



Current Journal Contents **November 2015**

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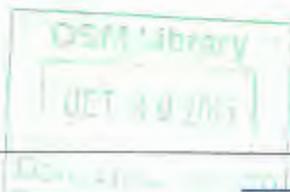
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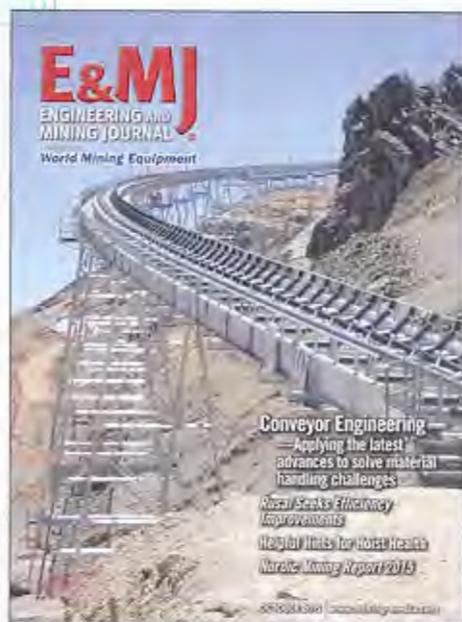
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Cover photo courtesy RTD; photo right courtesy APWA



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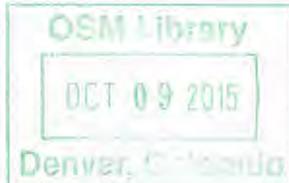
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Cover photo courtesy of Regional Transportation District-Denver; above photo courtesy of St. Louis NECA/IBEW.

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Water Supply

36 In an era of water scarcity and arid climates, more utilities and cities are considering programs to reuse treated wastewater for drinking-water distribution.

Cover photo courtesy of City of San Diego; photo right courtesy of Cloudcroft



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SPECIAL REPORT

THE TOP 600 SPECIALTY CONTRACTORS

45 The nation's largest specialty contractors see most market sectors on an upward trend and now are enjoying new client access through alternate project delivery approaches that demand subcontractors' input in the design phase of projects.

Cover illustration by Andrew Gibbs; photo (right) courtesy of Weifield Group Contracting.



GROUNDING TIME Weifield Group Contracting installing conduit for Denver's Union Station Block A project, which includes a 12-story, 146,000-sq-ft hotel and a five-story, 90,000-sq-ft office building.

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Cover photo: Stone Bridge across the River Neckar at Heidelberg. Photo by Ken Lanfear

Land and Water

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FEATURES

WETLANDS RESTORATION

7 Restoring a Natural Resource Treasure in Northern Virginia

The primary objective of the Huntley Meadows Wetland Restoration Project was to replace the remnants of the existing beaver dam with a permanent water control structure that would provide some control over water surface elevations in the main wetland, in order to recreate and sustain a hemimars environment.

by Frank Gaziano, PE & Jennifer Van Houten, PWS, PWD, LEED® AP

LOW IMPACT DEVELOPMENT

34 LID Full of Holes

Permeable pavement is a key BMP in the world of Low Impact Development, performing several important stormwater control functions. It directly reduces the amount of impervious surface, has the ability to store stormwater below the pavement, as well as significant water quality benefits.

by Donald Thiemon, CPESC, LEED Green Associate

STORMWATER MANAGEMENT

39 Sensitive Wetland Environment Calls for Dynamic Storm Water Solution

A stormwater system that would provide the largest storage volume containment area while using the smallest footprint was needed during construction of a new medical center, part of an expansion project in Newton, CI. They needed a system that would provide a combination of retention and detention, as well as groundwater recharge.

WATER MANAGEMENT

42 Urban Water Scarcity Aquifer Alternatives - Storage and Recovery

According to a recent study, the city of San Antonio ranked first as the most vulnerable city to anticipate water shortage. In response, the city started a case study to identify alternatives to extended drought conditions, resulting in a third alternative to water management.

by Nancy White

STREAM RESTORATION

46 Huge Engineered Riffle - Groundbreaking Grade Control on the Pedu River

This demonstration project on the Pedu River in Malaysia was an opportunity for hands-on technology transfer of new environmentally sensitive stream stabilization techniques. The engineered riffle was chosen as a cost-effective alternative to a large "check dam" - needed to ensure that the upstream irrigation pumps remain submerged during low flows.

by John McCallist

INDUSTRY BRIEF

50 Bank Restoration of Walton Creek

A project-based learning assignment for streambank restoration was developed for students on Walton High School property, which included installing coir mats and logs, erosion control blanket, and native plants.

by Robin B. Sair

REVEGETATION

14 Below the Surface: Digging into the Soil of Green Infrastructure

By using a green infrastructure approach, the Navy Pier in Chicago has a new stormwater management system that utilizes BMPs defined by the U.S. EPA. Choosing a sustainable, high performing soil was critical to the project.

by Chuck Davis & Jeffrey Bruce

PONDS & LAKES

18 Brookfield Park - A Case Study

Project goals for dam reconstruction: bring the deficient dam up to current requirements; retrofit a non-stormwater facility to meet the current Virginia BMP standards; include newer BMP technologies to enhance the pollutant removal and runoff reduction; include features to promote aquatic habitats; and enhance the aesthetic value.

by Stefan Pothoel

HYDROSEEDING

23 Ohio Contractor Helps Transform Eyesore into Park-Like Setting

Dresden Landscaping was called to put vegetative finishing touches on restoring a site, following the demolition of an industrial manufacturing facility. This site was especially challenging because of its topography - some of the riverbank includes slopes of 3:1.

by Jim Wolf

VEGETATION MANAGEMENT

27 Perico Preserve - Rebuilding and Maintaining Florida's Suncoast

With creative funding, Manatee County was able to restore and preserve a wetland along Florida's coastline. To date, the restoration project has involved removal of invasive plants, creation of dunes, freshwater wetlands and saltmarshes, basin reconstruction and tailheads, and recreation of regionally rare native coastal scrub habitat.

by Michael A. G. Burton, CEF

ABOUT THE COVER

Birds, including visiting white pelicans, rest at the newly constructed Rookery at Perico Preserve in late 2014 in Tampa Bay. Manatee County constructed this 150-acre coastal habitat restoration project, which provides seagrass, mangrove, and coastal dune sites for fish and wildlife in the region, with public and enterprise funding sources. Photo Credit: Robert Pope Photography, 2014.



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