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http://www.crc.siu.edu/naslr.htm

Summer 2010

PRESIDENT'S MESSAGE Michael Smith Pennsylvania Department of Environmental Protection

Greetings Reclamationists! I hope you're all planning to attend the upcoming conference and annual meeting September 12-15 in Carbondale, Illinois. If you've looked at the agenda, you've likely noted the interesting line up of presentations. Dean Spindler and our Illinois hosts have organized a great field trip too. Although these are particularly difficult times for state government employees to travel, I hope you will make every effort to attend the conference. And speaking of that, be sure to notice that employees of NASLR member states (with 2009/2010 dues paid) get a \$20 break on the registration fee and the rate on the conference hotel is excellent. Note that the room block expires on August 12th. Make your reservations now to hold your room and rate; you can always cancel without penalty if you find that you are unable to attend.

You'll also notice that the annual NASLR business meeting is scheduled on Tuesday afternoon. Don't give in to the temptation offered by all the other activities in the Carbondale area. We need you at the annual meeting. Reports from each state in attendance are always encouraged. One of the best aspects of the NASLR meeting is to find out what's going on in other states. I always come back with good ideas for my home state program. Also, we need to have a frank discussion on the future of NASLR as we transition to the next generation of reclamation professionals. Bring your ideas about how to enhance NASLR's value to state governments and reclamationists and how we can make NASLR a stronger organization. If you have ideas or particular discussion items that you would like to have placed on the agenda, please drop me an email at michaesmit@state.pa.us.

As soon-to-be outgoing president I leave you with a final thought. There are many reclamation professionals out

there that have never even heard of NASLR, let alone know about our annual conference. Five years ago, I was one of those people. By luck, I ended up attending the NASLR conference at Lake Placid, NY and was struck by what a good value the conference was, even though the field trip was cut short by a flat tire in the middle of the Adirondack wilderness. I've enjoyed being able to attend every conference since then. But we need to do a better job at getting the word out about NASLR and the annual conference and engaging the next generation of reclamationists. So please copy or forward this newsletter to anyone you think would benefit from NASLR and the upcoming conference.

Looking forward to seeing you in Carbondale

38nd Annual Conference of the National Association of State Land Reclamationists September 12-15, 2010 Carbondale, Illinois

Land Stewardship - Responsible Mining Challenges and Reclamation Successes Through Cooperative Efforts

For registration, hotel, and sponsorship information, please see the meeting package at the end of the newsletter. PLEASE NOTE: The room block to get the government rate expires on August 12th 2010. Please make your reservations now; you can always cancel if you are unable to attend the conference.

2010 Annual Meeting Agenda

Sunday, September 12, 2010

4:00 – 6:00 pm Registration

6:00 – 10:00 pm Welcome Reception – Hospitality Suite Room <u>Monday, September 13, 2010</u>

8:00am	Registration
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8:30am Welcome

8:50am	Scott Elrick, Illinois State Geological Survey, <i>Geology and Resources of Illinois</i>
9:30am	Dan Barkley, Illinois Office of Mines and Minerals, <i>Longwall Mining Issues in</i> <i>Illinois</i>
10:10am	Break
10:20am	Mike Wiant, Illinois State Museum, Using GIS for Managing Archaeological Information
11:00am	Robert Baker, The Ohio State University, <i>FGD By Product Utilization at Ohio Coal</i> <i>Mine Sites: Past, Present, and Future</i>
11:30am	Kim Vories, U.S. Office of Surface Mining, Implications of the Occurrence and Spread of the White Nose Syndrome To Protection of Endangered Bats under SMCRA
12:00pm	Lunch
1:00pm	Paul Behum, U.S. Office of Surface Mining, <i>The AMD Wetland Project at Tab</i> <i>Simco</i>
1:40pm	John Coleman, U.S. Office of Surface Mining, Creating Partnerships in Ilinois and Iowa to Enhance Watersheds by Eliminating Small Acid Mine Drainage using Watershed Cooperative Agreement Program Funds.
2:20pm	Shawn McKinney, Illinois Association of Aggregate Producers, Education Outreach Partnerships between Industry, Communities and Agencies
3:00pm	Break
3:20pm	Bill Hoback, Illinois Office of Coal Development, <i>The Future Through</i> <i>FutureGen</i>
4:00pm	Dean Spindler, Illinois Office of Mines & Minerals, <i>Education Outreach by the</i> Illinois DNR- Office of Mines and Minerals
4:30pm	Adjourn Monday Technical Session

