

# Sustainable Remediation Forum (SURF) Spring 2021 Membership Meeting

SURF's Spring 2021 Membership Meeting was held on March 23<sup>rd</sup> during the all-virtual 30<sup>th</sup> Annual International Conference on Soil, Water, Energy, and Air hosted by the Association for Environmental and Health Sciences (AEHS) Foundation. The meeting was open to members and non-members. Individuals that participated in the meeting, along with email contact information, are listed in Attachment 1. An agenda is provided in the presentation slides (see Attachment 2).

## Welcome Remarks

The meeting began with former SURF President Matt Ambrusch (Langan) welcoming participants and providing an overview of SURF. He presented SURF's updated vision and mission as follows:

**Vision:** We envision a world that is healthy, resilient, and improved by remediating degraded environmental conditions through sustainable practices.

**Mission:** SURF is dedicated to advancing sustainable remedies and practices on a local and global scale through collaboration, education, and innovation.

## 2021 SURF Board of Trustees

Matt announced and congratulated the new 2021 SURF Board of Trustees, as listed below.

### Officers:

- Betsy Collins, President
- Kyle Waldron, Vice President
- Stacey Hellekson, Secretary
- Jason McNew, Treasurer

### At-Large:

- Emerald Erickson-Mulanax
- Rob Rebel
- Chris Schultz
- Kristin Thornton
- Roy Thun

SURF President Betsy Collins thanked outgoing Board of Trustee members Matt Ambrusch (President, 2019 and 2020), Cathy Rockwell (Secretary, 2019 and 2020), and Gerlinde Wolf (At-Large, 2020) for their significant contributions.

## Technical Topic Discussion

Paul Favara facilitated a discussion on the technical topic of data management and analysis, asking “What forms of data management/assessment could we be using?” Participants offered many suggestions, including the following:

- Relate the function of sustainable resilient remediation to value engineering and optimization.
- Mine the data we have and maximize the decision power it provides to us.
- Compile and aggregate data to show better value across sites. (Note: One participant mentioned the importance of metadata and measurement method in the virtual conference chat function, emphasizing the danger of aggregating dissimilar but seemingly similar data.)
- Communicate best practices to see what we are tracking and how things are being tracked.
- Extract appropriate metrics for comparison, measure, track, and communicate.
- Plug into metrics and compile for databases for use in efforts such as California vapor intrusion database.
- Leverage simulation and environmental visualization technology to evaluate sustainability impacts (e.g., social, climate change).
- Seize opportunity to guide new Administration’s efforts in developing tools for climate change and risk.
- Use EJScreen to begin integrating the social aspect of sustainability and raise awareness. (Note: When using EJScreen, it is important to communicate with all stakeholders to “truth check” census data and ensure that additional available regional data are considered.)

## Technical Initiative Update

Gerlinde Wolf (Past SURF President and At-Large Trustee) and Evan Starr (SURF member) provided an update of SURF’s new technical initiative (TI), Sustainable Remediation Tools Review. The new TI evolved during a discussion at the Fall 2020 SURF Membership Meeting and quickly formed into a team of 10 active SURF members. Initially, the team is focusing on two tools, SiteWise™ and Spreadsheets for Environmental Footprint Analysis (SEFA), with the goal of both helping users decide which tool to use when and encouraging use. (A brief description of these tools and their availability is provided in the presentation slides in Attachment 2.) Two preview videos (entitled “SEFA Module 1 – Project Setup” and “SiteWise™ Module 7 – Comparing Alternatives”) are available on SURF’s YouTube channel (click [here](#)). Additional instructional videos will be created to guide users on how to set up and use each tool, provide tips and tricks, demonstrate common mistakes to avoid, and answer frequently asked

questions. The team will also develop a Reference Matrix that remediation practitioners can use to compare tool technical requirements, capabilities, data organization, and output presentations.

Participants were asked the following two questions at the end of the presentation:

1. What other tools should be included in this TI?
2. What are your thoughts on if/how we could/should include proprietary tools?

One participant suggested the U.S. Environmental Protection Agency's (USEPA's) Climate Resilience Evaluation and Awareness Tool (CREAT). CREAT is a risk assessment application that helps water utilities adapt to climate change impacts by providing a better understanding of current and long-term weather conditions. For more information, click [here](#).

