VICKI S. MCCONNELL, STATE GEOLOGIST

NEWS RELEASE: August 8, 2011

Mined Land Reclamation Awards announced by the Oregon Department of Geology and Mineral Industries

Portland, Oregon: Each year the Mineral Land Regulation and Reclamation program of the Oregon Department of Geology and Mineral Industries, with an independent panel of experts, selects specific mine sites and operators to receive awards for outstanding reclamation, mine operation and fish habitat protection. This year's awards, based on an operator's performance during the 2010 calendar year, were presented at the Oregon Concrete and Aggregate Producers Association (OCAPA) Annual Meeting, June 24, 2011, at the Seventh Mountain Resort, Bend Oregon.

Mined Land Reclamation Award winners include:

- *Outstanding Operator* Wilsonville Concrete Products Commercial Redi-Mix, Brown's Island, Marion County.
- *Outstanding Small Operator* Rock Solid Sand & Gravel, Aylett Pit, Morrow County.
- *Outstanding Reclamation* Myron Corcoran, Defiance 1 & 2, Josephine County.
- *Outstanding Voluntary Reclamation* Umpqua Sand & Gravel, Umpqua Pit, Douglas County.
- Oregon Plan Award Carlon's Gravel Pit, Josephine County.
- *Good Neighbor* JC Compton Company, Salem Industrial Park, Marion County.

Detailed information and site photographs for the winners can be found in this extended news release: <u>http://www.oregongeology.org/pubs/nr/press-release-2011-08-08.pdf</u>

"These awards are the state's recognition and thank you to those in the mining industry with a strong commitment to community and the environment," says State Geologist, Vicki McConnell.

The MLRR program at DOGAMI serves as a steward of the state's mineral production, while encouraging best practices within the industry. MLRR's goals include environmental protection, conservation, and effective site reclamation. Contact Gary Lynch, Assistant Director of Regulation, MLRR, at (541) 967-2053 for more information.

The Oregon Department of Geology and Mineral Industries has a broad responsibility in developing a geologic understanding of natural hazards. The Department is also the lead state regulatory agency for mining, oil, gas and geothermal exploration, production and reclamation.

Learn more about Oregon's geology online: http://www.OregonGeology.org

DOGAMI's mission is to provide earth science information and regulation to make Oregon safe and prosperous.

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Mined Land Reclamation Awards

Based on an operator's performance during the 2010 calendar year.

Outstanding Operator 2010 — Wilsonville Concrete Products – Commercial Redi-Mix, Brown's Island, Marion County Contact: George Adams, PO Box 37, Wilsonville, OR 97070, (503) 682-2525



As part of its work to restore ecological restoration in the Willamette floodplain, Wilsonville Concrete Product, Marion County, constructed overflow spillways at its Brown's Island site to convey floodwaters into and out of the mine site during highwater events in a controlled manner.

The Brown's Island site is located some three miles southwest of downtown Salem on the Willamette River floodplain. Mining of sand and gravel began in the late 1950s. In 1972, when the reclamation rules took effect there were approximately 14 acres of mine-related disturbance adjacent to the river. Brown's Island is really a misnomer; this site is not located on an island but is within the 100-year flood plain of the Willamette.

In 2007, Wilsonville Concrete Products (WCP) purchased this operation and assumed the DOGAMI permit. At that time WCP submitted an amended operating and reclamation plan to expand reclamation requirements to incorporate a more comprehensive ecological restoration at the end of mining. This included creating more shallow water habitat; designing and constructing in-stream channel connections between mine ponds and the river; fish passage channels to allow migratory fish access out of mine ponds as water levels drop; wetland and riparian habitat planting with native plants; and performing concurrent reclamation as areas are mined rather than waiting until all mining is complete.



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Work that has already been accomplished includes enhancing the stormwater control system to more effectively contain storm water on-site; backfilling of the mine pond to reduce in water slopes and create more complex habitat; placement of soil on final reclaimed areas and planting native species; changing the water source for processing from the river to a cell within the mine pond, this removed pumps from the river riparian area to the mine operation; completing a hydraulic analysis for this reach of the river, and using the model generated to design overflow spillways to convey floodwaters into and out of the mine site during high-water events in a controlled manner.

