

Volume 8, Issue 1

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We Need Your E-mail Address!

New federal rules are going into effect that will limit IECA and the Chapter's ability to communicate with members by fax. Until further clarification of these rules are available the Chapter will not be sending you information by fax. Please make sure we have your current email address, or make sure you check the web site regularly for information on Chapter events and news. ☁

Rapid Assessment and Emergency Mitigation of Post-Fire Impacts in San Diego

In the days and weeks following the devastating October 2003 Cedar, Paradise, and Otay wild-fires in southern California which blackened in excess of 375,000 acres and destroyed nearly 2500 homes, San Diego County and the City of San Diego separately undertook the tasks of conducting assessments of post-fire hazards and mitigating potential impacts. The process of rapid assessment of post-fire hazards and the emergency mitigation of primary and secondary impacts requires efficient collection, processing, and analysis of field data and conditions.

Both the County and the City contracted with GeoSyntec to assist with these monumental efforts. GeoSyntec used a number of recently developed tools and techniques during the hazard assessment, mitigation, and implementation process to improve the efficiency of the collection of field data during the assessment and improve the ability to make time critical engineering decisions. These tools included: deployment of ruggedized personal digital assistants (PDAs) equipped with integral global positioning systems (GPS) running the rapid development relational database engine Jetstream™; a whole-project field data management solution; the use of 1 meter pan-chromatic and 2.4 meter multispectral satellite imagery; and automated feature analysis of post-fire imagery to delineate burn areas based on satellite imagery and to refine estimates of burn severity and watershed response.

The hazards following the fires include debris flows, mud flows, flooding, and high sediment loads. The potential impacts of concern are impacts to public health and safety, public and private property damage, and damage to infrastructure. Mitigation measures being implemented include a system of sediment control measures, erosion control measures, trash racks and debris flow devices, evacuations and warnings. Soil bacteria (mycorrhizal inoculum) is being used in limited areas where native seeding is being applied to burned slopes.

Another result of the October 2003 was the complete burning of the watersheds of three City of San Diego reservoirs, San Vicente, El Capitan, and Otay reservoirs. A rapid assessment was conducted to



Top: WCIECA member Carol Forrest in Harbison Canyon.

Bottom: WCIECA member Mike Harding with debris flow on El Monte Road.

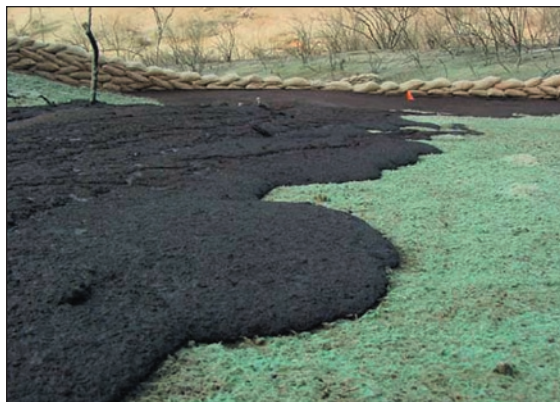
quickly identify values at risk (VAR) and mitigation measures to help protect public health, water quality and infrastructure associated with the reservoirs. The reservoirs are used for non-contact recreation (boating and fishing) as well as their primary function to provide drinking water to the City of San Diego.

As with the affected residential areas, assessment methods for the reservoirs included aerial and field reconnaissance in conjunction with review of outside data sources. Outside data sources included: fire severity information provided by the USDA Forest Service/Burn Area Emergency Response

See **San Diego Fire**, pg. 2



California Conservation Corps installing fiber rolls.



Lava-like ash flow following a light rain on December 25th.



Watershed mitigation in Harbison Canyon.



Mud and wood debris flow at El Capitan reservoir, one to two feet thick.

San Diego Fire, cont'd from pg. 1

(BAER) Team; relevant GIS data (land use, ownership, public facilities, vegetation, etc.); as well as satellite and aerial imagery. These methods were used collectively to identify the areas of greatest risk and for the siting of specific mitigation measures.

Three general categories of VAR sites were identified as being of concern: 1) water supply infrastructure; 2) current and future recreational use; and 3) reservoir water quality. Mitigation measures were selected to address: potential mud and debris flow and rockfall potential that could impact park/reservoir access and damage infrastructure elements (drainage culverts, pump stations, etc.); spillway blockage and flooding due to debris carried by post-fire runoff; and anticipated water quality impacts, predominantly increases in sediment and turbidity loadings.