Another participant asked more of a "big picture" question about tools, curious if regulatory agencies are requiring tool use. Participants seemed to agree that progress at the federal level has moved at a faster pace than that at the state level. Whereas many federal drivers exist for implementing green and sustainable remediation, state drivers are more hit or miss. However, discussions indicated that a proactive approach can be successful. If the output of these tools is brought to the table with regulators, it helps drive the decision-making process and allows consensus to be reached.

Participants also discussed the continuing disconnect between sustainable remediation and companies' sustainability programs. Despite more aggressive sustainability goals being integrated into corporate sustainability programs, the contributions of sustainable remediation to this bottom line remain unrecognized and unrealized.

SURF members wishing to join the Sustainable Remediation Tools Review TI should contact Gerlinde Wolf ([gerlinde.wolf@aecom.com](mailto:gerlinde.wolf@aecom.com)).

## **SustREM 2022 and SuRF International**

In 2016, Sustainable Remediation Forums across the world collaborated formally as the International Sustainable Remediation Alliance (ISRA). Now, these groups communicate regularly via teleconference to transfer knowledge and share organizational priorities. Roy Thun (SURF At-Large Trustee) serves as SURF's representative on these calls.

In this presentation, Roy highlighted participating ISRA organizations and plugged SustREM2022: Creating a Healthier, More Resilient World through Sustainable Practices. This 7<sup>th</sup> International Sustainable Remediation Conference will be hosted by SURF in consort with the Association of Environmental and Health Sciences (AEHS) Foundation's 31<sup>st</sup> Annual International Conference on Soil, Water, Energy, and Air and will be held March 14-17, 2022 in San Diego, California. Potential conference topics are provided in the presentation slides in Attachment 2.

## Organizational Discussion

Betsy Collins, SURF President, showed SURF's 2021 organization chart and asked participants their thoughts about what they are looking to get from SURF and how they want to get involved. Responses are below.

- Hold a webinar on ISRA and other international efforts to help knowledge sharing.
- Hold a webinar on how to initiate sustainable remediation efforts at your own company.
- Explore option of reinitiating the Sustainable Remediation Panel as part of the journal Remediation.
- Establish a certificate training program for university students to conduct sustainable remediation assessments.
- Establish SURF website as the one-stop clearinghouse for sustainable remediation resources.
- Create a formal introduction to SURF for new members that introduces the different aspects of the organization and provides examples of how new people can get involved.
- Raise the awareness, visibility, and involvement with SURF within the National Laboratories.
- Reach out to different industries (e.g., nuclear, U.S. Department of Energy).

## Chat Sharing

During the meeting, participants shared links to the following resources through the virtual meeting chat function:

- The California Department of Toxic Substances Control's EnviroStor (click [here](#)) shows CalEnviroScreen scores for all sites reporting to their platform.
- The U.S. Agency for International Development (USAID) reports and data page provides publicly available information on a global basis (click [here](#)).
- The Maryland Department of Natural Resources' Maryland Park Equity Mapper (click [here](#)) is an interactive map tool that identifies areas across the state in need of public park space.

In addition, Sabine Apitz (SURF member) "chatted" that the Society of Environmental Toxicology and Chemistry (SETAC) journal, *Integrated Environmental Assessment and Management*, is planning a call for papers for a special environmental justice issue. Contact Sabine ([drsea@cvrl.org](mailto:drsea@cvrl.org)) with thoughts or abstracts.

