



UPCOMING MEETINGS:

SURF 20 – July 24-26, 2012
Colorado State University

SURF 21 – December 12-13, 2012
National Academy, Washington, DC
Registration and Agenda will be
available on the SURF website:
www.sustainableremediation.org

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SURF REPORT – WINTER 2012

MESSAGE FROM SURF PRESIDENT, KARIN HOLLAND

After a momentous 2011 for our organization, I am anticipating another successful year for SURF. Our 2012 meeting in San Diego last month ensured a wonderful kick start to the year, welcoming over 120 registrants, including several representatives from overseas. It was the first time SURF hosted a 3-day meeting and this approach was embraced by attendees and we received very positive feedback. SURF organized an international student poster session during SURF 19 that proved to be a highlight of the meeting. Meanwhile, our various initiatives continue to gather momentum: our academic outreach initiative is securing additional student chapters; our technical initiative is working on new guidance that builds upon previous SURF resources; and our communications and outreach committee is utilizing ever more innovative approaches to spread our mission. And these examples are but a few of our recent endeavors!

One of my goals over the next year is to further increase the value SURF provides to our members through the dissemination of meaningful resources, networking, and the exchange of knowledge. With this in mind, I welcome your feedback on how SURF can better serve you so that you continue get the most out of the organization. A second major objective is to keep increasing our membership base, both in terms of numbers and diversity of membership. I certainly hope that the enthusiasm generated among the students in the last few years will perpetuate and result in the formation of even more student chapters and members in 2012!

I would like to thank all our members for their continued energy and dedication and look forward to working with you this year.

Karin Holland, SURF President

Greetings from SURF! This newsletter is published quarterly by the SURF Communications and Outreach Committee to provide you with highlights of SURF's activities and opportunities and developments in the field of sustainable remediation.

The SURF website, www.sustainableremediation.org, continues to be our primary resource for sharing the latest and greatest news about SURF. Our Links pages act as portals to resources, tools, information, and documents from other organizations and individuals. The Calendar shows remediation, sustainability, and related conferences, as well as deadlines for submitting abstracts. Suggestions for additions and improvements are welcome by using the Contact SURF form on the website or by emailing administrator@sustainableremediation.org.

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Contact chairs for volunteer opportunities!

ABOUT SURF

The Sustainable Remediation Forum (SURF) was initiated in 2006 to promote the use of sustainable practices during remedial action activities with the objective of balancing economic viability, conservation of natural resources and biodiversity, and the enhancement of the quality of life in surrounding communities. The mission of SURF is to maximize the overall environmental, societal, and economic benefits from the site cleanup process by:

- Advancing the science and application of sustainable remediation
- Developing best practices
- Exchanging professional knowledge
- Providing education and outreach

LinkedIn  *Did you know that SURF is on LinkedIn?* 

LinkedIn members: Search for "sustainable remediation forum" in Groups to join SURF's discussion group on the LinkedIn professional networking site (www.linkedin.com). Look for the SURF logo and start a discussion!

Also follow SURF on  **@SR_Forum !**

SURF Members: Are you making a presentation or preparing a poster for an upcoming conference? Let us know and we'll help get the word out! Email communications@sustainableremediation.org.



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SURF Zone – SURF 19 in San Diego, CA

SURF 19 was held at the University of California, San Diego (UCSD) in San Diego, California from January 31 to February 2, 2012. The theme of the meeting was “Share the Vision Towards a Sustainable Future,” and featured presentations focused on the sustainable redevelopment, community partnerships, and growth of the sustainable remediation field. The group was welcomed by David S. Woodruff, the Director of UCSD’s Sustainability Solutions Institute (SSI) for interdepartmental research, education, outreach, and campus-as-a-test-bed activities in environmental sustainability. During the meeting, SURF thanked its outgoing Board members and welcomed its 2012 Board of Trustees, including:

- President – Karin Holland, Haley & Aldrich
- Vice President – Nick Garson, Boeing
- Secretary – Karina Tipton, Brown and Caldwell
- Treasurer – Brandt Butler, URS
- At-Large –
 - Stew Abrams, Langan Engineering and Environmental Services
 - Angela Fisher, GE Global Research
 - Curt Stanley, Shell
 - Dan Watts, NJIT
 - Mike Miller, CDM