Tuesday, September 14, 2010

8:30am	R.E. Dunker, et al. University of Illinois, A System to Evaluate Prime Farmland Reclamation Success Based on Spatial Soil Properties
9:30am	Jim Gregg, Illinois Department of Mines and Minerals, AML experience at the Red Ember Mine – 500 ac of Coal Waste, A Coal Stockpile to market to investors, An environmental disaster to neighbors.
10:15am	Jack Nawrot, Southern Illinois University, <i>Stream Restoration:</i> <i>Restoring the Functions and Values</i>
11:00am	Break
11:20am	Technical Session Wrap Up and Question and Answer Session
12:00pm	Lunch
1:00pm	NASLR Business Session and Elections
5:30 pm	Reception
7:00pm	Banquet and Awards Presentation, Speaker Marc Miller, Director, Illinois Department of Natural Resources
8:30	Hospitality Suite Open
	Wednesday, September 15, 2010
8:00am	Members and Spouses/Guests Assemble in Hotel Lobby, Board Bus.
8:15am	Field Trip to Consolidation Coal Company Burning Star #5 Mine (Prime farmland reclamation and all aspects of wildlife restoration) Burning Star # 4, Stream restoration project Prairie Eagle Mine, Combination surface, highwall miner and underground mine.
4:00pm	Return to Hotel, Annual NASLR Conference Adjourns

Other Meetings to Note

NAAMLP will be holding its 32nd Annual Conference September 19-22, 2010 in Scranton, PA. For more information, see the attachment on page 4 of the newsletter.

OSM will host a Technical Interactive Forum **Protecting Bats at Coal Mines,** August 31 - September 3, Charleston, WV. For more information visit <u>www.techtransfer.osmre.gov</u>

2010 Annual Meeting Field Trip Details Dean Spindler Illinois Office of Mines and Minerals

The Carbondale area will provide for an enjoyable meeting and an excellent field trip site. As an attendee of approximately 30 NALSR conferences, I have always placed a high value on this part of the conference. One of the sites we will visit will be a 6000 acre coal mine which opened in 1975 and closed in 1990 and has met all reclamation bond release standards and has received several reclamation awards. It has every land use you want to see: **prime farmland, a stream diversion, warm season prairie grass, forest, wetlands including slurry wetlands, and deep water lakes.** It is also habitat for the bald eagle, endangered trumpeter swan, numerous waterfowl, plus beaver, turkey, deer, fox and some big time bass fishing.

This site had all of the above, with the exception of the swan, before mining. If the permit were proposed in today's litigious world, it would probably be touted as a site that couldn't be reclaimed. Come see a site where the environmental stewardship of the land has been met by balancing the need for a mineral with the restoration of the land after mining. Also come to learn what we learned; what worked and what didn't. This site is also a good example where regulators, conservation agencies, universities, and the mining company worked together in problem solving. PS. We will have by-pass the usual observation spot, because the trees on reclaimed ground are getting too big and block the view.

The next newsletter will feature articles from Illinois, Kansas, Ontario, Oregon, and South Carolina. Deadline for copy to be received at the Coal Research Center is October 1 2010.

STATE NEWS/REPORTS

TENNESSEE

Gold Dredging Impacts Bruce Ragon Department of Environment & Conservation

The Coker Creek area of Tennessee lies on the eastern border of the state between Chattanooga and Knoxville.



