



UPCOMING MEETING:

**SURF 34: April 5-6, 2017 – Parsons,
Pasadena, California**

Registration and details for the upcoming SURF meeting will be available on the SURF website soon!
www.sustainableremediation.org

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SURF REPORT – WINTER 2017

SURF 33: WHAT WE’VE LEARNED AND WHERE WE’RE GOING

In October, SURFers gathered just outside our nation’s capital to share perspectives on the theme “Sustainable Remediation: What We’ve Learned and Where We’re Going.” What have we learned? Paul Gilman (Senior Vice President and Chief Sustainability Officer, Covanta Energy) reflected on a series of workshops hosted by The National Academies in 2014 that were focused on best practices



A group of SURFers pause for a photo in front of the Nationals baseball stadium after an Anacostia River boat tour. (L to R: Marisa Tychon, Boeing; Beth Moore, U.S. Dept. of Energy; Kathy Adams, Writing Unlimited; Karina Tipton, Brown and Caldwell; Matt Ambrusch, Langan Engineering; and American University students and interns Will Grinnell and Mason Brestle) (Not pictured/photographer: Captain Trey Sherard, Anacostia Riverkeeper)

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Contact chairs for volunteer opportunities!

ABOUT SURF

The Sustainable Remediation Forum (SURF) promotes site assessment and remediation that protects human health and the environment while maximizing environmental, social, and economic benefits throughout the project life cycle by:

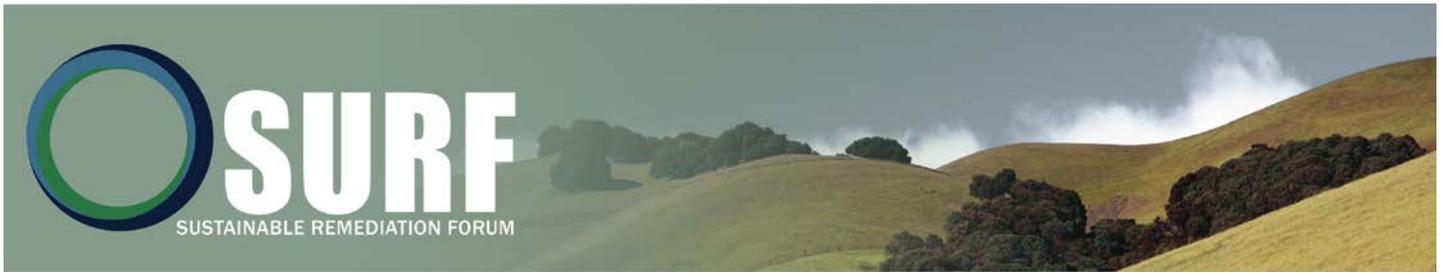
- Advancing the science and application of sustainable remediation
 - Developing best practices
 - Exchanging professional knowledge
 - Providing education and outreach
-

Greetings from SURF! This newsletter is published quarterly by the SURF Communications 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 and sustainable remediation. Our Online Resources page provides a one-stop shop for resources, tools, information, and documents. 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.

IN THIS ISSUE:

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-



A RUNDOWN OF SURF'S QUARTERLY WEBINARS IN 2016

SURF's Board of Trustees continues to pursue avenues to achieve the high-priority objectives identified by members in early 2016 (see the previous newsletter for details). As part of SURF's 2016 action plan, the Board of Trustees voted to hold four webinars per year. The vote was held mid-year and SURF reached its goal, hosting webinars in July and November 2016.

For the first webinar, SURF collaborated with nonprofit organizations EcoAdapt and the National Adaptation Forum to focus on "Climate Change and Resilience within Sustainable Remediation." The webinar featured highlights of SURF 31, including a comprehensive overview of challenges and opportunities focusing on legal and insurance implications. A new SURF Technical Initiative will be evaluating the necessary planning, research and activities to ensure the long-term sustainability of site remediation and examining the benefits of rehabilitated land to strengthen community and ecosystem resilience.

Over 100 people participated. Positive feedback was obtained from a diverse audience that included a global environmental technology firm and tribal climate change coordinator. The webinar proceedings, along with answers to participants' questions, are available by clicking [here](#).