SURF would like to thank the various organizations for their sponsorship of refreshments and receptions during the meeting, including: AECOM, Geosyntec, Haley & Aldrich, Hunton and Williams, Langan Engineers, Opper and Varco, Procopio, Republic Services, SCS Engineers, and Terra Systems. Day 1 of the meeting featured the Sustainability Symposium with participation from the American Society of Landscape Architects, Institute for Sustainable Infrastructure, San Diego Environmental Professionals, UCSD Calit2, UCSD SSI, and the U.S. Green Building Council – San Diego Chapter. Organizational and audio visual support was also provided by UCSD SSI and Calit2.

Upon conclusion of the formal SURF 19 proceedings, several members participated in a hike in Torrey Pines State Park, overlooking the beautiful Pacific Ocean.



SURF attendees from the University of Nottingham in the UK.

Upcoming SURF Meetings

SURF invites you to attend the 20th meeting of the SURF community! SURF 20 will be held at Colorado State University in Fort Collins, Colorado on July 24-26, 2012. The first day of the meeting will be devoted to Student Chapter activities.

SURF 21 will be held on December 12-13, 2012 at the National Academy in Washington, DC. This is sure to be



a lively meeting falling on the heels of the national election.

Keep an eye on the SURF website and the Meetings and Bulletin Board pages for information about registration, agenda and meeting logistics. If you are interested in volunteering to help plan the meeting programs, email meetings@sustainableremediation.org.

Brandt Butler – Treasurer’s Corner

Fellow SURFers,

My tenure as SURF's treasurer will end in January 2013. I have thoroughly enjoyed the role and would run again if the By-Laws allowed. To ease the transition and give prospective candidates a taste of the treasurer's roles, I'm recruiting apprentices to work with me through the next year before, during, and after our SURF meetings. The treasurer gets involved when money is involved. My role includes:

- Collection of sponsorship funds, membership dues, and meeting fees;
- Payment of SURF expenses, including facilitator, technical editor, facility fees, insurance, etc.;
- Filings for 501(c)(3) status and insurance coverage;
- Reconciling our checking account;
- Keeping the books - a ledger-entry spreadsheet;
- Collaboration with our accountants for the annual IRS filing; and
- Others as they arise.

The treasurer serves a two year term. The full range of responsibilities is memorialized in our By-Laws (see www.sustainableremediation.org/library/other/). Email me at treasurer@sustainableremediation.org if you are interested. I look forward to working with those who may be called to this service!

ITRC Technical & Regulatory Guidance Document and Training

In November 2011, the Interstate Technology & Regulatory Council (ITRC) GSR Team published “Green and Sustainable Remediation: A Practical Framework,” which provides a generalized framework intended to be flexible and scalable to each phase of the remedial process. The GSR Framework covers both remedial planning and implementation. The guidance also provides tools to perform sustainability evaluations and case studies. Many SURF members have led and participated in the ITRC GSR Team that developed this guidance. ITRC offers online training in the use of the guidance document. Future trainings for 2012 are scheduled on April 26, July 19, and November 27. Information is available on the ITRC website at www.itrcweb.org.

Academic Outreach Initiative

A memorable highlight for SURF 19 attendees was the student poster session, whose theme was: *What is the intersection between your field of academic interest and sustainable remediation?* Fourteen students, representing the following national and international academic institutions, presented posters based on their undergraduate or graduate research: Syracuse University, Colorado State University, Colorado School of Mines, University of California Riverside, University of California San Diego, and the University of Nottingham (six of Dr. Paul Nathaniel’s students traveled from the UK to attend the meeting). Members of the SURF Board of Trustees judged the posters, and awarded a prize to Zeno Levy (Syracuse University) for his poster entitled, “Restoring Recreational Opportunities, Habitat, and Ecological Integrity to the Onondaga Creek Corridor: Analysis of the North Valley Area of Syracuse, NY.” Although only one prize could be awarded, judges and



attendees alike agreed that all of the posters were excellent and extremely informative.

Academics are launching several new SURF student chapters, including at Colorado School of Mines, University of Illinois Chicago, and Clarkson University. Dr Michelle Crimi (Clarkson University) proposed a new academic outreach technical initiative, the SURF Student Chapter Competition. Members of established student chapters would design sustainable solutions to a remediation problem devised by a group of SURF remediation professionals. The designs would be judged by a panel of SURF judges, who would award prizes to one or more of the student chapters.