## Follow-Up Items for Board of Trustees

Task	Task Lead	Description
<b>Communications (Chair: Betsy Collins)</b>		
Outreach	Rob Rebel Keith Thomsen	Kick off Outreach Team and determine next steps.
		Establish SURF website as the one-stop clearinghouse for sustainable remediation resources.
Sustainable Remediation Panel	Betsy Collins	Explore option of reinitiating the Sustainable Remediation Panel as part of <i>Remediation</i> . Examples are available for download on <a href="#">SURF’s website</a> in the library.
<b>Technical Initiatives (Chair: Kyle Waldron)</b>		
Case Studies	Kathy Adams	Forward draft case study created during Hassan Amini’s presentation to Rob Rebel for follow-up.
Webinar Series	Chris Schultz	Hold a webinar on ISRA and other international efforts to help knowledge sharing (Roy Thun).
		Hold a webinar on how to initiate sustainable remediation efforts at your own company (Nick Garson, Jason McNew, Rob Rebel).
Big Data TI	Kyle Waldron	Determine interest and potential scope; follow up with Stacey Hellekson.
<b>Membership (Chair: Stacey Hellekson)</b>		
Demographics	Kathy Adams	Per a request, determine SURF membership composition. Based on the membership as of March 22nd, the composition is as follows: 3% academia, 25% government, 68% regular (includes consultants, industry, and vendors), 3% retired, and 1% student.
	Stacey Hellekson	Follow up with Lara Quetin with above results.
Email Distribution	Gerlinde Wolf and Kristen Thornton	Cross check AEHS conference registration list against SURF email distribution list and add individuals not already included.
Meetings and Programs	Matt Ambrusch	Plan a student outreach event. Contact Cathy Rockwell and Jessica Gattenby for support; both are interested but do not have time to lead.
Membership Engagement	Betsy Collins	Meet with Nicole and Stacey to discuss ideas and next steps.
	Nicole Tucker and Stacey Hellekson	Create a formal introduction to SURF for new members. (It may be possible to create a customized email within ClubExpress for new members.) Ray Smith may be interested in getting involved.
		Reach out to new member Maryam Azad (Cascade Drilling).
		Follow up with Chelsey Shepsko (Sanborn Head); she is interested in getting more involved.
		Follow up with Bill Butler (ERM).
	Betsy Collins	Follow up with Priscila Vargas de Oliveira (Ramboll), who visited the booth.
<b>Finance (Chair: Jason McNew)</b>		
Sponsorship	Jason McNew	Follow up with Alex Jernigan (Gregg Drilling) in a month or so if we do not hear from him.

**Attachment 1**  
**Participant Contact Information**

# Spring 2021

## SURF Membership Meeting Participants

Last Name	First Name	Email Address
Abrams	Stewart	sabrams@langan.com
Adams	Kathy	kathy.adams@sustainablemediation.org
Alloyer	Morgane	Morgane_Alloyer@golder.com
Ambrusch	Matthew	mambrusch@langan.com
Apitz	Sabine	drsea@cvrl.org
Bennani	Taoufik	tbennani@rskgroup.fr
Bergstrom	Bret	bret.bergstrom@wyo.gov
Brown	Daniel	daniel.brown@jacobs.com
Butler	Bill	bill.butler@erm.com
Butler	Craig	craig.butler@parsons.com
Carfi	Nicole	ncarfi@eaest.com
Chu	Kristina	kchu@gradientcorp.com
Clodfelter	Chris	chris.clodfelter@bakerhughes.com
Collins	Betsy	betsy.collins@jacobs.com
Copping	Catherine	catherine.copping@stantec.com
Cruz	Joyce	joycercruz@gmail.com
Danckert	Rob	rdanckert@cascade-env.com
Dingbaum	Zachary	Zdingbaum@gmail.com
Doherty	Antonette	antonette.l.sanchez@nasa.gov
Donlon	Joseph	joseph.donlon@denvergov.org
Doyon	John	john.doyon@dep.nj.gov
Dugas	Susan	susan.dugas@bsigroup.com
El Mahdi	Abdullah	abdullahcorr@gmail.com
Elich	Katie	kelich@woodardcurran.com
Erickson-Mulanax	Emerald	eerickson@farallonconsulting.com
Evans	Richard	richardkevans@yahoo.com
Favara	Paul	paul.favara@jacobs.com
Firth	Michael	mfirth@elminc.com
Fogas	Christine	christine.fogas@ramboll.com
Freed	Elisabeth	freed.elisabeth@epa.gov
Garson	Nick	nick.garson@boeing.com
Gates	Lindsey	lgates@cgrs.com
Gattenby	Jessica	jessica.gattenby@arcadis.com
Hadley	Paul	hadley1304@aol.com
Harclerode	Melissa	harclerodema@cdmsmith.com
Heinze	David	DHEINZE@RAMBOLL.COM

