

WESTERN CHAPTER

International Erosion Control Association

Serving Erosion Control Professionals in Arizona, California, Nevada and Hawaii

IN THIS ISSUE

1

Western Chapter Sponsors Student Moderators at Annual Conference 2

CA Rice Straw Wattles –
Over Two Decades of Proven
Performance & the Forgotten
Benefit 3-4

Products & Services 4-6

Up-coming Dates 5

X CICES 2020 Monterrey Mexico 5

Regional News 6-8

IECA Education 6

Upcoming IECA
Webinar Series 8

Professional Listings 9-10

NEW! Financial Services Member Benefit! 10

IECA Next Annual Conference 10

PRESIDENT'S MESSAGE

Dear Members,

As many of you are aware, the annual IECA Conference was held at the end of February in Raleigh, NC. I, along with several of our Board Members, attended this year's event. It was a non-stop week of educational classes and technical sessions.

The expo hall was filled with manufacturers and suppliers of erosion and sediment control products and services. I enjoyed meeting new people and



Danny Reynaga CPESC, QSD WCIECA President DReynaga@profileproducts.com Profile Products LLC. 760-330-1848

connecting with colleagues. It was my first time to Raleigh, NC, and the venue for this year's event was spectacular.

I was very impressed to see such a strong presence of Western Chapter members who made the cross-country trip to spend time with their peers and be a part of this year's conference. I met with many long-standing Western Chapter members who have been strong influencers in the industry for many years and new ones who are dedicated to the growth of our industry.

We held our annual Chapter Meeting and had over 25 members in attendance. Thank you to all who attended; I truly appreciate you making the time. I was also able to meet with a couple of our college scholarship award winners who we sponsored at this year's IECA Conference. They presented their research and their educational posters were on display. They put a tremendous amount of work into it and it showed. Thank you, scholarship winners, for the quality information that you provided to our industry.

Finally, our Events and Educational Committee is working hard to develop new training criteria based on the chapter's input that we have received. We are looking forward to this year's spring/fall and winter events.

Sincerely,
Danny Reynaga, CPESC, QSD
WCIECA President

WESTERN CHAPTER SPONSORS STUDENT MODERATORS AT ANNUAL CONFERENCE

By Jeanne Duarte, QSD, ToR, CPESC, CPSWQ, CISEC CEO/President - Storm Water Resources, Inc. WCIECA Treasurer

Every year, IECA opens up an amazing opportunity for up and coming students in the erosion and sediment control and/or stormwater industry. Students from our chapter and around the world are provided with scholarships in order to allow them to attend IECA's Annual Conference. Students are required to submit a poster, which are displayed at the conference. Awards are given to winning posters each year.

This year, Western Chapter was proud to sponsor three students, helping them attend the Annual Conference in Raleigh, North Carolina. Two of our students are from California - Brent Wilder and Sophia Barron. Both come from San Diego State University and we were very happy to sponsor their travel and meet them at the conference.

Sophia's poster hit very close to home for many of us who live in the Ventura and Northern Los Angeles County areas as she presented a poster on "Surface Water Quality in Coastal Watersheds Following the Woolsey Wildfire in California". Brent also presented an excellent poster titled "Flood after Fire in Southern California – Incorporating Machine Learning to Identify Important Parameters for Process-based Hydrologic Models".

Our third sponsorship went to an international student from England. Corina Lees is studying Soil Science in England and presented a poster title "Selecting Grass Species to Control Concentrated Flow Erosion in Grassed Waterways".

It was very exciting to meet such passionate students, who are the future of our industry. If you are a student and interested in a scholarship to attend the IECA Annual Conference, or you know of a student in our field that is interested, please let us know. Scholarships are given out every year and the Board is always looking for deserving students who are interested in attending the conference, given the opportunity to moderate an educational session with another speaker, and present a poster to the Poster Competition.