Mitigation measures currently being considered for implementation include spillway debris booms, creation of sediment basins in tributaries using geotubes (geosynthetic tubes filled with dredge material), turbidity curtains deployed within the reservoir near the mouth of tributaries to partition sediment-laden runoff, and alum dosing to enhance settling of sediment particles. Erosion control methods on up-gradient slopes are not considered practical due to the vast size of the watersheds at each reservoir.

A relatively light rainfall that occurred on Christmas Day resulted in several damaging mud flows around the County that affected homes and roads, and high debris and sediment loads into the reservoirs. A number of Western Chapter IECA members are involved in the design and implementation of the mitigation measures, which has required rapid response in expertise, technologies, and materials. ☁

Carol Forrest

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IECA State of the Community Assessment Survey

Trends Identified by IECA Staff from the SOCA Survey

The term *members* as used below actually represents the 246 survey respondents (who are all members).

FROM SURVEY QUESTIONS

More Favorable

1. Members are extremely interested in IECA's future (90%)
2. Members want to know what's going on in the profession/industry (92%)
3. It is important to be a member of IECA (82%)
4. IECA provides useful (94%) and accurate (81%) information
5. Through IECA members can make a positive contribution to the profession (88%)
6. IECA is an effective advocate for the erosion control profession/industry (73%)
7. 88% of members consider themselves to be proficient to advanced users of technology
8. 83% of members read IECA email immediately

See SOCA, pg. 7

WCIECA Summer Educational Event and Field Tour

San Diego, CA - August 21-22

This August more than 40 erosion control professionals gathered at Crown Cove in Coronado, CA for the Western Chapter Summer Educational Event and Field Tour. The Educational Event featured Mike Chase and Lucinda Dustin teaching the IECA professional development course - How to Prepare and Implement a Storm Water Pollution Prevention Plan. The Field Tour, coordinated by Board member Peter McRae and his assistant Renee Castillo, featured stops at the McMillin Rolling Hills Ranch master-planned community in Chula Vista, San Diego State University Rainfall Simulator Laboratory, and two locations within the Tijuana Estuary.

Mike and Lucinda led the information-packed class through the basic material on preparing and implementing SWPPPs on construction sites. Their professional experiences provided many anecdotes to illustrate the course material for the class. A special feature of the course was a presentation by Thom Fuller, McMillin's Senior Vice President of Engineering, who provided his insights on the practical aspects of working SWPPP issues with the regulatory community in the San Diego area. Tom's comments were particularly compelling for the audience because he holds SWPPP certification authority for McMillin. As the setting sun bathed the participants in golden light, the group gathered beside the waters of Crown Cove for a catered BBQ amidst tabletop displays by the vendors and the event sponsors.

Friday morning everyone boarded the bus and headed off for an informative and scenic day. Stopping first at McMillin's Rolling Hills Ranch, Thom Fuller led the group around various aspects of the master-planned community. Features of this stop included areas under construction where we viewed various erosion and sediment control measures, and post-construction measures (such as functional wetlands) installed in the completed areas to protect on-going water quality.

Mid-day the bus made its way to the San Diego State University Rainfall Simulator Laboratory where Chapter member Mike Harding had a BBQ lunch awaiting, followed by a tour of the facility where we were afforded the opportunity to observe a performance-testing run of soil stabilization products in the simulator.

The final destination of the day was a visit to two locations in the 2,500-acre Tijuana Estuary, a unique and biologically productive coastal wetland on the US-Mexico Border and the end point of the 1,735 sq. mile Tijuana River watershed. Jeff Crooks, Research Coordinator for the Tijuana River National Estuary Research Reserve, hosted the exploration of both the restored coastal wetland near the Visitor Center to the north, and Goat Canyon on the Mexican border, a watershed where restoration efforts are faced with many cross-border challenges. Participants were shuttled off-road to the top of Spooner's Mesa where they could overlook the border fence deep into Mexico's Canyon de los Laureles.

As has become a tradition on Western Chapter field trips a friendly competition among the "plant people" was taken up to identify the native and invasive species. There is never a winner in these competitions, just lots of fun!

