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COVER STORY

Energy

30 Technology allowing wind and solar farms to store electricity is available but costly. Reduction of those costs is the next hurdle renewable energy must clear.

Cover photo courtesy of Beacon Power LLC; photo right courtesy of Duke Energy.



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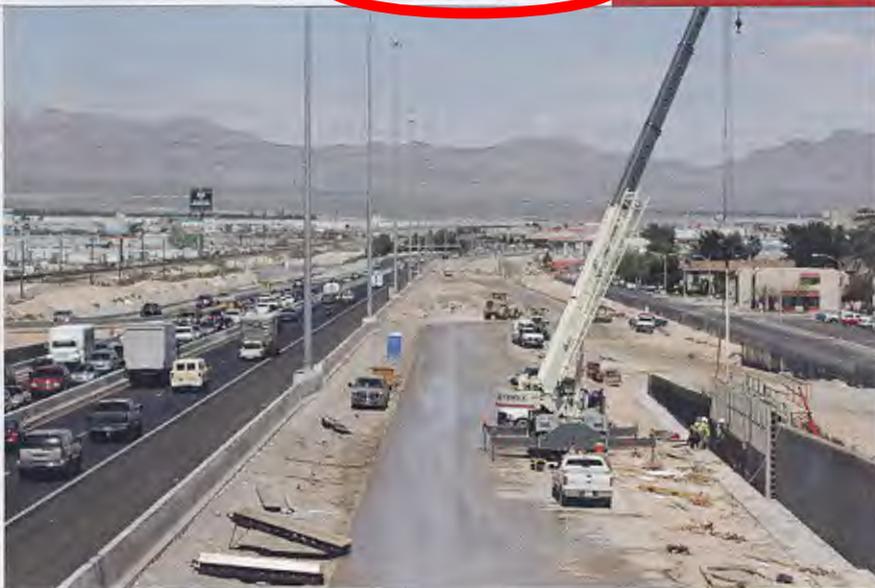
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COVER STORY

Firms Weigh Bid-Pursuit Costs

6 With more procurement options, such as this design-build highway job in Las Vegas, firms aim to control costs with more robust 'go-no-go' proposal strategies.

Photo (right) courtesy of North Corridor Constructors LLC



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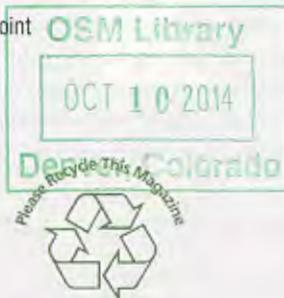
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COVER STORY

Water Supply

20 With a record drought in the western U.S., utilities are planning for water shortages and other extreme weather phenomena caused by global climate change.

Cover photo and right courtesy of California Dept. of Water Resources



Georgia powerplant includes CB&I parts. Page 8

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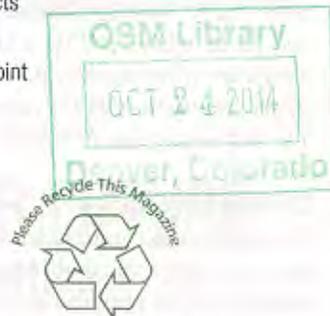
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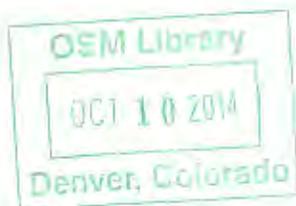
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(THIS ISSUE'S 40TH FOCUS)

7 40 Years of Slope Surface Stabilization Evolution

The past 40 years have seen a plethora of advancements in slope surface stabilization. How have the regulations, products, organizations, manufacturers, and DOT, evolved since 1974? *by Kurt Kelsey, M.S., CPESC, CPSWD*

STREAM RESTORATION

15 Stream Restoration Improves Water Quality, Play at Lost Nation Golf Course

At the Lost Nation Golf Course in Ohio, the goal was to return 1,450 linear feet of stream and riparian corridor within the course to a more natural state by minimizing streambank erosion, enhancing nutrient filtering, and providing wildlife habitat. *by Matt Fredmorsky*

EROSION CONTROL

20 Sustainable Repairs to a Kansas Highway Landscape

A reconstruction and expansion project completed in 2013 required follow-up to address erosion and problems with vegetation growth. The project's aim is to provide corrective grading, stabilization, and sediment control, while prompting vegetation growth and repair erosion damage. *by John Harsch, Aaron Sirook & Jason Van Nice*

LOW IMPACT DEVELOPMENT

24 Watershed Protection Project Will Reduce Chesapeake Bay Pollution

The recently completed Tidal Back River Greening Project in Baltimore, MD, was a \$2 million green infrastructure project carefully planned and executed to significantly reduce pollutants carried by stormwater runoff to the river, which drains to the Chesapeake Bay. *by Kelly Lennon, Everett Gaston & Katherine Elven*

Correction: The product name for the EVOH geomembrane discussed in Chris Kelsey's article "Hidden in Plain Sight: Sustainability and Geomembranes" from the Jul/Aug issue was unintentionally omitted, and should have read "ABSOLUTE BARRIER" by Raven Industries.

STREAM RESTORATION

29 Mission Creek: Flood Risk Reduction and Streambank Restoration

In June 2012, over the course of 24 hours, approximately nine inches of rain pummeled the landscape in Duluth, MN, causing massive floods and landslides. As a result, infrastructure and natural resources were severely damaged, notably Mission Creek. *by Jeremy Walgrave, PE & Nick Grewe*

BIOENGINEERED SOLUTIONS

34 Rebuilding an Eroding Bank on an Inland Lake

In 2011, a three-year study began at the Shoreline Management Demonstration Area on Gull Lake. The study was designed to compare the effectiveness of two types of encapsulated soil lifts that are used to stabilize shorelines: traditional and prefabricated. *by Jane Herbert & Gina Nasson-Hudson*

PONDS & LAKES

40 Building Jim Swanson's Lake - Part 1 of 3: Planning the Lake

In the first of a three-part series, a recent 60-acre land purchase in north Texas inspires a 10-15 acre lake building project. The owner enlists the help of a veteran fisheries biologist, along with a 40-year professional earthmover. *by Bob Lusk with Mike Otto*

STORMWATER MANAGEMENT

45 What's with all the SWPPP Contractor Inspection Reports?

Anyone constructing a project that disturbs one acre or more has to obtain a NPDES construction stormwater permit. One of the requirements in the permit is conducting site inspections on the project and filling out an inspection report. This is where confusion begins. *by Leo Holm, PE*

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You can now read Land and Water Magazine online, visit www.landandwater.com

ABOUT THE COVER

An unnamed stream flows through the fall foliage in Aroostook County, Maine. The photo was taken by Tom Tetreau, an environmental scientist based in the Topsham, Maine office of Stantec. (L&W's reader submitted photo). All year, we've had the opportunity to feature YOUR photos on our cover. But, as 2014 comes to a close, you have one last shot to send us your favorite natural resource management photo for the final issue of the year (Nov/Dec). Send them to lwmarketing@frontiernet.net.



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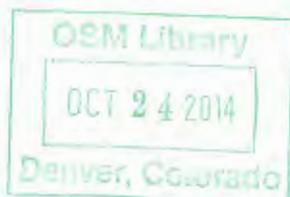
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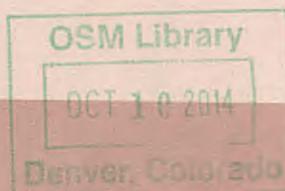
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