Although not as rich in gems and precious metals as the North Carolina side of the Appalachians, the area has long been frequented by amateur prospectors. In the early 1900's commercial mining of gold was attempted but the deposits were not sufficient to be profitable over a long term. While a small scale commercial mine was attempted in the 1990's, the vast majority of the activities in the area are recreational. Panning, sluicing and dredging have been popular for many years. The gold is found as placer deposits in and around streams and consists mostly of fine grains although the occasional "picker" (a piece large enough to be picked out with the fingers) may also be found. Black sands may also be further processed (chemically) to produce small amounts of gold.



Suction Dredge in Operation

Recently, prospecting activities have increased dramatically (from a handful a users annually to several hundred); particularly dredgers. Panning is relatively unobtrusive and produces little lasting effect on the stream as very little area is affected. Sluicing creates more disruption as stream substrate is used to construct a dam to direct stream flow through a trough or sluice. The remaining substrate (upstream) is then agitated and hand fed into the mouth of the sluice where the heavy gold particles are trapped in the bottom of the sluice. Dredging is, basically, mechanized sluicing using an engine driven pump to suction up the substrate and direct it through a sluice at the outlet of the pump.

Dredging has the potential to cause substantial damage to streams due to the amount and size of material that can be moved, disruption of the natural grading of the substrate, changing stream flow paths (due to the creation of deep holes, bank undercutting and displacement of substrate) which can increase erosion and riparian damage from the movement of equipment to and from the stream. Macroinvertebrate populations are affected by being displaced and may be destroyed due to loss of habitat, travelling through pump impellers and/or being blanketed by silt from the effluent of a dredge.



Silt Plume from Dredge Effluent



Sluice Dam and Dredge Piles



Piles of Substrate from Dredging Activities



Undercut Bank Due To Dredge Operation



Deep Pool Created by Dredging Operation



Substrate (Benthic Habitat) Removed From Stream Channel



Disruption of Substrate Due to Dredging (note vegetative cover upstream)

During the commercial mining in the early 1900's, mercury was used to process gold from the mined material and was entrained in the resulting spoils and tailings. Redisturbance of these materials allows the mercury to mobilize back into the environment. Studies by the Tennessee Department of Environment and Conservation (TDEC) in the Hiawassee River have shown elevated mercury levels in fish tissue below the confluence of Coker Creek and the Hiawassee.

These activities are concentrated in certain segments of the watershed which exacerbates the problem. Panning, dredging and sluicing are allowed on portions of U. S. Forest Service (USFS) land (Cherokee National Forest) with a valid permit. Outside of the USFS boundaries, some private landowners lease access to segments of the stream to private organizations for these operations also. The net effect of this concentration of disturbance means that certain portions of the stream are continually redisturbed and have little chance of recovering.

The USFS and TDEC are currently conducting benthic, geomorphic and water quality surveys in order to quantify the long term effects of these activities. The USFS is also currently studying their land use and permitting criteria with a goal of minimizing deleterious effects. However, since these activities are recreational as opposed to commercial (much like ATV usage which is also under scrutiny) a balance must be reached that allows a reasonable measure of protection for the environment.



FLORIDA Lou Neuman Department of Environmental Protection

Remember the 20 questions game? To add variety to our newsletter, below are 20 questions. While most questions are about Florida, some are not state specific. Hope you enjoy it.

1. All of the following resources are commercially extracted in Florida except:

- a. sand b. silver c. limestone
- d. phosphate e. peat

2. The Uniform Mitigation Assessment Method in Florida is used for:

- a. calculating angle of repose
- b. calculating density of plants on reclaimed lands
- c. graphing wildlife density via x and y

coordinates

d. evaluating wetlands

3. Which factor should not be used for delineating wetlands in Florida?

- a. vines b. upland plants
- c. wetland plants d. soils

4. Diameter at Breast Height (DBH) means the diameter of a plant's trunk or main stem at a height of ______ feet above the ground.

a. 2.5 b. 3.0 c. 4.5 d 6.0

5. All of the following are examples of morphological plant adaptations except:

- a. hydric adventitious roots
- b. crayfish chimneys
- c. prop roots found on red mangroves
- d. hypertrophied lenticels

6. All of the following are examples of hydrologic indicators that may be useful for delineating wetlands in Florida except:

a. algal mats b. aerophytes c. liverworts

d. lichen lines

7. All of the following are poisonous snakes that are native to Florida except:

- a. black widow b. copper head
- c. water moccasin d. coral
- e. diamondback rattlesnake

8. Which of the following are consider non native species to Florida and should not be recommended for planting on mined lands?