WCP also met with a local citizens group on several occasions. As a result of these meetings WCP has volunteered to undertake actions to meet citizens' concerns. These include expanding the buffer zone from mine activity to the river and public access areas; planting native vegetation to increase visual and sound buffers; and constructing a sound berm where materials had been stockpiled in the past. The processing plant was relocated to reduce the noise impact on adjacent properties.

Reclamation is on-going. As a mine cell is completed, overburden from the next extraction cell is brought in and regarded to create shallow slopes that promotes wetland type plant to establish, and creates more complex fish and wildlife habitat. New pond banks are then planted in native species trees and shrubs.

Wilsonville Concrete was nominated by DOGAMI staff as an outstanding operator for their commitment to improve the operation of this site in an environmentally sensitive area.



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Outstanding Small Operator 2010 — Rock Solid Sand & Gravel Aylett Pit, Morrow County Contact: Wade Aylett, 75816 Frontage Road, Hermiston, OR 97838

(541) 571-9200



Rock Solid Sand & Gravel, Morrow County, improved safety and efficiency at its Aylett Pit by constructing one-way access roads and installing culverts to help control storm water. At the same time, moving processing to the bottom of the pit, backfilling areas where excavation has been completed and building a berm to screen pit operations from the nearby highway have enhanced reclamation and the appearance of the mine.

The Aylett Pit is located adjacent to Interstate 84 and just south of the Umatilla Army Depot. This site is visible from the highway. Mining of sand and gravel began in 1984 by landowner Jeddie Aylett. Although the materials being mined are alluvial deposits, the Columbia River is over five miles to the north.

This site has always been a family-run operation. A third generation is now working equipment. The senior Mr. Aylett retired from active operations in 2003. Wade Aylett took over operations from siblings in 2007. Wade Aylett has significantly improved the day-to-day operations of this site and dramatically improved the appearance of this site since his arrival. Old mine related equipment that had gathered over the years has been hauled off-site. Most material has been recycled or sold as scrap metal. All other material has been hauled to the landfill.



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The sequence of mining has been changed to allow more efficient use of materials and will allow reclamation to commence before the actual end of mining. Processing has been moved to the bottom of the excavation which now screens this equipment from public view. A low berm along the highway also helps screen this site from adjacent areas. New internal access roads have been constructed to allow one-way traffic through the pit increasing safety and efficiency.

Grading of the site perimeter has been accomplished to help contain storm water onsite. Culverts have been installed beneath internal haul roads to help control storm water as well. Backfilling of the excavation where mining has been completed has begun. This helps stabilize the excavation and will increase the area for post-mine development.

Wade Aylett was nominated as an outstanding operator by DOGAMI because of his efforts to improve the visual appearance of this site, improve the safety and efficiency of the operation, and reduce the reclamation liability of mine-related disturbance.



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Outstanding Reclamation 2010 — Myron Corcoran Defiance 1 & 2 claims, Josephine County Contact: Doug Murphy, 2385 Table Rock Road #18, Medford, OR 97501 (541) 774-1102

The Defiance 1 & 2 claims are located six miles west of Highway 199 adjacent to Josephine Creek in Josephine County on USFS lands. A plan of operation was approved by the USFS in 1995, and a DOGAMI operating permit was issued in 1996. This was a placer gold mine but the site is located on a bench 70 feet above the creek. Mining did not impact the stream or riparian area.

Mining involved excavating coarse gravels and processing the material through a concentrator, which using gravity to separate the heavier gold from the overburden. A process water pond contained the turbid water on-site and allowed re-use of the water in the process system. The bulk of mining activity occurred from 1997 through 2001. All too often when more than one partner is involved in a mining venture things turn sour. By 2006, both parties were involved in litigation.

The site sat idle until 2009, when the permittee, Mr. Corcoran, received a favorable decision from the court and started reclamation in order to not lose the reclamation security he had posted with DOGAMI and the USFS. Removal of equipment and debris was accomplished in late 2009. Final grading was accomplished in early 2010. The site was seeded with a native grass mixture in late 2010.