## Spring 2021 SURF Membership Meeting Participants

Hellekson	Stacey	shellekson@woodardcurran.com
Hoblyn	Vicki	Victoria@ersremediation.com
Johnson	Nicholas	nwjohnson@gsi-net.com
Kadiri	Akeem	abkadiri2001@yahoo.com
Kaminsky	Dianne	djkaminsky@burnsmcd.com
Klaybor	Jacob	jacob.klaybor@dot.gov
Laitinen	Jarno	jarno.laitinen@gmail.com
Lenker	Carl	carl.lenker@tetrattech.com
Lewis	Philip	philip@lmbgeosolutions.com
Lin	Heather	Heather_lin@golder.com
MacGrotty	David	david@allego.io
Machado	Roberto Jorge	robertoabdalla@concre-s.com
Maco	Barbara	BarbaraMaco@ww-envlaw.com
Maltby	Meghan	meghan.maltby@gza.com
Manley	Krista	kmanley@buckeye.com
Mantzou	Petroula	petroula.mantzou@environment-agency.gov.uk
Markey	John	john.markey@erm.com
McAlexander	Ben	bmcalexander@trihydro.com
McNew	Jason	jmcnew@eaest.com
Mielbrecht	Eric	Eric.Mielbrecht@EcoAdapt.org
Montenero	Ernesto	ernesto@sustainabletech.cc
Morales Hendricks	Natalie	natalie.hendricks@dc.gov
Nielsen	Mark	mnielsen@ramboll.com
Pac	Tim	tjpac@comcast.net
Patel-Coleman	Kanan	kcoleman2@burnsmcd.com
Phillips	Dianne	dianne.phillips@hklaw.com
Pour	Mike	mkp@allego.io
Raymond	Dick	draymond@terrasystems.net
Rebel	Rob	Rob.Rebel@wsp.com
Reddy	Krishna	kreddy@uic.edu
Repetti	Sofia	sofirepetti@gmail.com
Rockwell	Cathy	crockwell@woodardcurran.com
Rolston	Hannah	hannah.m.rolston@gmail.com
Roskelly	Amari	amari.roskelly@jacobs.com
Sadasivam	Bala Yamini	yamini18@gmail.com
Schultz	Chris	cschultz627@gmail.com
Shepsko	Chelsey	cshepsko@sanbornhead.com



**Spring 2021**  
**SURF Membership Meeting Participants**

Smith	Maile	msmith@gsi-net.com
Smith	Ray	Smith.Raymond@epa.gov
Sohl	John	jsohl@columbiatechnologies.com
Stabile	Daniel	dstabile@golder.com
Starr	Evan	evan.starr@dot.gov
Stromberg	Scott	sstromberg@orionenv.com
Swoboda	Todd	todd.a.swoboda@boeing.com
Thomsen	Keith	thomsen6@ltnl.gov
Thornton	Kristen	Kristen.Thornton@delaware.gov
Thun	Roy	roy.thun@ghd.com
Tucker	Nicole	ntucker@dudek.com
Wainwright	Haruko	hmwainwright@lbl.gov
Waldron	Kyle	KAWaldron@Marathonpetroleum.com
Wolf	Gerlinde	gerlinde.wolf@AECOM.com

**Attachment 2**  
**Presentation Slides**

# WELCOME

Spring 2021  
SURF Membership Meeting  
March 23, 2021



**SURF SUSTAINABLE REMEDIATION FORUM**

# Agenda



Time (Eastern)	Topic	Speaker(s)
11:00 a.m.	Welcome Remarks and Introduction of 2021 Board of Trustees	Matt Ambrusch, Past SURF President (Langan)
11:15 a.m.	Discussion: How can the sustainable remediation industry use new forms of data management and assessment?	<i>Facilitator:</i> Paul Favara, Past SURF President (Jacobs)
11:35 a.m.	Technical Initiative: Sustainable Remediation Tools Review	Gerlinde Wolf, Past SURF President (AECOM) Nikki Carfi, SURF Member (EA Engineering, Science, and Technology) Evan Starr, SURF Member (U.S. Dept. of Transportation, Volpe Center)
11:50 a.m.	SustREM 2022 and SURF International Update	Roy Thun, SURF At-Large Trustee (GHD)
12:05 p.m.	Discussion: How's SURF engagement?	<i>Facilitator:</i> Betsy Collins, SURF President (Jacobs)
12:20 p.m.	Wrap Up and Final Questions	All
12:30 p.m.	<i>Adjourn</i>	

## **VISION**

**We envision a world that is healthy, resilient, and improved by remediating degraded environmental conditions through sustainable practices.**

## **MISSION**

**SURF is dedicated to advancing sustainable remedies and practices on a local and global scale through collaboration, education, and innovation.**