- a. Tropical soda apple (Solanum viarum)
- b. Cogongrass (Imperata cylindrica)
- c. Kudzu (Pueraria montana)
- d. All of the above

9. All of the following are true regarding the proper installation of standard silt fences except:

- a. Bottom of fabric should be 1 3"above ground
- b. Bottom of fabric should be 4-8" in the groundc. Top height of installed silt fence should not exceed 36 inches above ground

d. Fabric should be securely fastened to posts/stakes

10. All of the following are classified as conifers except:

a. American hollyb. Eastern red cedarc. bald cypressd. longleaf pine

11. How much sand is in a hole that is 3 feet wide, 3 feet across, and 3 feet deep?

a. 1 cubic yard b. 3 cubic yards c. none d. 27 cubic yards

12. If a landowner wants to plant pine trees on land after it has been mined and he wants 6 x 10 feet spacing, approximately how many trees to the acre will be needed?

a. 222 trees b. 550 trees c. 726 trees d. 1,220 trees

13. The approximate weight of a cubic yard of dry sand is?

a. 25 pounds b. 250 pounds c. 2,500 pounds d. 12,500 pounds e. 27,500 pounds

14. If a mine site is in a FEMA classified FloodZone A (100 year flood zone area), this means:a. The site will be flooded every year for the next100 years

b. The site will be flooded only once every 100 years

c. There is a 1 percent annual chance the site will be flooded in any given year

d. The sum of the rainfall for the next 10 years at the site should equal 100 inches

15. If an approved reclamation plan requires the operator to plant two acres of grass, how many square feet of grass must be planted?

a. 1,760 b. 5,280 c. 43,560

d. 85,120 e. 115,280

16. Fuller's earth (a resource mined in Florida) has been used for:

a. cleaning oil and grease spillage

- b. cat litter
- c. making pharmaceutical products
- d. all of the above

17. The largest dredge in the United States is found in what part of Florida?

a. south b. northeast c. central

d. panhandle

18. An inspector in Florida may encounter which of the following?

a. poison ivy, poison sumac, and poison wood

b. temperatures below freezing and above 100 degrees (F)

c. ticks, chiggers/redbugs, yellow flies, and mosquitoes

- d. pythons and alligators
- e. all of the above

19. From a statistical standpoint, which term best means "a systematic distortion"?

- a. precision b. bias
- c. accuracy d. parameter

20. A 50 pound bag of 10-10-10 fertilizer means:

- a. It contains 10 lbs of organic Nitrogen
- b. It contains 10 lbs of Iron

c. The contents in the bag actually weighs 30 pounds

d. None of the above

How many answers did you get right? Answers

 1. B
 2. D
 3. A
 4. C
 5. B
 6. B

 7. A
 8. D
 9. A
 10. A
 11. C
 12. C

 13. C
 14.C
 15. D
 16. D
 17. A
 18. E

 19. B
 20. D



38nd Annual Conference of the National Association of State Land Reclamationists

September 13-15, 2010

Carbondale, Illinois

Land Stewardship - Responsible Mining Challenges and Reclamation Successes Through Cooperative Efforts

Greetings NASLR Members!

In this package, we hope to provide you with all relevant information for attending the 2010 NASLR Conference in Carbondale, IL.

Getting to Carbondale:

Airports serving the region include:

St. Louis- Lambert Field. It is approximately 120 miles from the Conference Center. If you'd rather not rent a car, there are shuttle available through BART shuttle <u>http://www.bartshuttle.com/</u>. However, their rates are comparable to Cape Air's regional service. See Williamson County Airport below.