Overall the Chapter's Summer Educational Event and Field Tour was a success. The goal of providing fun-filled local educational opportunities for erosion control professionals was achieved and the Chapter made about a \$5,000 profit on the event, which will be put towards supporting scholarship students at EC04 and at the upcoming Chapter Regional Conference that will be held in Phoenix April 21-24, and future Chapter activities. The Chapter is especially appreciative of the event sponsors, S&S Seeds, Golden Gate Products, EarthSaver, and Pacific Coast Seed. ☁

Sandy Mathews, WCIECA Board Member
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Rolling Hills Ranch stabilization.



Curb line sediment control.



Mike Harding explains the workings of the SDSU Rainfall Simulator.



Restored wetland at Tijuana Estuary.



Zina Dean and Debbie La Duke on top of Spooner's Mesa overlooking Mexico's Canyon de los Laureles.



Entry point for sewage and sediment into the US that quickly overwhelms \$600M US-built treatment plant after 1/2" rainfall.



Jeff Crooks addresses the group above Goat Canyon.



US-Mexico border erosion control challenges.

CONTRACTOR'S CORNER

Western Chapter Develops New "Ecotech" Training Program

First Presentation Set for January in Sacramento

Over the last year, the Western Chapter Education Committee has worked on developing a program to benefit members and to help improve the quality and success of erosion and sediment control on construction projects. This program is the Erosion Control Operations Technician (Ecotech). The two goals set forth for the development process of the program are stated as follows:

1. To develop a standardized process for the certification of individuals as qualified applicators of erosion and sediment control products.
2. To cultivate a common understanding between owners, operators, employees, designers, inspectors, purchasing departments and others who invest in erosion and sediment control projects.

When the program is in place, success will be indicated by the program's ability:

1. To provide guidance in the selection, formulation and application of erosion and sediment control products and materials.
2. To certify individuals who have both technical knowledge and hands-on experience in selecting/applying erosion and sediment control products and materials.
3. To provide erosion control professionals with an opportunity to participate in the development of the erosion and sediment control industry.

The Ecotech program classroom presentation is in PowerPoint format. Field demonstrations will also be incorporated into the final program. The agenda for the classroom portion is:

- I. INTRODUCTION TO ECOTECH
- II. RULES AND REGULATIONS (erosion, sediment and water quality)
- III. PRINCIPLES OF EROSION, SEDIMENT AND RUNOFF CONTROL
- IV. PLANS, SPECIFICATIONS AND JOBSITES
- V. PRODUCTS
- VI. MATERIALS
- VII. COMPLEX (ENGINEERED) STRUCTURES
- VIII. EQUIPMENT

Certification Process- As the program is developed, the details of certifying individuals will be worked out. Some parallels and connections with the Certified Professional in Erosion and Sediment Control (CPESC) program may occur. Much administrative work still needs to be accomplished, but currently, the process looks like this:

Applicant's background experience and professional referral: To be decided.

Fee: To be decided.

Classroom examination on Sections II-VIII.

Field examination on Sections V-VIII:

Certification presented to eligible candidate following review by certification committee.

See **Ecotech**, pg. 5

Additional Certificates: BFM, gypsum and mulch (i.e. compost or chipped product) applications.

Professional Development Units (PDUs)- Continuing education requirements to be decided.

As mentioned above, the Ecotech program will be of interest to a large cross-section of the industry; additionally, it will include information on horticultural matters as they relate to soil stabilization on construction sites, which might not be commonly available otherwise. The initial presentations of the Ecotech program are scheduled for the Sacramento Valley Landscape and Nursery Expo produced by the California Landscape Contractors Association (CLCA) and the California Association of Nurserymen and Garden Centers (CANGC) on January 14th in Sacramento and the Turf and Landscape Expo produced by the Northern California Turf and Landscape Council on January 28th in Santa Clara.

Now is a good time to have a hand with shaping the Ecotech program's technical and administrative format. The Education Committee of the Western Chapter of the International Erosion Control Association welcomes your participation. ☁

David Franklin, WCIECA Secretary
Metamorphosis Erosion Control, Inc., (707) 226-7333, meci@sprynet.com.