- **501(c)(3) nonprofit organization**
- **Forum for government, industry, consultancy, and academia to collaborate**
- **Ways to contribute**
  - **Membership**
  - **Sponsorship**
  - **Board of Trustees**
  - **Technical Initiatives**

# Thank you to our sponsors!



- Sponsorship Levels
  - Gold (\$5,000/year)
  - Silver (\$2,500/year)
  - Bronze (\$1,500/year)
- Free AEHS Conference registrations based on the level of sponsorship
- Cost of sponsorship recuperated by using:
  - The allowable free conference registrations (about \$695/each)
  - Annual memberships (about \$150/person)

## Gold



**CORTEVA™**  
agriscience

**LANGAN**



## Silver

**AECOM**

**BURNS & MCDONNELL**



**CASCADE**  
DRILLING | TECHNICAL SERVICES



**EA**  
EA Engineering, Science,  
and Technology, Inc., PBC



**Jacobs**



**Trihydro**



**Terra Systems**  
INCORPORATED

## Bronze

**bsi.**



**EARTHCON®**

**provectus**  
ENVIRONMENTAL PRODUCTS®



[www.sustainableremediation.org](http://www.sustainableremediation.org)

**SURF**

**SUSTAINABLE REMEDIATION FORUM**

# 2021 Board of Trustees - Officers



## President



**Betsy Collins**  
Jacobs

## Vice President



**Kyle Waldron**  
Marathon  
Petroleum

## Secretary



**Stacey Hellekson**  
Woodard & Curran

## Treasurer



**Jason McNew**  
EA Engineering



# 2021 Board of Trustees – At-Large Members



**Emerald  
Erickson-Mulanax**  
Farallon Consulting



**Rob Rebel**  
WSP USA Inc.



**Chris Schultz**  
Trihydro



**Kristen  
Thornton**  
DNREC



**Roy Thun**  
GHD



# Thank You 2020 Board of Trustees



- President – Matt Ambrusch (Langan)
- Vice President – Betsy Collins (Jacobs)
- Secretary – Cathy Rockwell (Woodard & Curran)
- Treasurer – Jason McNew (EA Engineering)
- At-Large Members
  - Emerald Erickson-Mulanax (Farallon Consulting)
  - Kristen Thornton (DNREC)
  - Roy Thun (GHD)
  - Kyle Waldron (Marathon Petroleum)
  - Gerlinde Wolf (AECOM)

