plant is developing plans to be part of the community support. "Going forward we want to continue to be a resource and will be identifying ways we can support fire recovery; we're looking to expand our network to continue being a good neighbor and that means being available for the community," Clausen said.

The Lyons Plant has worked for years cultivating relationships that provide opportunities for students, help the community recover from natural disasters, improve resiliency, and tend to Dowe Flats, one of Boulder County's most ecologically diverse areas. "Some people may say a mine can limit biodiversity, but we don't see that at all; we cultivate biodiversity," Clausen



The Greenwood Wildlife Rehabilitation Center will reintroduce rehabilitated animals, like this fox, back into the wild at the Lyons Plant.

said. And this success has been recognized by the Wildlife Habitat Council as the site has earned Conservation Certification since 2010. The Lyons Plant was also honored with the Portland Cement Association's 2019 Energy & Environment Award in the Outreach category.

While reclamation work helped lay the foundation for many successes and partnerships seen at the Lyons Plant, it's just a part of the larger puzzle. "We look for biodiversity conservation and education opportunities that align with the important needs and priorities of the local community and region," Silveira said. "Working closely with our communities on coordinated efforts results in a more meaningful and greater impact. We understand every act of conservation matters and plays a part in building a better and more sustainable future."