During the SURF 19 academic outreach break-out session, professionals and students conducted a lively brainstorming session to identify the advantages offered by SURF to academics and by academics to SURF. In collaboration, SURF and student chapter members are currently combining the brainstorming results to develop an academic value proposition that will be used to encourage more academics to join and more student chapters to form.

SURF 19 Student Poster Winner

Zeno Levy, a Masters of Science candidate at the State University of New York College of Environmental Science and Forestry (SUNY-ESF) in Syracuse, New York, was selected as the winner of the Student Poster Competition at SURF 19. Zeno presented a poster entitled "Restoring Recreational Opportunities, Habitat, and Ecological Integrity to the Onondaga Creek Corridor: Analysis of the North Valley Area of Syracuse, New York," which was a collaboration with Colin Bell (UNC Charlotte), Johanna Cuffy (Barton and Lougudice P.C.), Gui Lin (John Todd Ecological Design Inc.) and Stewart Diemont (SUNY-ESF).

As part of a semester-long class project in Stewart Diemont's "Ecosystem Restoration Design" course, the team constructed a comprehensive plan for sustainable ecological restoration along the North Valley reach of the Onondaga Creek corridor. The team developed a 50% restoration design through extensive site visits, interviews with local stakeholders, and analysis of site-specific ecological research studies. The plan incorporates the three primary dimensions of sustainability: society, environment, and economy.

As the winner of the competition, Zeno was awarded a \$1,500 stipend toward attendance at a future SURF meeting. Upon completion of his M.S. in Environmental Science (with a specialty in Wetlands and Water Resources) at SUNY-ESF, he will pursue a Ph.D. in the same program.

SURF Board: 2012 Goals

The 2012 SURF Board of Trustees has developed a preliminary list of objectives and goals for 2012. Contact SURF President Karin Holland with your ideas and input, or if you'd like to champion or support any of the following activities.

- Expand member benefits;
- Expand the diversity of organization;
- Facilitate better communication and cooperation between student chapters and faculty advisors;
- Improve regulatory engagement;
- Form new partnerships with like-minded groups;
- Create additional SURF publications, including overview pamphlets and brochures geared toward a wide audience, checklists for use during project implementation, and presentation-ready slides for academic use;
- Develop webinar opportunities;
- Recruit and train potential treasurer replacements;
- Fund and support research through the creation of a research foundation; and
- Create a five-year plan for the organization.



Sustainable Risk Assessment in the UK

The UK department of the environment (Defra) is about to introduce a sustainable remediation appraisal step into the risk assessment of sites being considered for determination as statutory contaminated land - roughly equivalent to being listed on the National Priorities List (NPL). The changes to Part 2A of the Environmental Protection Act 1990 are being made in secondary legislation, i.e. as guidance issued by the Secretary of State of the Environment. One change is the introduction of four tiers of possibility of significant harm - Categories 1 through 4. Categories 1 and 2 meet the legal definition of contaminated land. Categories 3 and 4 do not. Where a regulator is unable to determine the significance of a given level of risk at in Categories 2 or 3, then a sustainability appraisal of possible remediation options is carried out to determine whether remediation will result in a net benefit compared to the present situation.

Additionally, a toxicological evaluation tool has recently been released to refine risk assessment at the elevated levels at which land is deemed contaminated. As a result, very few sites may require such an appraisal in practice, but the provision is quite significant because of the precedence it sets.

New Leaking UST Footprint Calculator

A new Leaking UST Footprint Calculator has been developed with input and funding from the U.S. EPA and the California State Water Resources Control Board, and is now available for public review and use. The calculator estimates and compares the greenhouse gas emissions (normalized to CO₂) for the five most common remediation technologies used at contaminated underground storage tank (UST) sites. The tool is meant to help cleanup professionals and

stakeholders better understand the greenhouse gas emissions of common technologies. It provides a breakdown of where emissions come from and where they can be reduced for remedy optimization. The calculator is in Beta release, and questions, comments, and other feedback is welcomed (ustcalc.org).

