

OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

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2015 MINED LAND RECLAMATION AWARDS Award Recipient Narratives

OUTSTANDING RECLAMATION

River Bend Sand & Gravel Co. Ellendale Quarry site near Dallas, Ore.

River Bend Sand & Gravel Co. of Salem is being recognized for ongoing water quality protection efforts and thoughtful operational practices that supported final reclamation at the Ellendale Quarry site.

Protection of surface water quality was an important part of mine development over the years. Best practices – including sloping, graveled roads and floors, retention berms, conveyance ditches, vegetation, fractured rock, and an infiltration pond – were implemented to contain and drain storm water onsite.

Mining ceased on property in 2011, and reclamation focused on incorporating the mined area into the natural topography and establishing a stable vegetative cover. Surface mining at the site was conducted via a multi-benched side-hill cut. One to two feet of soil and overburden materials have been spread on the benches and the quarry floor. Twenty thousand native fir and hardwood tree seedlings were planted, with native grasses planted in the open areas between trees.

The company also created a border around spring-fed naturally wet areas of the pit floor to encourage wetland development. Cattails and poplars have already established.

OUTSTANDING OPERATOR

Britt Sand & Gravel Co. Grey Eagle Mine, Baker County

Britt Sand & Gravel Co. of Baker City is being recognized for improving the safety and productivity of mining operations at the Grey Eagle Mine.

The earliest mining operations at Grey Eagle Mine date back to 1907. The Britt Corporation took over operations at the upland quarry in 2003, and has since improved site practices, including salvaging soil and overburden to construct safety berms and sloping the quarry floor and containment berms to contain storm water onsite.

DOGAMI implemented new mapping requirements for mine sites in 2010, to bring a higher level of accuracy to permit boundary maps and ensure mine operators were aware of the locations of property

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lines and permit boundary lines. Britt Corp. immediately had the DOGAMI permit boundary surveyed and permanently marked in the field to ensure mine activity remained in compliance.

The site's operating and reclamation plan calls for the site to be returned to range/open space use.

OREGON PLAN AWARD

The Nature Conservancy Willamette Confluence Project

The Nature Conservancy is being recognized for the ongoing Willamette Confluence Project, which seeks to restore fish and wildlife habitat on previously mined land in the Middle/Coast Fork confluence area.

The Willamette Confluence Project represents one of the largest floodplain restoration opportunities on the Willamette River. The vision is to transform the currently degraded post-mine condition to a functioning floodplain-river system that provides a diversity of channel and floodplain habitat.

Mining for sand and gravel began in the confluence in the 1930s, with the Wildish family mining in the area since 1935. The approximately 1,457 acre site is located along the southern bank of the Middle Fork of the Willamette River. In 2010, Wildish Sand & Gravel Co. sold all but 186 acres to the Nature Conservancy. The Nature Conservancy obtained an operating permit from DOGAMI in 2011 for the approximately 1,270 acres previously permitted by Wildish – though no mining was proposed, the operating permit was maintained in order to complete reclamation of the mine ponds as part of the overall restoration strategy.

The first phase of the project was completed in 2015, and included grading and shaping the mine ponds to create riparian habitat; removing the levee and creating a secondary side channel; adding large woody debris to provide stability and habitat; and removing non-native vegetation and restoring native riparian vegetation. More than 3,000 tons of on-site quarry rock was used. Two hundred onsite trees were harvested for large woody debris habitat log jams. Seventy thousand trees and shrubs, more than 40 acres, were planted in spring 2015. Eighty-two thousand sedges and rushes were planted in 2015 as well. The total project cost was just over \$1 million, with an estimated savings of \$300,000 by using onsite materials.

Phase two of the multi-phase project is scheduled to begin in summer 2016.

GOOD NEIGHBOR Wildish Sand & Gravel Co., Eugene Wildish Plant site 2

Wildish Sand & Gravel Co. is being recognized for commitment to reducing the potential impacts of their operation on neighbors and the environment.