Professional Listings

Marvin E. Davis & Associates, Inc., a provider of geotechnical engineering services in the Northern NV and Tahoe, CA areas, seeks experienced engineers, registered in NV and/or CA, for design and project management of geotechnical and materials testing projects. M.S. in geotechnical engineering and at least three years experience conducting geotechnical investigations required. Please fax resume to Personnel Manager @ 775-853-9199, or Email to MDA12000@aol.com.

Synergy Resource Solutions, Inc., Jack D. Alexander III, President. (775) 331-5577, fax (775) 331-5579, synergy@countgrass.com. We provide vegetation, water, soil, and air monitoring; reclamation and erosion control planning, permitting, and monitoring; and NEPA document preparation. Offices in Reno, NV and Alpine, WY.

Western Botanical Services, Julie Etra, Owner. 775-849-3223, 775-849-3303. WBS provides consulting services for design of erosion control, wetlands and riparian areas as well as botanical surveys and wetland delineations. Construction management services are also available.

Kelley Erosion Control, Claudia J. Chambers CPESC, Kym Kelley CPESC, Helen Godfrey, Reno, NV 775-322-7755 Fax 775-322-6606 email kelleyerrosion@worldnet.att.net. Services: Hydroseeding, wetland mitigation, stream channel stabilization, revegetation, dust abatement, drill seeding, BMP installation, biotechnical slope stabilization, strawblowing & reclamation.

JWA Consulting Engineers, R. Mark Hoefer Vice President, P.E., CPESC. Two offices to serve your needs; Zephyr Cove, NV- (775) 588-7178 fax (775) 588-1726, jwaeast@aol.com and Pleasant Hill, CA- (925) 939-5000 fax (925) 939-5878, jwawest@aol.com



Calendar of Events

February 1-4, 2004 (HI) - *Annual Meeting of the National Associations of Conservation Districts*, Big Island HI. For more info contact: 2004@nacdn.org.

February 16-20, 2004 (Philadelphia, PA) - *EC04, IECA's 35th Annual Conference and Expo*. More info at <http://www.ieca.org>, or call Kate Nowak 970-879-3010 ext 15.

February through April, 2004 - The California State Water Resources Control Board will host a series of workshops on the new *Small Linear Underground/ Overhead Project (Small LUP) Construction Storm Water Permit*. The dates will be posted at website: <http://www.swrcb.ca.gov/stormwtr/training.html> once they are finalized. Contact Robert Musial at musir@swrcb.ca.gov to get added to the interested persons list.

March 15-18, 2004 (San Diego, CA) - *Annual West Coast Conference on Soils, Sediments, and Water*. For more info visit: <http://www.aehs.com/conferences/westcoast/>

March 29 & 30, 2004 (Oakland, CA) - *Sediment and Erosion Control* training course offered by the Association of Bay Area Governments. For more information visit: <http://www.abag.ca.gov/abag/overview/training/WinterSpring04.pdf>.

April 21-23, 2004 (Phoenix, AZ) - *Western Chapter IECA Regional Conference*. For more information visit <http://www.wcieca.org/>

July 26-29, 2004 (Palm Desert, CA) - *Surface Water Quality Conference and Expo*. For more info visit <http://stormcon.com>.

April 25-27, 2005 - International Salinity Forum Managing Saline Soils and Water. Call for Papers underway. For more info contact: dsuarez@ussl.ars.usda.gov or 909-369-4815.

Members, do you know about an upcoming training session, event, or conference that might be of general interest to the chapter members? Send your calendar items to Sandy Mathews mathews6@lntl.gov.



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Shasta College News

Shasta College, located in Redding, CA, is fast becoming a leading erosion and sediment control training facility for the Northwest region. In 1998, the College was a research site for an Erosion Control Blanket Study and hosted the IECA and WCIECA sponsored Watershed Restoration and Erosion Control Conference. Today, it provides hands-on training through the Center for Science, Industry & Natural Resources Environmental Resources program which includes Certification in Heavy Equipment Operations and Watershed Restoration.