Wisconsin Sustainable Remediation Guidance

There is a new GSR guidance available: *Green & Sustainable Remediation Manual - A Practical Guide to Green and Sustainable Remediation in the State of Wisconsin* (PUB-RR-911, January 2012). The manual is available at Wisconsin Department of Natural Resources Remediation and Redevelopment website at <http://dnr.wi.gov/org/aw/rr/cleanup/wisrr.htm>.

THANK YOU TO SURF'S SPONSORS!

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SURF TECHNICAL INITIATIVES

SURF is currently engaged in several technical initiatives, including:

- Developing a consensus-based framework for sustainable remediation practices
- Fostering standardized sustainable remediation criteria and metrics
- Promoting consistency, transparency, and best practices for Life Cycle Assessment (LCA)
- Developing a "site of sites" database, an internet-based resource that will categorize and



provide links to existing sustainable remediation resources and case studies

- Exploring the viability of a sustainable remediation site rating and professional certification system
- Working towards the integration of sustainable remediation and sustainable redevelopment

SURF's technical initiatives are entirely member supported. To get involved with the SURF Technical Initiative Committee or any of the working groups above, please contact Paul Favara.

SUSTAINABLE REMEDIATION EVENTS AND CONFERENCES

Remediation of Chlorinated and Recalcitrant Compounds – The Eighth International Conference – May 21-24, 2012

The Eighth International Conference on Remediation of Chlorinated and Recalcitrant Compounds will be held in Monterey, California, May 21-24, 2012. Make plans now to attend. The breadth and depth of the technical program, combined with ample opportunities to meet and share experiences and ideas with other environmental professionals, will make this a valuable investment for you and your organization in 2012.

The conference will have a full track for Green and Sustainable Remediation. Preliminary session titles include:

1. Estimating Remediation Impacts: Tools and Approaches
2. Demonstrating Value of GSR: Making Decisions that Reduce Footprint
3. Integrating Renewable Energy into Remedial Programs to Achieve Cost-Effective Solutions
4. Incorporating GSR Practices into Remedy Selection and Design

5. Incorporating GSR Practices into Remedy Operation and Optimization
6. Incorporating Societal and Economic Aspects into GSR

2012 Environmental Monitoring and Data Quality Workshop – March 26-29, 2012

The Department of Defense (DoD) Environmental Data Quality Workgroup is pleased to announce the 9th annual DoD Environmental Monitoring & Data Quality (EMDQ) Workshop, which includes technical training sessions, technical presentations, a plenary session featuring distinguished speakers, a Q&A forum, component meetings, a poster session/meet & greet, an update on the DoD ELAP, and networking opportunities with members of the environmental community. This workshop is open to all interested environmental professionals involved with DoD sites or projects including representatives from the DoD services, other federal agencies, state, local, and tribal governments, academia, and the private sector.

The workshop takes place March 26 through March 29, 2012, at the Hyatt Regency La Jolla, in La Jolla, California. More information is available on the workshop website.

Invitation to Present Sustainable Remediation Papers at 2012 UMass Soils Conference

Mike Miller of CDM Smith, co-chair of the SURF Academic Outreach Initiative, is organizing a Sustainable Remediation session at the 28th Annual International Conference on Soils, Sediments, Water, and Energy, October 16-18, 2012, University of Massachusetts at Amherst. Mike has been organizing highly successful and well-attended SR sessions at this conference since 2009. Please contact Mike directly at millerme@cdmsmith.com or 617-452-6295 if you are



interested in being a part of the 2012 session. The deadline for invited abstracts is April 6, 2012. The call for abstracts can be accessed at the conference website (www.umasssoils.com/papers.htm).

COMPETITIONS, SCHOLARSHIPS, AND GRANTS

Document Your Environment: Student Multimedia Contest sponsored by the National Archives

In the 1970s, the EPA hired freelance photographers to capture environmental issues and challenges in the United States. Forty years later, the National Archives is inviting students ages 13 and up to seek inspiration from one of these photos and start creating the next generation of Documerica records. The original Documerica photos can now be found at the National Archives, which has digitized more than 15,000 of these photos, many of which are available on Flickr and in our online catalog. Today, the National Archives and the EPA have continued this spirit of capturing the environment and life through their recent project, State of the Environment. Learn more at the contest website.