The second webinar, "Climate Change and Resilience within Remediation: Environmental Agencies' Perspectives" highlighted programs being implemented by the U.S. Environmental Protection Agency (USEPA) and the Massachusetts Department of Environmental Protection (MassDEP). Carlos

SHARE YOUR NEWS; KEEP US POSTED

Do you have sustainable remediation news to share? SURF's LinkedIn page, managed by the SURF Communications Committee, can be used to spread the word about news and announcements and allows SURF members another opportunity to connect. Or, write a viral blog entry on the SURF News blog on SURF's website!

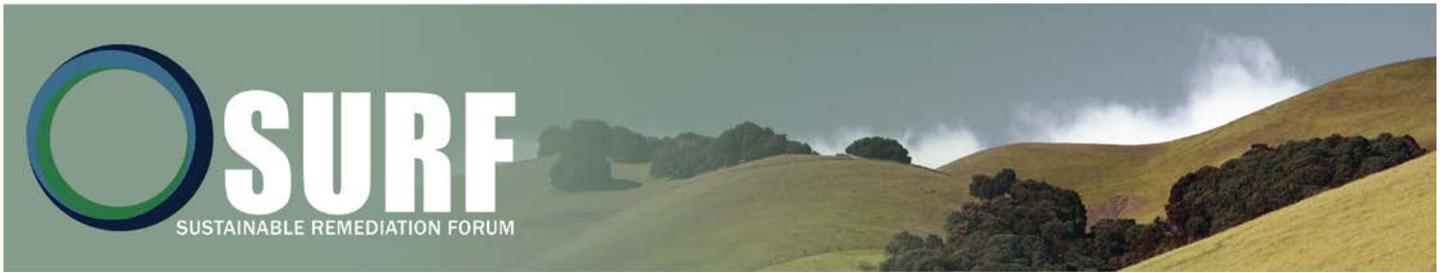
To join SURF's page on LinkedIn, search for "Sustainable Remediation Forum" and look for the SURF logo. To post a blog entry, contact Jake Torrens at jtorrens@haleyaldrich.com.

Pachon and Anne Daily provided USEPA perspectives; MassDEP programs were illustrated in presentations by Tom Potter (MassDEP) and Barbara Maco (SURF Vice President).

The progress of SURF's Climate Change and Resilience Technical Initiative was discussed during the webinar. Technical Initiative members represent both the private (global and small business) and public sectors, including regulators, nongovernmental organizations, and academia. The team is considering all aspects of site remediation to ensure long-term sustainability and climate resiliency. Research findings, recommendations, and case studies will form a white paper planned for publication in December 2017. The paper will be shared with the Climate Adaptation Knowledge Exchange (CAKEx.org).

Quarterly webinars will continue in 2017, so look for announcements on the SURF website news feed and LinkedIn for dates.

Contributed by Barbara Maco



CIRCLING BACK: FALL 2016 AEHS CONFERENCE

The 32nd Annual International Conference on Soils, Sediments, Water, & Energy was held on October 17-20, 2016 in Amherst, Massachusetts. The conference attracted a variety of participants, including regulatory agency personnel, consultants, vendors, and academics. The conference featured several sessions emphasizing sustainable remediation.

State regulatory personnel from Massachusetts and Connecticut CT presented during the technical session “New England’s Regulatory Perspective on Greener Cleanups.” Presenters said that although their agencies did not have state-specific regulations on sustainable remediation, remediation practitioners are encouraged to use the ASTM guidance documents on sustainable remediation and best management practice (BMP) implementation.

The Connecticut Department of Energy and Environmental Protection (CT DEEP) is starting to track the names and amount of people implementing green and sustainable remediation (GSR) across the state. The agency has noted the increasing use of green vendors that offer carbon offset programs as part of their product



production or service, green service providers (e.g., labs), and green remediation contractors.