At the beginning of the Fall 2003 semester, Shasta College rolled out the Caltrans approved, online SWPPP training course. This professional training course is fully online, self paced and open entry / open exit throughout the semester to provide maximum flexibility for individual students. Over 70 people took advantage of this training opportunity during the fall semester. For the Spring 2004 semester, you are invited to enroll and complete the course anytime between January 20 and March 26, 2004. The cost is \$75; to sign up call Vicki Shipman at (530) 225-4697. You can also visit the informational web page at: http://online.shastacollege.edu:8900/public/CONS197_JC/

In December of 2003, Shasta College hosted a one-day Erosion Control workshop for the public. The workshop was sponsored by an economic and workforce development grant entitled Construction Technology Training, and was free to the participants. The workshop highlighted the effective use of BMPs and identified frequently misused BMPs. Additionally, the workshop demonstrated case studies and gave participants an opportunity to get dirty and practice installing a variety of BMPs during the afternoon portion of the training workshop. Certificates awarding 6 Professional Development Hours (.6 CEUs) were given to the attendees.

The workshop was highly successful, with 109 contractors, students and staff from over 50 different public and private agencies. John McCullah, CPESC, presented the half-day lecture and half-day hands-on training.

Several exhibitors, ranging from suppliers and consultants to the Regional Water Quality Control Board had information booths at the event. Lunch was catered by Shasta College and materials for the BMP demonstrations were donated by Reed and Graham, Inc, California Paving Products, Midwest Industries, SWA Mountain Gate Quarry, and United Rentals. McEntire Landscaping generously donated 2 staff members as well as provided hydroseeding and mulch blowing demonstrations.

The Shasta College Environmental Resources Department has been steadily increasing its presence in the community and the region as a leader in the Watershed Restoration and Erosion Control training arena. Shasta College will be planning more free trainings this year, as well as seeking the College Board approval for an Erosion Control Training Facility (ECTF). The Erosion Control Training Facility (ECTF) will be designed as a place to train people in the application, installation, and maintenance of various Best Management Practices (BMPs), and will provide a place to research various erosion and sediment control techniques and their effectiveness as well as a possible site for testing for the future Ecotech Certificate. Once the Board approves the ECTF concept (fingers crossed, everyone!), we will be looking for partners to assist in the funding and development of the facility. ☁

Laurie Barnes, Environmental Generalist
Salix Applied Earthcare, (530) 247-1600, laurie@salixaec.com



Participants look on as Lynn Friesner and John McCullah discuss runoff control methods.



Shasta College students prepare the training site.

Field Tour Photos



Lunch break at Crown Cove.



Mike Chase and Renee Castillo finesse dinner at the Coronado Yacht Club.



9. 70% of members visit IECA's website monthly to quarterly, only 12% visit weekly
10. The members most active in IECA activities, at almost all levels, is the group that has been in the profession 6 – 10 years.
11. 77% of members are satisfied with IECA, although only 66% feel they get their money's worth from their membership
12. 96% of members have a high likelihood of renewing their membership
13. 93% of members have a high likelihood of recommending others to join IECA
14. Members support international expansion, though not necessarily connecting with international members
15. The top four reasons people join IECA are:
 - a. professional development (76%)
 - b. the cause, concern or profession is important (61%)
 - c. information availability (44%)
 - d. networking 33%
16. Members want IECA to expand its educational formats to include audio conferencing, CD-ROM and/or online training courses (72%)
17. 79% of members feel staff does its job well, while 63% feel leadership does its job well
18. The bond to IECA strengthens as the years in the profession/years as a member increase
19. Moderate interest to recruit student members (56%)
20. Younger members (25 – 34) generally feel more connected to IECA, feel IECA makes them successful and are 100% likely to renew. This group showed higher percentage of women (32%, overall average is 13%)

Less Favorable

1. Members have a low to moderate sense of social experience/connection/collaboration with other members
2. Members feel a moderate sense of community within the association (47 - 57%)
3. IECA is moderately responsive to member concerns (50%)
4. Only 33% of members are active at Chapter level
5. 44% of members perceive IECA as a trade or manufacturer's association
6. Members have a poor understanding of IECA's goals/objectives

7. Members have a low satisfaction with their value from Chapters (34%)
8. Only 36% of members feel the roles of Chapters and the parent organization are appropriate
9. Email and website have low value in strengthening sense of connection to other members, although email gives strong connection to the association
10. Willingness to volunteer is moderate (47%)
11. IECA should be more active in representing member interests to local (75%), regional (81%) and national (77%) government leaders.