Barkley Regional Airport- Paducah, KY (65 mi)

Evansville Regional Airport-Evansville, IN (100mi)

Williamson County Regional Airport, Marion, IL (10 mi)-Regional carrier Cape Air offers connecting flights to and from St. Louis several times daily. A round trip ticket is \$100 plus applicable fees & taxes. See details and flight times here http://www.capeair.com/common/index.php?lng=CAPE&div=AA&nav=AA&page=A01. Rental cars are available at this location but may be limited so reserve early.

Cab Fare from the airport to the Conference Center is 23\$ each way.

Lodging:

The Holiday Inn & Conference Center is offering the government rate of \$70. NASLR has a block of rooms which will expire on August 12th. Even if you do not have official notification of travel approval, please make your reservation before we lose our room block. You will have until 6 pm on the day of check in to cancel without penalty. After August 12th, the government rate will be subject to availability. Please mention the NASLR conference when reserving your room.

Things to do while you are here:

Southern Illinois is home to the <u>Shawnee National Forest</u>, <u>Crab Orchard National Wildlife Refuge</u>, and the <u>Shawnee Wine</u> <u>Trail</u>. The conference center is also just a few short miles to southern Illinois' newest winery, <u>Walker's Bluff</u>, or the <u>Eqyptian Revival Day Spa</u>. Visit the <u>Carbondale Convention & Tourism Bureau</u> for more information on things to see and do during your stay. If you have any further questions about the area, contact <u>Anna Caswell</u>.

Spouse Tour:

This year's spouse tour will include a tour of the Little Grassy Fish Hatchery, a drive through Giant City State Park, a shopping/beverage break at the artist's enclave, the Makanda Boardwalk, scenic photo stop at the valley of Bald Knob Cross, lunch on your own in Alto Pass, IL, a winery stop, and finally, a stop at Rendleman's Orchard and gift shop. All surrounded by the beautiful Shawnee National Forest.

Following, you will find a registration form, agenda, and sponsorship/exhibitor forms. We look forward to seeing you!

38th Annual NASLR Conference September 13-15, 2010

Holiday Inn and Conference Center, Carbondale, Illinois

Land Stewardship - Responsible Mining Challenges and Reclamation Successes Through Cooperative Efforts

Name:	Name tag (if	different)	
Title :			
State / Organization / Dept			
Address:	City:	State:	
Zip Code: Pho	one:		
E-mail :			
Registration Fees: Please indicate the number o	f persons that will par	ticipate in each activ	ity to assist in planning.
Number Fee			
@ \$150 Associate Member Registration			
@ \$130.00 Individual Member Registratic	on (Active State memb	ership required)	
@ \$100.00 Spouse / Guest Registration	Name:		
Banquet (Included in Registration Fee)			
Field Trip (Included in Registration Fee)			
Total Fees \$ Make checks payable to	o NASLR and mail to:	NASLR c/o Coal Research 405 West Grand, r Carbondale, IL 629 ATTN: Anna Caswo Email: <u>aharring@s</u>	nc4623 901 ell

If you would like to pay using a credit card, you may do so using Paypal. Please contact Anna Caswell at the above email for instructions. You need not have a Paypal account to use this service.

SPONSOR / EXHIBITOR INFORMATION

National Association of State Land Reclamationists 2010 Conference Holiday Inn Hotel and Conference Center Carbondale, IL

September 12-15, 2010

(Company/Organization Name)	
(Contact Name)	(Phone)
(Address)	
(City, State, Zip Code)	
Exhibition Booth (8x10): We request booth	(s) @ \$200.00 per booth.
Гуре of Donation: Cash (Amount) (Spec	ify event being sponsored, if desired)
*Doorprizes(Indicate	Type and Amount) samples, cups, etc. with or without company logos)

Please make checks out to NASLR. If you would like to pay by credit card using PayPal, please contact Anna Caswell at <u>aharring@siu.edu</u> for instructions.

Please mail the completed form along with payment to:

NASLR c/o Coal Research Center 405 West Grand mc4623 Carbondale, IL 62901 ATTN: Anna Caswell