CA RICE STRAW WATTLES – OVER TWO DECADES OF PROVEN PERFORMANCE & THE FORGOTTEN BENEFIT

By Lynn Friesner, CPESC EarthSavers Erosion Control

Nineteen years ago, in the Soil Erosion Research Laboratory at San Diego State University, the original rice straw wattle was tested. Almost two decades later, rice straw wattles have been field-tested and proven as an effective BMP. The variety of applications seems endless. You can find them along roadways, on building construction sites, wildfire restoration, ski areas, vineyards, mines, golf courses, and even landfills.



Wattles for Wildfire Restoration



Wattles for Landfill Expansions & Closures

When rice straw wattles are installed on slope contours in conjunction with an effective cover practice, rice straw wattles reduce the effects of long or steep slopes. Wattles help to break up slopes and can often allow for a less expensive cover practice. In perimeter protection applications, rice straw wattles act as a temporary ponding device to keep sediment-laden water from leaving the site. Sediment drops out of suspension and collects behind the wattle. Larger diameter rolls are used when more sediment holding capacity is required and are routinely used to replace silt fence. Additionally, rice straw wattles are used in inlet and stockpile protection applications as well as in low flow channels to reduce the flow velocity.

Over the years the original rice straw wattle has been enhanced. The product was first produced with photodegradable plastic netting. The industry now offers a 100% biodegradable burlap netting option. There has even been a new type of installation developed by Caltrans and referred to as a "Type II Lashed Installation." This application assists in holding the wattles down with notched stakes and biodegradable rope and requires no trenching.



Caltrans Type II "Lashed Installation"



Wattles With Coir Mat

CA RICE STRAW WATTLES CONTINUED

Manufacturers have also made advancements in packaging. The original wattles were loosely hand-loaded into trucks. This procedure made it very labor intensive for unloading. Wattles are now more commonly seen coiled and shrink wrapped onto pallets.

As the industry has grown, the use of these devices has spread across the country where they are generically referred to as fiber rolls. Other parts of the country have adapted the product with more locally available materials such as wheat straw, excelsior, or coconut. Regulations through many state DOTs across the nation have created standards for fiber rolls and the EPA recognizes fiber rolls as an effective Best Management Practice. With all of the national acceptance and extensive use of fiber rolls, people tend to forget there is an added value associated with rice straw wattles.

We need to look back about 3 decades...to the very beginning. California's rice growers had traditionally burned their fields to dispose of the straw and stubble residue remaining after harvest. In 1991, due to air quality issues, California passed AB1378. The Rice Straw Burning Reduction Act of 1991 phased out the burning of rice straw in the Sacramento Valley starting in 1992, until it was phased out completely in the year 2000. At the same time, the US EPA adopted Subtitle D regulations on Oct. 9, 1991. Subtitle D regulations are a set of Federal requirements for public and private landfills receiving municipal solid waste. It set out minimum standards for design, operation, location, closure, and post closure. The result was that landfill "air space" became increasingly costly. Many smaller landfills could not afford to comply and were forced to close. States and counties moved towards larger regional landfills and transfer stations. For context, I worked in Sacramento County in the early 90's. At that time there were 13 landfills, today there are 3.

As the state mandates were implemented, California rice growers attempted to incorporate their high-volume, fibrous crop residue into the soil just as wheat growers do. They found that the high silica content of rice straw wore out their cultivating equipment so quickly that it made the method cost prohibitive. Rice growers were faced with paying to dispose of their crop residue. Worse yet, the landfills did not want it! Thus, the original rice straw wattle was born. Agencies are still scrambling to divert waste and recycle. The cost of landfill "air space" has continued to skyrocket. Today, an estimated 70,000 TONS per year of rice straw is diverted from California's landfills for the manufacturing of rice straw wattles. I believe this forgotten benefit is more important and more relevant now than it was 20 years ago.





























UPCOMING DATES

April 8-9 CANCELED 2020 EROSION CONTROL BMP SUMMIT at Shasta College. Redding, CA. Info: https://watchyourdirt

Sept. 8-11, 2020, X CICES, Monterrey Mexico.