How to Establish a SURF Student Chapter

SURF encourages the use of principles and concepts of sustainable remediation through education, research, and dissemination of information. SURF believes that the goals of the profession can be achieved in part by encouraging the consideration, study, and application of sustainable remediation fundamentals, principles, and concepts at colleges and universities. To aid this effort, SURF welcomes the establishment of Student Chapters at institutions of higher education and will endeavor to assist their creation and activities.

The basic requirements to establish a Student Chapter are not complex; essentially there must be a faculty

advisor and at least five student members, all of whom are members of SURF. The proposed chapter must qualify as a recognized student organization at the parent academic institution, or meet a few requirements if the academic institution does not recognize student groups. Guidance on starting a student chapter, details of the requirements, and a sample constitution is available on the SURF website (www.sustainableremediation.org/membership).

OTHER NEWS AND ANNOUNCEMENTS

Regulators: Are you interested in making a presentation or preparing a poster for an upcoming SURF meeting? Contact SURF's Government Outreach volunteers Dave Woodward (dave.woodward@aecom.com) or Buddy Bealer (leroy.bealer@shell.com) to learn more about this opportunity. Note that SURF waives meeting registration fees for all invited presenters.

Update to Envision™ Rating System

An updated version of Envision™, the Institute for Sustainable Infrastructure (ISI) rating system, is now available (www.sustainableinfrastructure.org).

The new version of Envision™ includes significant alterations as the result of public comments submitted since July 2011 and the merging of the ISI rating tool with a similar tool developed by the Zofnass Program for Sustainable Infrastructure at Harvard University.

Details associated with the individual credentialing process, including training schedules, fees, application procedures, and guidelines for individual infrastructure project submissions for ISI accreditation, are also available.

For questions or additional information, please contact Bill Bertera, ISI Executive Director, at 202-218-6725.

SURF MEMBERSHIP

Join SURF or Renew your Membership TODAY!

The practice of sustainable remediation is gathering world-wide momentum, and SURF is a rapidly growing and influential organization. By joining SURF, you establish partnerships and build relationships with a wide variety of stakeholders: industry and agency peers, customers, clients, members of academia, technology vendors, and the public. You'll have access to members who are helping to shape green and sustainable remediation guidance and assessment tools, academics and their research on innovative remediation technologies, and discussions about the state of the practice and lessons learned. The SURF website, meetings, and communications provide a clearinghouse and source for the latest information about policy, case studies, best practices, and educational opportunities.

SURF is engaged in several exciting technical initiatives, including developing a "site of sites" database, an internet-based resource that will categorize and provide links to existing sustainable remediation resources and case studies, exploring the viability of a sustainable remediation site rating and professional certification system, and working towards the integration of sustainable remediation and sustainable redevelopment.

The benefits of SURF membership are many, but simply put, you will improve your understanding of sustainable remediation, network with hundreds of other professionals, enhance your career opportunities, and have fun doing so.

SURF has several membership levels based on an individual's qualifications: Regular Member (dues are \$150 annually), Government Member (dues are \$100 annually), Academic Member (dues are \$100 annually), and Student Member (dues are \$25 annually).

The term for all classes of Members is February 1 through January 31 of the following year.

Learn more and apply for membership at www.sustainableremediation.org/membership.

NEWSLETTER SUBMITTALS:

Deadline is the 15th of March, June, September, and December for the following quarterly issue. Contact the Newsletter Editor by email for submittal:

Amanda McNally,
newsletter@sustainableremediation.org

Submittals are subject to editing for space considerations.

Address Changes

Please submit to the SURF Secretary at secretary@sustainableremediation.org.

Circulation

The newsletter is circulated to about 600 individuals directly and is posted online at www.sustainableremediation.org.

Sponsorship

Sponsorship is a great way to demonstrate to your communities, clients, employees, or shareholders that you are committed to advancing the science and application of sustainable remediation.

As an appreciation for sponsorship:

- Your company or organization will receive complimentary SURF memberships and meeting registrations
- Your company's or organization's name will be displayed on the SURF website and hyperlinked to your webpage
- Your company's or organization's name will be displayed in the SURF newsletter and announced during SURF events
- Your company or organization may use the SURF Sponsor logo

To inquire about sponsorship options, contact membership@sustainableremediation.org.