Mr. Corcoran's grandson-in-law, Doug Murphy, was the equipment operator during the final reclamation project. The work Mr. Murphy completed far surpassed all expectations of DOGAMI and USFS. Oversteepened highwalls were completely backfilled with reject material stockpiled on site. Uneven complex slopes were created to blend in with surrounding areas. A low area was created to help contain storm water on-site.

Perhaps the most impressive aspect of this reclamation project was the timeframe. Mr. Murphy completed the grading work in half the time that was originally estimated.

Mr. Corcoran and Mr. Murphy were nominated for the Outstanding Reclamation Award by DOGAMI for their dedicated efforts to reclaim 10 acres of ground that had been disturbed by mining for many decades.



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Outstanding Voluntary Reclamation 2010— Umpqua Sand & Gravel Umpqua Pit, Douglas County Contact: Kelly Guido, 640 Shady Drive, Roseburg, OR 97470, (541) 673-1088



Umpqua Sand & Gravel, Douglas County, has voluntarily reclaimed over 35 acres of pre-law flood plain mine disturbance by leaving shallow slopes along the mine pond banks, spreading soil, and planting native grasses. Concurrent reclamation of mined-out areas to wildlife habitat encourages wildlife to move in even during active mining and protects the adjacent river system.

The Umpqua Pit is located four miles northwest of Roseburg in Douglas County. This is a sand and gravel operation on a terrace above the South Umpqua River. Mining began in 1946 by the landowner, Frank Guido. Early mining was a combination of both in-stream and flood plain sand and gravel extraction. This site was permitted by DOGAMI in 1972 and has been maintained since. In 1972 approximately 70 acres were identified as exempt from the reclamation rules. In 1998 and in 2006 the DOGAMI permit was amended to expand the permit boundary. Both amendments involved property owned by the permittee. The permit boundary now encompasses 377 acres.

Surrounding land use is agriculture. Hay fields and fruit orchards are located to the west and south. The Umpqua River forms the east and northern permit boundary. Residences are located 2,000 feet to the south along Garden Valley Road.

From the earliest DOGAMI inspection reports, the presence of wildlife at this site has always been noted. Numerous species of birds use this site as well as mammals, reptiles, and amphibians. Over 35 acres of pre-law flood plain mine disturbance has been voluntarily reclaimed. As the excavation has expanded, the pre-law exempt areas have been reclaimed as open water ponds for wildlife habitat. Concurrent reclamation of



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mined-out areas to wildlife habitat encourages wildlife to move in even during active mining. This involves leaving shallow slopes along the mine pond banks, spreading soil, and planting native grasses. Willow, ash, alder, and cottonwood trees have volunteered. By law, in-water slopes must be left at 3H : 1V to six feet below ordinary low water to allow people and animals to get out of the pond. By leaving even shallower slopes, up to 10H : 1V in places, riparian vegetation quickly volunteers. A setback between mine operations and the river has protected mature riparian vegetation along the banks. On the northern end of this site, wetland areas have been enhanced between mine operations and the river to promote Western Pond Turtle habitat.

Processing of sand and gravel has always been a part of this operation. A DEQ WPCF 1000 water quality permit is maintained with no documented violations. By maintaining internal drainage there is no discharge of stormwater off site.

In 2005 a high-water event caused flood waters to back into the active mine ponds at this site. Because the final slopes had yet to be established in the inundated area, headcutting of the pond edge occurred for about 100 feet toward the river. However, because the setback to the river was 500 feet, no impacts to the river system occurred. Working with DOGAMI and ODFW, Umpqua Sand & Gravel incorporated a low dike in this area to prevent back waters from entering the pit, and constructing a fish access channel to insure any fish stranded in the mine ponds during a future high-water event can migrate back to the river. Umpqua S & G has been recognized for their commitment to perform voluntary and concurrent reclamation to enhance wildlife habitat and to protect the adjacent river system.