Nov. 6 WCIECA - Boulder City By-Pass and Vicinity Field Tour, Lunch and Social Diner - Save the Date!

IBEROAMERICA EROSION AND SEDIMENT CONTROL CONFERENCE SEPT. 8-11, 2020, MONTERREY MEXICO.

Do you understand which human activities are responsible for damaging our soil, water, and air?

What do you do to prevent erosion and avoid subsequent sedimentation?

Share your experiences and research with us at X CICES, Monterrey, Nuevo Leon, Mexico

Pre-conference courses, papers, forums, trade show, and post conference field tour, with ample opportunities to network

- Is your company involved in erosion and sediment control? Share for our mutual benefit at X CICES, Monterrey, Mexico.
- Are you a researcher involved with evaluating materials and methods for erosion and sediment control? Share with us at X CICES,, Monterrey, Mexico.

At CICES we develop protocols, standards, and propose regulations that facilitate the evaluation of erosion control methods and materials. When correctly selected and implemented, techniques should result in healthier environments while reducing construction and maintenance costs.

Our diverse group of participants includes civil engineers, contractors, soil and crop scientists, biologists, ecologists, hydrologists, landscape architects, and suppliers who combine forces to solve engineering and environmental problems.

Participate in our Conference - the most important event in IberoAmerica dedicated to the protection of our precious soil, water, and air.

For more information contact: info@iecaiberoamerica.org, https://iecaiberoamerica.org/, and ginalsah@hotmail.com

Page 6 Western Chapter















REGIONAL NEWS FROM IECA

TOP NEWS

Arizona is creating its own system to protect its waterways after the replacement for the Waters of the US rule eliminated federal protection for intermittent streams and other non-navigable waters. The state has invited local government agencies, environmental groups and other stakeholders to participate. Full Story: Arizona Public Media (3/10)

How to better harness nature's shifting water flows

Changing rainfall patterns and other factors are challenging efforts to ensure dependable water sources. Mechanical engineers at Rensselaer Polytechnic Institute are studying how to channel changing water and sediment flows in ways that better mimic nature with the goal of developing dynamic water system controls. **Full Story:** Rensselaer Polytechnic Institute (Troy, N.Y.) (3/12)

House bills aim to improve, protect quality of US water

A House bill has been introduced that would establish and fund an Environmental Protection Agency office to develop technology that can boost water quality and reduce costs. Another bill would help safeguard water resources from oil and gas operations on public lands by closing the "Halliburton loophole" for hydraulic fracturing, requiring companies to provide water management plans to the Bureau of Land Management and mandating that they replace water supplies hurt by oil and gas operations. Full Story: E&E News (subscription required) (3/10)

IECA Education

Enhance Your Knowledge

IECA has two certification partners EnviroCert International, Inc. (CPESC, CESSWI, CPSWQ, CPSM, CPISM) and CISEC, Inc. (CISEC).

IECA offers the professional development credit required to apply, re-certify and keep up to date with your industry certifications.

IECA has met the standards and requirements of the Registered Continuing Education Program to deliver professional education activities for engineers, surveyors, and related A/E/C industry professionals.

A selection of online courses, webinars and in person training is included in this program.

IECA education includes:

- <u>eLearning Classes</u>
- <u>Upcoming Live</u>
 <u>Webinars</u>

Learn more about RCEP program, licensing requirements and how to keep engineering and/or surveying licensure current across state lines at http://www.ieca.org/rcep

REGIONAL NEWS FROM IECA CONTINUED

POLICY & REGULATION

EPA accepting comments on transportation runoff rule

The Environmental Protection Agency has launched a public comment period on proposed changes to its Multi-Sector General Permit for Industrial Stormwater Discharges program. The proposal would streamline permitting requirements for regulating stormwater runoff from the transportation sector and other industries, as well as require more frequent monitoring at the state level. **Full Story:** Transport Topics (3/9)

April Webinar | Navigable Waters Protection Rule: A New Definition of Waters of the United States

Learn more about the long-running controversy over the definition of "waters of the US," the Trump Administration's efforts to repeal and revise the Clean Water Rule and review of the new Navigable Waters Protection Rule during this webinar. The webinar will also cover the new Rule's emphasis on State and Tribal rights and outline options for State and Tribal assumption of the Section 404 program. Learn more!