The family-owned Wildish Sand & Gravel Company has been producing aggregate materials in the Eugene area since 1935. Until the early 2000s, the Wildish operation was located south of Springfield along the Willamette River. Today's operation is on the McKenzie River between Eugene and Coburg, a site that was once out in the country but is now next to residential development – making neighbor relations especially important.

Wildish has long sought to reduce potential impacts of its operation. The McKenzie site was acquired in 1969. Since the 1970s Wildish has transported materials onsite via a conveyor system that consists of more than 9,400 feet of electrically driven conveyor belts, reducing the noise, dust, and emissions of conventional truck transport. The main entry road and the majority of parking areas are paved to reduce dust and track out onto public roads. To further suppress dust, bag houses were installed on the concrete plant and the asphalt plant is equipped with a wet scrubber to reduce hydrocarbon emissions.

After the 1996 – 1997 flood events in the Willamette Valley, Wildish worked with the Oregon Concrete and Aggregate Producers Association, local, state, and federal agencies, the McKenzie Watershed Council and other local aggregate producers to develop a comprehensive river bank stabilization plan. More than 2,800 feet of river bank has been stabilized using fish barbs, benched sloping, rip rap, large woody debris, and natural riparian vegetation.

In 2003, Wildish completed the construction of a 670-foot reinforced concrete suspension bridge over the McKenzie River to allow conveyor transport of material from the excavation on the north side of the river to the processing plants south of the river. This aesthetically pleasing structure allows safe passage of boaters along the McKenzie River.

On numerous occasions Wildish has brought in an archaeologist to record, collect, and document cultural and historic resources discovered on their properties.

SPECIAL RECOGNITION AWARD

The late Robert D. Traverso, Canby Canby Sand & Gravel

Bob Traverso was born in La Grande, and graduated from Marshall High and then Multnomah Community College. He served in the U.S. Army during the height of the Vietnam War. He received the Army Commendation Medal for meritorious service; the Bronze Star Medal for heroism in ground combat; and the Purple Heart for wounds suffered in combat. Like many of those who served, Bob did not talk about his time in-country. But it is known he single-handedly saved his platoon when they came under fire.

Bob then moved to Clackamas County where he started working for Parker Paving. Subsequently, Bob became a partner and owner of Canby Sand & Gravel, Molalla Sand & Gravel, Molalla Quarry, River Island Sand & Gravel, and Canby Landscape and Supply.

His vision of mine reclamation far exceeded regulatory standards. In 1999, Bob's work at the River Island site along the Clackamas River was honored with DOGAMI's Oregon Plan Award. In 1996, a high-water event changed the course of the river–right through the mine operation. The mine site consisted of

more than 100 acres of mine ponds with more than 5,000 feet of river frontage that was deemed excellent spawning and rearing habitat for salmon. Bob donated 138 acres of the former mine site, with a certified appraised value of \$750,000, to Metro and sold another 109 acres to Metro for \$400,000 less than the appraised value. Bob oversaw an additional expenditure of \$250,000 in restoring the site before official transfer. To remove destroyed mine equipment from the middle of the river, a helicopter company was hired at the rate of \$125 per minute, or \$7,500 per hour. At the time, Metro noted that Traverso "expended considerable amounts…to return the property to as natural a state as possible, in anticipation of future use by the public."

Bob received the DOGAMI Outstanding Reclamation Award in 2014, for his work at the Canby Sand & Gravel operation along the Molalla River. Areas exempt from the reclamation rules were reclaimed to wildlife habitat. The riparian corridor along the river was expanded and enhanced. Outstanding concurrent reclamation has been accomplished in areas where mining is complete. At the time of his death in 2015, Bob was finalizing one of the most comprehensive mining and operational plans ever developed for a new site at Canby Sand & Gravel.

Bob was a decades-long member of the Canby Rodeo Association and Canby Fair Board. During the annual fair, operations at the sand and gravel pit ceased as personnel and equipment were donated.

Mr. Traverso's legacy is exceptional restoration of mined land to thriving habitat.

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