FROM SURVEY COMMENTS

About Chapters

1. Chapters too big, inhibits participation, want benefits at home (10 comments)
2. Chapters do not communicate with members (4 comments)
3. Need more "how to" info for Chapters (events, Board meetings, membership), more support, possible financial support
4. Need to reinforce leadership at Chapter level
5. Make it easier to join just local Chapter, not have to join both local and international

About Education

1. Provide more "at home" courses (2 comments)
2. Start a more scientific and reviewed journal

General

1. Reduce costs of membership and events (8 comments)
2. Five comments about IECA's relationship with suppliers/vendors: Don't like strong affiliation with suppliers; stop being dominated by trade/supplier mentality; vendors control leadership; IECA exists solely for vendors; should cater to designers and contractors instead of suppliers
3. IECA should have more of a Canadian presence (4 comments)
4. Need to stem the notion that IECA is a U.S. organization (2 comments)
5. IECA fails to use members effectively
6. Many organizations do not know who IECA is
7. Need to reach for higher intellectual goals
8. One member felt criticism towards those new in industry, they need encouragement (especially those in their 20s)
9. Would like to see more leadership in setting standards ☁

Erosion Control Quiz

1. In the photo of the Black Canyon of the Gunnison River, what is the primary reason that the left canyon rim and the right canyon rim have eroded differently over so many thousands of years?

1. R-Rainfall (storm energy) hit the rims differently.
2. C-Cover on the rims is different.
3. K-Erosivity of the soil is different.
4. L-Length of slope is different.
5. P-Practices from man (pre-historic or current) have been different on the rims.
6. E-None of the above.

Answer-6 E-None of the above. The primary reason is aspect. The left rim faces south while the right rim faces north. Moisture entering joints and fractures promotes weathering. The south rim does not receive as much sun and does not dry out as quickly as the north rim. (This photo, taken in mid-summer at mid-day does not represent the exposure to the sun during the wetter winter months.) Since moisture is an important factor in erosion, a moist slope will tend to erode at a faster rate than a dry slope. It took about 2 million years for the slopes to erode this way.

2. In the photo of the Burned Pinion Pine, about how many years will it take for pinion pine to grow at this location to the same height after the burn occurred?

1. 15 years
2. 30 years
3. 50 years
4. 100 years
5. 200 years
6. None of the above.

Answer-6 None of the above. According to a Meza Verde National Park ranger, pinion pine is neither reliant upon nor tolerant of fire for regeneration. Fire destroys the seed bank of this species and the plant must “walk” back in., sometimes from miles away, where the fire did not burn. A typical cycle is 350 years.

3. Hundreds of years ago, the cliff dwelling inhabitants of Mesa Verde in Colorado had access to water that seeped from the rocks and formed pools. Today these same pools are stagnant and non-potable. What did these people do or not do to maintain water quality so much better than it is today?

1. They did not use pesticides.
2. They conserved it because it was a precious commodity.
3. They did not use water for personal hygiene.
4. They danced to the rain gods and sacrificed young maidens.
5. They dissolved tincture of peyote cactus as an anti-bacterial purification adjuvant.
6. They used it with reckless abandon whenever they damn well pleased.
7. They did not farm the mesas above the pools without utilizing common sense erosion and sediment best management practices.

Answer: The closest answer may well be number 6. The only reason the pools are stagnant today is that nobody is using the water.

See Quiz, pg. 9



1. Black Canyon of the Gunnison River.



2. Burned Pinion Pine and Juniper.

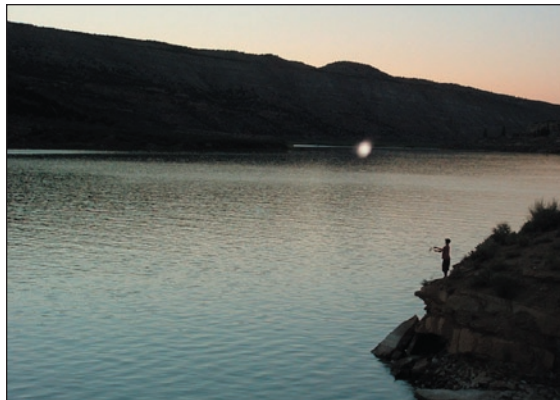


3. Long House of the Cliff Dwellers.





4. Green River.



5. Fishing to sundown.

Quiz, cont'd from pg. 8

4. Since the construction of the Flaming Gorge Dam in 1964, the Green River has been adversely affected. Which of the following statements is true about this site?