Calif. to consider new water management system

California Gov. Gavin Newsom has proposed a plan that would call on water agencies to seek "voluntary agreements" between differing sides in disputes over the state's water resources. The setup is intended to help increase water flow through the San Joaquin River Delta during dry years, restore more than 60,000 acres of wildlife habitat, and generate more than \$5 billion for environmental improvements. **Full Story:** The Associated Press (2/5)

BLM may remove **NEPA** requirements from land-use plans

The Bureau of Land Management is considering removing National Environmental Policy Act requirements from the land-use planning process, potentially eliminating the need for the BLM to consider the effects of projects on the environment. The BLM hasn't decided whether the proposal will advance or released any details, but "we will notify the public, as required by law," said agency spokesman Jeff Krauss. **Full Story:** <u>Bloomberg Environment (free content)</u> (2/4)

WETLANDS & COASTAL RESTORATION

Organization uses oysters to protect Calif. coastline

Tens of thousands of oysters have been drawn to a habitat restored and expanded by volunteers working for Orange County Coastkeeper in California. The group hopes that encouraging oyster beds along the coast the state can help preserve the Alamitos Bay shoreline in Long Beach. **Full Story:** San Jose Mercury News (Calif.) (tiered subscription model) (3/8)

Study: Rising seas may swallow half of world's beaches by 2100

Up to 15% of global coastlines may look remarkably different by 2050 and half of the world's coastal beaches may be gone by the end of the century, according to a study published in the scientific journal Nature Climate Change. Sea level rise could push many shorelines inland by nearly 330 feet by 2100, including those in heavily populated sections of the US, South Asia and Central Europe. **Full Story:** CNN (3/2)

Study pins dollar value on wetlands' storm protection

An average square kilometer of wetlands is worth about \$1.8 million annually in storm protection alone, according to a pair of economists from the University of California, San Diego. Researchers Fanglin Sun and Richard Carson sought to put a dollar value on wetlands to provide a tangible estimate of the benefits the areas offer. **Full Story:** Bloomberg (tiered subscription model) (3/2)

Page 8 Western Chapter

REGIONAL NEWS FROM IECA CONTINUED

EROSION/SEDIMENT CONTROL

Group continues efforts to secure Calif. bluffs

The San Diego Association of Governments and North County Transit District are asking the state of California for an additional \$100 million over the next four years to secure the Del Mar bluffs. Approximately \$10 million was previously earmarked to add new concrete and steel support columns, fix stormwater drainage structures, and replace segments of sea walls. Del Mar Times (Calif.) (1/27)

Graduate students study Calif. beach dynamics

A new graduate course on beach dynamics at the University of California at Irvine is helping students develop beach monitoring skills in the classroom and on site with visits that examine the extent of erosion. "I'd like students to be aware that visualization tools, models and simulations can not only be useful for helping stakeholders understand a proposed project, but also for the engineer to learn from stakeholders about what they care about and how these concerns can be addressed," says professor Brett Sanders. University (1/21)

WETLANDS & COASTAL RESTORATION

Coastal building in Tunisia a cautionary note for Calif.