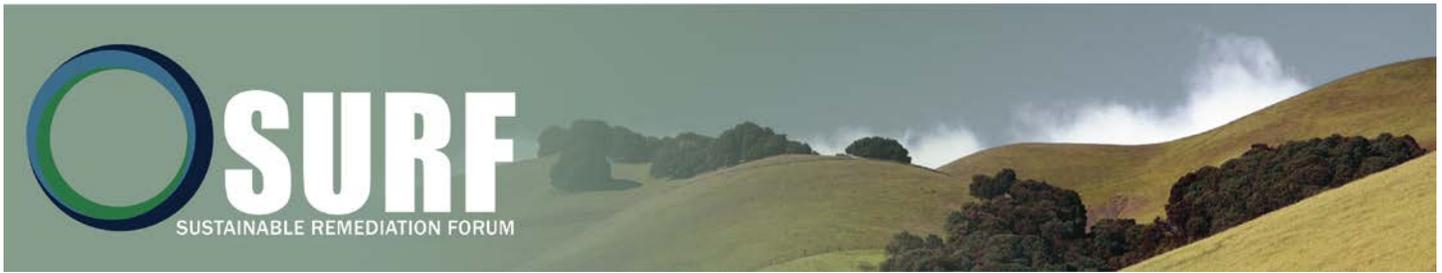
Russell Downey (Phizer Inc.) highlighted the value of greener cleanups, including a case study in which several treatment technologies were used at a RCRA corrective action site in North Haven, Connecticut. GSR added value to the project by considering all stakeholder groups, evaluating the options

*Audience during a technical session on Day 2 of the 32nd Annual AEHS Conference.
Photo Credit: © 2016 Patankar Photography & Design*

between risk-based remediation and aggressive remediation, and considering the environmental footprint of the project. As part of this discussion, Russ urged GSR practitioners to consider remediation costs as more than solely monetary.

Other presentations focused on sustainable remediation as well. Geoffrey Schwartz (GZA) presented a case study in which a sustainability analysis was conducted and a carbon footprint was quantified for an in situ stabilization remedy at a former manufactured gas plant site. Sustainability was incorporated into project decision making by evaluating project elements (e.g., material use, power source, in situ vs. ex situ remedy

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for risk-informed remedy selection, closure, and post-closure of contaminated sites. The workshops mirrored many of the perspectives shared among SURF meeting participants two years since the workshops were held:

- We have seen an evolution of decision-making processes over the years.
- There is flexibility in existing regulations that allows for the inclusion of sustainability.
- We need realistic models and timeframes in which to study sustainability.
- Frequent and effective communication with stakeholders is of utmost importance.
- We must weigh the value of limited environmental resources in the context of site remediation decisions.

Many of these themes were discussed throughout the remainder of the meeting.

The U.S. Environmental Protection Agency (USEPA) had several representatives in attendance and shared updates on its Greener Cleanups and Brownfield programs (Carlos Pachon and Patricia Overmeyer). Over the last several years, these programs have spurred improvement in the environmental performance of site cleanups and, in the case of the Brownfields program, encouraged the economic development of contaminated sites.

Deborah Edwards (ExxonMobil Environmental Services Company) and Amanda McNally (AECOM) presented a comprehensive sustainability framework developed for the Portland Harbor Superfund Site that included a CERCLA-linked net environmental benefit analysis, regional economic

modeling, and a robust stakeholder values assessment. SURFers heard how this framework could be applied at other large sediment remediation sites early in the remedial process to develop a more sustainable remedy that considers the values of all stakeholders.



A group of Cornell students attending SURF 33 joined other SURFers at a local pub before the group dinner.

Building upon the programmatic themes discussed early in the day, representatives of “site owner” organizations shared their perspectives on the successes and failures of sustainable remediation programs. Panel members Amy Hawkins (U.S. Navy), Frank Messina (ExxonMobil Environmental Services Company), Beth Moore (U.S. Department of Energy), and Kyle Waldron (Tesoro Companies) are each champions of sustainability in their organizations. Each program is in a different stage of development, and the panelists shared unique insights with one another and SURF 33 participants.

Continued on page 6

SURF 33, continued from page 5

On Day Two, speakers discussed developments in technology, incorporating the concept that sustainable, out-of-the-box thinking can lead to new solution spaces that have not been explored in the traditional remediation paradigm (Paul Favara, CH2M). An innovative groundwater monitoring paradigm implemented at the U.S. Department of Energy Lawrence Berkeley National Laboratory was presented (Haruko Wainwright), as well as smart characterization strategies (Patrick Curry, ARCADIS). Paul Hadley (retired, CA Department of Toxic Substances Control) shared a unique way of thinking about remediation and how remediation professionals achieve endpoints through the application of different technologies over time.