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Oregon Plan Award 2010 — C & C Logging of Oregon Inc., Carlon's Gravel Pit

Rice Creek Rock, Josephine County Contact: Bobby Carlon, PO Box 147, Paisley, OR 97636, (541) 592-6071





C & C Logging is an outfit out of Paisley, Oregon. In 2000 this family-owned company expanded into placer mining. They purchased 40 acres along Sucker Creek east of Cave Junction below the Oregon Caves National Monument. Historic mining had begun in this area in the 1880s. Sucker Creek was dredge and hydraulic mined; this left many sections in the upper reaches straight and channelized, with dredge tailings lining the banks.

The C&C operation was a basic placer mine operation: Excavate overburden, expose a potential pay zone consisting of sand and gravel, and run the pay zone through a processing plant that uses gravity to separate out the heavier gold. Simple yet effective. Problems can occur, however, if the excavation impacts the stream channel or turbid process water escapes from the mine site to the stream.

From the very beginning C & C invited regulatory agencies out to their site to insure the company met regulations. In 2002, when a process water pond was found to be leaking, C & C notified DEQ and sought assistance in remedying the situation. DOGAMI is requested to inspect this site by the permittee on an annual basis to insure the operation is in compliance.



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In 2006 the Rogue–Siskiyou National Forest and the Illinois Valley Watershed Council

DOGAMI 08-08-2011, p. 9 of 11

started planning a project on Sucker Creek which is considered one of the forest's highest priorities for watershed restoration. The Sucker Creek watershed is a productive primary refuge for salmon and steelhead.

The USFS indentified a half-mile reach of the creek above USFS land where previous restoration projects had been accomplished, for this cooperative project. Partners included the IV Watershed Council/Soil and Water Conservation District; Perpetua Forests Co.; OWEB; ODFW; and C & C Logging. Plans and specifications were compiled by the USFS. Construction supervision was provided by the watershed council. Construction was accomplished by C & C.

The project area lies within the 40-acre parcel owned by C & C Logging. Due to setbacks between the mine operation and Sucker Creek the project area had not been mined by C & C. So this project not only created a more complex floodplain and fisheries habitat, it allowed the operator to fully utilize the resource in the DOGAMI permit boundary.

A new stream channel was constructed that added meanders, thereby increasing stream length. A wider floodplain was created, and an overflow channel was enhanced which adds flood carrying capacity. Riparian vegetation was planted to stabilize the channel, to provide habitat, and to help provide shade during the summer months; the latter reduces thermal heating of the stream.

This is a text book example of a cooperative mining operation that allows extraction of the mineral resource while creating a more complex flood plain and enhancing wildlife and fisheries habitat.



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Good Neighbor 2010— JC Compton Company Salem Industrial Park, Marion County Contact: Jay Compton, 3825 Shropshire Way South, Salem, OR 97302 (503) 508-7534



JC Compton, Marion County, cooperated with the Claggett Creek Watershed Council to mitigate wetlands at Compton's former sand and gravel operation in Salem by planting several thousand trees and plants.

This sand and gravel operation is located within the Salem city limits along Claggett Creek. This 76-acre pit was first permitted with DOGAMI in 1977 by MP Materials Company. The permit was transferred to Morse Brothers Inc. in 1987, and then to JC Compton Company in 1997. In 1997 the site consisted of a large open water pond. JC Compton amended the DOGAMI permit to allow de-watering of the pond to extract deeper gravels.

Mining ended in 2004. The post-mine land use for the site was development into an industrial park. However, when a local school was built that impacted existing wetlands, a mitigation plan was established to replace the lost wetlands. The area along Claggett Creek that borders this site was chosen for the mitigation project. JC Compton sold the land to the city rather than complete the industrial development.

With the cooperation of JC Compton the Claggett Creek Watershed Council began the wetland mitigation project in 2003. Stormwater retention was designed in to the plan as well. Several thousand trees and plants were planted and an irrigation system was installed to insure survival during the summer when this area dries out. The mine pond has been successfully reclaimed and will eventually be developed as part of the industrial setting.



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