Research in Tunisia revealed that building along coastlines can greatly accelerate beach erosion, writes research scientist Essam Heggy. Therein lies a lesson for Southern California, where the semiarid climate is similar to that of North Africa. Los Angeles Times (tiered subscription model) (1/19)

Calif. erosion-control project to begin in March

A retaining wall and landscaping form part of a six-month, \$797,000 project to curb erosion on a section of California's Laguna Canyon Channel. Contractor James McMinn Inc. has been selected for the work, which is scheduled to begin in March. Laguna Beach Independent (Calif.) (1/2)

FROM AROUND THE WORLD

Book offers ways to retrofit structures for flood resilience

A new book from University of Cambridge doctoral candidate Edward Barsley focuses on six spatial tactics to retrofit structures to handle increased flood risks. The book offers a visual guide to flood resilience and how to adapt built and natural environments to mitigate flooding. **Full Story:** <u>GreenBiz</u> (3/14)

UPCOMING IECA WEBINAR SERIES

Navigable Waters Protection Rule: A New Definition of Waters of the United States Contains 3 Component(s), Includes Credits Includes a Live Web Event on 04/08/2020 at 1:00 PM (EDT)

Join Wright Water Engineer's Drew Maraglia for his discussion of the Navigable Waters Protection Rule.

This webinar will cover the long-running controversy over the definition of "waters of the U.S.", the Trump Administration's efforts to repeal and revise the Clean Water Rule, and review of the new Navigable Waters Protection Rule. Drew will also discuss the new Rule's emphasis on State and Tribal rights, and outline options for State and Tribal assumption of the Section 404 program.

PROFESSIONAL LISTINGS

<u>Dirttime.tv</u> is an affiliated brand of **Salix Applied Earthcare LLC**, formed in 1996 by John McCullah. John has been involved in Watershed Management for 30 years, becoming a certified erosion specialist in 1986. The firm's work involves consulting, training, design/build of stream restoration, bioengineering, education, and awareness. Salix published design guidance manuals, books, popular and technical articles, and informative case studies. Dirttime.tv has produced over 40 Dirt Time videos. Selecting and watching the clips of your choice then taking tests online is a popular way to earn CEUs. Visit <u>www.dirttime.tv</u> regularly for 'how to' info, tips, and blogs.

Earthsavers Erosion Control Products is the home of the "Original Rice Straw Wattle". Our certified weed free wattles have been tested for sediment retention at San Diego State University and proven in field studies by Caltrans and numerous other agencies. Earthsavers wattles are available in 3 diameters, photodegradable netting, or 100% biodegradable burlap. Additionally, <u>Earthsavers</u> is a master distributor for a full line of erosion & sediment control products, geosynthetics and more. Our network of distributors provide local access to premium BMPs and Earthsaver's experienced staff can provide superior technical support to our distributors and their customers and specifiers.

Kelley Erosion Control, Inc. established in 1983 is recognized throughout Nevada and California as a leader in the industry. KEC has an excellent reputation known for quality, competency, solutions, innovative ideas, cutting edge technology, excellence, and client satisfaction. Services include: Hydroseeding, site preparation, dust control applications, BMP's, revegetation and project maintenance, site winterization, wetland mitigation, stream channel stabilization, planting and irrigation, mining reclamation, soil stabilizer applications, biotechnical applications, and fire restoration/rehabilitation. Phone (775) 322-7755 Fax (775) 322-6606 Contact – Claudia Chambers CPESC, CISEC, QSP Claudia@kelleyerosioncontrol.com. Visit us at www.kelleyerosioncontrol.com.

Linwood Supply, Inc. distributes the tools you need for Erosion Control and Storm Water Management including Erosion Control Blankets, TRM and HP-TRM, HydroFiber™, Coir products, organic fertilizers, native and grass seed, plus, for oil spill remediation, Rubberizer booms, mats and filters. Other services include written pesticide recommendations and soil testing. We will always provide you with the level of service and professionalism you deserve. Linwood Supply, Inc. is a certified small business based in California. *If Your Storm Water is as Clear as Mud*™ – Please call us at 707 678-5087 or visit us at www.linwoodsupply.com.

LSC Environmental Products exists to solve some of the industry's most persistent environmental challenges...such as erosion, revegetation, odor, dust, and waste cover through the application of our spray-applied coatings. You probably know LSC as the "ADC guys", who we have been for the past 26 years, but we are more than that. With the acquisition of Terra Novo, Inc., who are best known for their EarthGuard® products; and have served the erosion and sediment control industry for almost 20 years. We are excited to offer new solutions, including soil amendment, site winterization, intermediate cover, and special waste that we believe can benefit virtually any site.