Finally, panelists discussed the idea of how to drive sustainable remediation forward through technology and research [Eliot Cooper, Cascade; Paul Lear, Envirocon; Andrea Larson, Strategic Environmental Research and Development Program/Environmental Security Technology Certification Program (SERDP/ESTCP); Dick Raymond, Terra Systems, and Patricia Reyes, Interstate Technology & Regulatory Council (ITRC)]. The panelists shared how research and development drive their organizations. SURF members enjoyed hearing about new opportunities for research and advancing the practice – a key part of SURF's mission.

Contributed by Amanda McNally

SURF PARTNERS WITH AEHS FOR FALL 2017 CONFERENCE

During a Spring 2016 survey of SURF membership concerning future directions and activities, the opportunity for SURF to align with a national conference received more support than any other survey item. A Conference Alignment Working Group was formed to identify partnership possibilities and determine the best fit for SURF and its members.

SURF is pleased to announce that on December 2, 2016, SURF and the Association of Environmental and Health Sciences Foundation (AEHS) entered into a formal partnership. SURF and AEHS will launch the partnership at the Fall 2017 AEHS Conference in Amherst, Massachusetts – the 33rd Annual International Conference on Soils, Sediments, Water, & Energy. The conference will be held October 16-19, 2017 in Amherst, Massachusetts. SURF members registering for this conference will be offered a discounted registration rate, access to the technical sessions (including those developed in collaboration with SURF), and attendance to the SURF meeting where the SURF Board of Trustees and members will discuss the business affairs of the SURF organization. Please feel welcome to reach out to the Conference Alignment Working Group ([Maile Smith](#), [Paul Hadley](#), [Mike Miller](#), [Jake Torrens](#), and [Rick Wice](#)) or the SURF Board of Trustees with any questions about this new collaboration or inquiries about how to get involved. SURF member input and feedback on this new collaboration with AEHS will ensure that the partnership is successful and beneficial to both organizations. A call for abstracts has been issued and the deadline is February 3, 2017. See the conferences section on Page 8 of the newsletter!

Fall 2016 AEHS Conference, continued from page 4

implementation), which helped identify which project components had the greatest environmental impact. Amanda McNally (AECOM) co-presented a talk with Deborah Edwards (ExxonMobil Environmental Services Company) on the development of a sustainable remediation approach for the Portland Harbor Superfund Site in Portland, Oregon (see page 5 for a summary). Sustainable remediation also was featured in a poster presentation of a retrospective sustainability analysis of three sediment sites by Gerlinde Wolf (AECOM). The study focused on evaluating past sediment remediation projects where sustainable remediation was not explicitly considered to determine if a sustainability evaluation might have impacted the remedy selection decision making process.

The conference was a success and many SURF members attended. The next conference will be held on October 16-19, 2017 in Amherst, Massachusetts and SURF will be a partner to AEHS for the event (see page 6 for details).

GET SOCIAL WITH SURF!



Search LinkedIn for
"Sustainable
Remediation Forum"
to join



@SR_Forum



**Got an idea
for a webinar
or meeting
theme?**

Contact Barbara Maco for webinar ideas and Kristin Mancini for meeting theme ideas. Contact information is provided on page 1.

THANK YOU TO SURF'S SPONSORS!

Gold

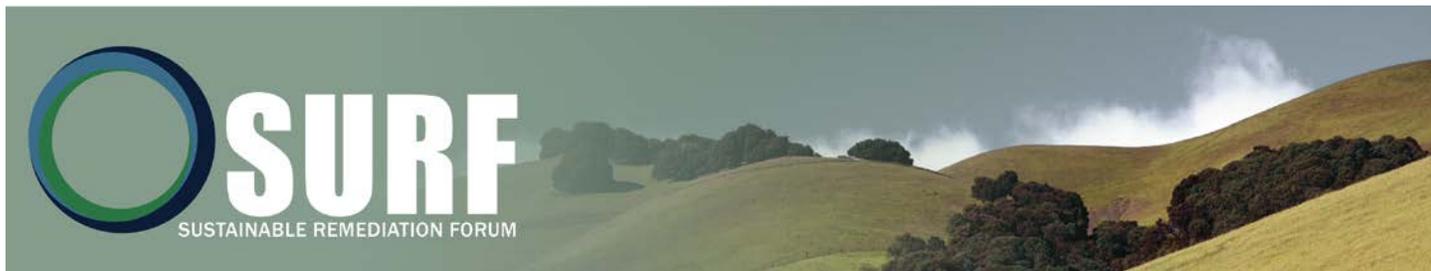
Boeing • CH2M • DuPont • Shell

Silver

AECOM • Amec Foster Wheeler • Cascade Drilling
CDM Smith • Haley & Aldrich • Terra Systems