1. Water released is much colder than would be normal and exotic plants downstream are able to invade.
2. Water released is much warmer than would be normal and the controlled release results in the increased loss of sand beaches downstream.
3. Water released is much colder than would be normal and the controlled release results in the decreased loss of sand beaches downstream.
4. The controlled releases are low in sediment loads and the regeneration of the native cottonwood trees has been eliminated.
5. The controlled releases are high in sediment loads and spawning grounds of native fish species have been destroyed.

Answer-1 and 4. Water released from the reservoir is far colder than the natural temperatures of the river. The thick sediments of the Green are now held behind the dam, which has led to increased loss (for lack of replenishment) of sand beaches downstream, as well as the destruction of former spawning grounds of native fish species. The controlled flows have eliminated the spring floods that disperse cottonwood seeds. Flooding also scoured the riparian flood plain, keeping exotic plants at bay, while creating backwater areas for the fry of native fish. Now, exotic plants along the riverbank push out native vegetation. There appear to be no cottonwood saplings to replace the aging trees.


5. Who or what will benefit from good erosion and sediment control and water quality practices?

1. Flora (native)
2. Fauna (native)
3. Family (non-native)
4. Friends (invited)
5. Future generations (theoretical)
6. All of the above

Answer-6. ☁

David Franklin, WCIECA Secretary
Metamorphosis Erosion Control, Inc., (707) 226-7333, meci@sprynet.com.

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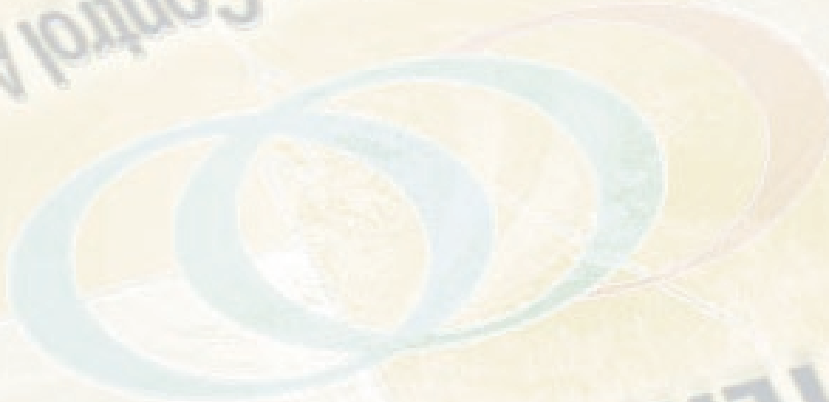


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WCIECA Regional Conference Announcement

Phoenix, Arizona April 21-23, 2004

The Western Chapter is lining up an exciting spring educational and networking opportunity in Phoenix Arizona April 21-23, 2004.

Focused on the theme The I's of Erosion Control - Implementation, Installation, and Inspection and regional issues the conference format will be similar to past successful chapter conferences with the professional development courses (PDCs) on Wednesday, technical papers on Thursday, and field trips on Friday.

The conference will also feature an exhibitor hall, student and youth posters, and opportunities for approved candidates to take the Certified Professional in Erosion and Sediment Control and Certified Professional in Storm Water Quality examinations on both Thursday and Friday.

The conference venue the Doubletree Guest Suites Phoenix-Gateway Center is an all suite property located about 1.5 miles north of the Phoenix Sky Harbor Airport. The room rates include a full breakfast buffet daily. Every suite has refrigerators, high speed internet access, and dataports. You can book your suite at the special conference rate \$109/night through March 23, 2004. Just call 1-800-800-3098.

Remember to visit the Chapter website regularly to get the latest details on the conference. The conference committee is actively working on the details of the event. If you have some time and want to volunteer to help with some aspect of the conference, contact Mike Chase mchase@rainforrent.com or Sandy Mathews mathews6@ltnl.gov.

WCIECA Regional Conference

April 21-23, 2004
Phoenix, Arizona

*An exciting educational and
networking opportunity!*



IMPLEMENTATION • INSTALLATION • INSPECTION