Nedia Enterprises manufactures a complete line of erosion control, sediment control, and bioengineering products made primarily from natural fibers. Committed to the conservation of the environment, we are constantly striving to develop products that contribute to its enhancement and protection. Our products are subject to stringent quality control measures that meet or exceed industry standards. **Nedia** offers sound technical advice on product selection and installation with a thorough understanding of the benefits and limitations of the products. A large inventory of products in several distribution centers across the country facilitates cost-effective and timely delivery of our products. Contact 888-725-6999 or email info@nedia.com.

ADVERTISE YOUR BUSINESS HERE

For more information check out this link https://www.wcieca.org/products-services/advertise-with-wcieca/

Page 10 Western Chapter

PROFESSIONAL LISTINGS CONTINUED

Pacific Coast Seed is Northern California's premier supplier of CA native grasses and wildflowers, turf grass seed, and other erosion control materials such as fertilizers, mulches, and soil amendments. We provide seed and other materials for diverse applications including restoration, reclamation, revegetation, ornamental landscaping, and erosion control. We offer specialty seed collection from site-specific sources. For more information check out our website **www.pcseed.com** or contact us at 925-373-4417 or info@pcseed.com.

Quattro Environmental, Inc. offers reclamation design and implementation services in a "best value" team approach to re-establishing native plant growth on drastically disturbed soils. "Do It Once, Do It Right" has been the mantra for over 22 years of success on tough sites located throughout the U.S. western States. "Hold soil" with BIND | ATLAS SUPERDUTY – world's #1 heavy-duty soil binder. "Grow soil" for effective native plant establishment with Quattro's Living Soil Membrane™ technology. Phone (619) 204-1372 Contact – Peter McRae, past-President WC-IECA pmcrae@quattroenvironmental.com. Visit us at www.GrowingSoil.com.

Reno Tahoe Geo Associates, Inc. – Formerly Marvin E. Davis & Associates focuses on the challenging issues of the Tahoe Basin and Northern Nevada/California terrain. Our professionals provide a diverse and solid background in geotechnical engineering; specialized engineering design; erosion control services; construction and forensic inspection services and materials testing; and, regulatory and compliance issues to enable project approval. Phone 775-853-9100 or visit us at http://www.rtgeo.com/.

Sustane Natural Fertilizer — For over 30 years of continuous operation, <u>Sustane Natural Fertilizer</u>, <u>Inc.</u> has produced the highest quality natural based and organic fertilizers and soil amendments distributed in the U.S. and exported to 50 countries worldwide. Sustane Natural Fertilizer maintains and operates its U.S.E.P.A. permitted compost site, manufacturing facility and corporate offices from Cannon Falls, MN. Sustane fertilizers and soil amendments provide readily available, balanced nutrition with beneficial microbiology to provide the basic soil components for exceptional plant establishment and long term sustainability. Call 800-352-9245 to speak with a Sustane Regional Specialist or with our International Team Leader.

<u>Western Green</u>, and its associated erosion control brands North American Green and Western Excelsior, is the industry leader for manufactured erosion and sediment control products and holds the industry's most complete product line ranging from short term ECBs to permanent HPTRM Anchored Systems. Whether your site needs short-term protection or permanent vegetation reinforcement, trust Western Green's quality brand products to handle any erosion issue you may face.

NEW! Financial Services Member Benefit!

IECA members are now eligible to join Signature Federal Credit Union and take advantage of the IECA VISA Platinum card, high-yield checking accounts, mortgage financing, business accounts and access to 5,000+ shared branching locations and ATMs! Signature Federal Credit Union is a full service, nationwide credit union, offering a wide range of services including: no fee checking, personal loans, up to 97% financing on mortgages and auto loans nationwide.

EXPLORE NOW

HEADS UP! 2021 IECA Annual Conference – Kansas City, MO

2022 Conference will be in Minneapolis, MN