Bronze

Envirocon • ExxonMobil • Tetra Tech



UPCOMING EVENTS AND CONFERENCES

33rd Annual International Conference on Soils, Sediments, Water and Energy – October 16-19, 2017 – Amherst, MA

SURF and AEHS are excited to announce the formation of a conference partnership for the Fall 2017 meeting. The meeting will feature a strong and diverse technical program with a conference track dedicated to sustainable remediation topics. A call for abstracts has been issued and the deadline for submission is February 3rd, 2017. For more information and conference registration, click [here](#).

9th International Conference on Remediation of Contaminated Sediments – January 9-12, 2017 – Sheraton New Orleans, New Orleans, LA

This conference will be held January 9-12, 2017 in New Orleans, Louisiana, with the goal of sharing research results, practical experiences, and opportunities associated with remediating, restoring, and managing the environmental and economic vitality of waterways. Anticipated topics include sustainability in terms of remedy implementation and management approaches. For more information, click [here](#).

RemTEC Summit – March 7-9, 2017 – Colorado Convention Center, Denver, CO

The RemTEC Summit will include four technical tracks focused on advancing the environmental science and remediation industry. The world's leading experts within the academic, regulatory, and environmental-consulting communities will share information on technology, application, and policy impacting contaminated site restoration. Early-bird

registration is open until January 31, 2017. For more information, click [here](#).

4th International Symposium on Bioremediation and Sustainable Environmental Technologies – May 22-25, 2017 – Hyatt Regency Miami Hotel, Miami, FL

The Fourth International Symposium on Bioremediation and Sustainable Environmental Technologies will be held May 22-25, 2017 in Miami, Florida. Anticipated topics include green and sustainable remediation, sustainable site management strategies, bioremediation technologies, vapor intrusion evaluation and mitigation, and the biodegradation of emerging contaminants. For more information, click [here](#).

7th International Conference on Environmental Pollution and Remediation (ICEPR'17) – June 6-8, 2017 – Rome, Italy

This conference will feature scholars from all over the world to present advances in the field of environmental pollution and remediation and to foster an environment conducive to exchanging ideas and information. The abstract submission deadline has been extended to February 3, 2017 and early-bird registration is open until March 31, 2017. For more information, click [here](#).

Please note: there are too many events and conferences to list in the SURF newsletter, for a complete list of upcoming environmental and remediation events please view the SURF calendar: <http://www.sustainableremediation.org/calendar/> for links to conference websites and information.

SURF 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:

Gerlinde Wolf, AECOM
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 500 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.

Join SURF or Renew your Membership TODAY!

SURF provides great value to our members, the public, and the practice of remediation. We do this by supporting:

- Alignment with organizational sustainability goals
- Environmental footprint reduction
- Social responsibility and public outreach
- Reduced remediation costs and long-term liabilities
- Innovative thinking, research, and real world application
- Peer benchmarking (domestic and international)
- Access to leading-edge case studies
- Opportunities to collaborate on publications
- Networking and access to subject matter experts
- Academic outreach and mentoring

By joining SURF, you establish partnerships and build relationships with a wide variety of remediation stakeholders: industry and agency peers, customers, clients, academia, technology vendors, and the public. Our website, meetings, and communications provide a clearinghouse and source for the latest information about policy, case studies, best practices, and educational opportunities related to sustainable remediation.

As a member, you have the opportunity to participate in SURF's Technical Initiatives. SURF has published several groundbreaking guidance documents, and recent or current initiatives include examining more sustainable practices for water use and reuse, compiling sustainable remediation case studies, assessing the social aspects of sustainable remediation, and exploring the viability of a sustainable remediation site rating and professional certification system.

SURF has several membership levels based on an individual's qualifications: Regular Member (dues are \$150 annually for new members and \$140 for renewing members), Government Member (dues are \$50 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/.