# Thank You Outgoing Members



**President  
(2019 & 2020)**



**Matt Ambrusch**  
Langan

**Secretary  
(2019 & 2020)**



**Cathy Rockwell**  
Woodard & Curran

**At-Large Trustee  
(2020)**



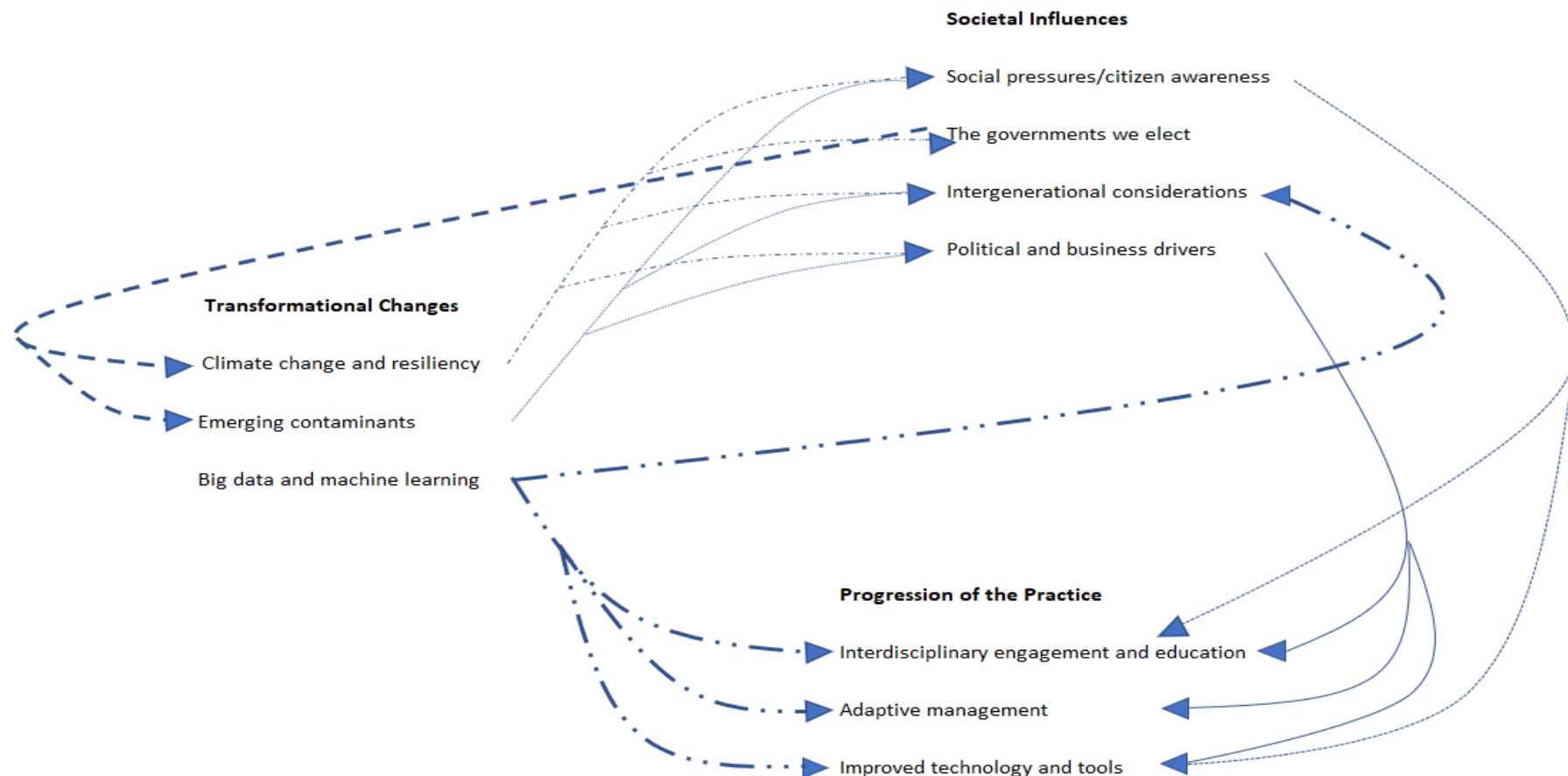
**Gerlinde Wolf**  
AECOM

# DISCUSSION: HOW CAN THE SUSTAINABLE REMEDATION INDUSTRY USE NEW FORMS OF DATA MANAGEMENT AND ASSESSMENT?

Facilitator:  
Paul Favara, PE  
LEED Green Associate, Jacobs  
Past SURF President

# The “Potential” Future Dynamic of Sustainable Remediation Integration

(from SURF 10-Yr White Paper)



Note: line symbology represent common topics  
(e.g., "Big data and machine learning" can flow into "Societal and Progression of the practice")

# “Who could possibly need more computing power than the TI-30?” (asked my 1978 self)



# Tee up the discussion: “What forms of data management/ assessment could we be using?”



- What databases should practitioners use/develop?
- What geospatial resources should we be using?
- Is there a role for visualization?
- Is there a role for super computing like Watson (IBM), AZURE (Microsoft), AWS (Amazon)?
- Economic modeling?
- Dashboards (project, program, company, industry)?
- Environmental Product Declarations?
- Compilations of tools available (e.g., EJSCREEN) (lives in other documents)?

# TECHNICAL INITIATIVE: SUSTAINABLE REMEDIATION TOOLS REVIEW

Gerlinde Wolf

Environmental Engineer, AECOM

Past SURF President

Evan Starr

Environmental Protection Specialist

U.S. Dept. of Transportation, Volpe Center

SURF Member



# Technical Initiative Origin and Goal



- Origin
  - Topic of interest during discussion at Fall 2020 SURF Membership Meeting
  - SURF members expressed interest in using SEFA\* and SiteWise™ tools, but had some questions:
    - How do users know which tool to pick for a project?
    - How to get started?
- Goal
  - Compile SURF's knowledge on SiteWise™ and SEFA tools and create user-friendly reference documents to encourage their use and help users decide which tool is right for their project.

\* SEFA = Spreadsheets for Environmental Footprint Analysis



# Planned Technical Initiative Outcomes



- User reference matrix
  - Compares tool technical requirements, capabilities, data organization, activity evaluation, and output presentation
- Instructional videos
  - Short and focused videos to guide users on how to set up and use each tool
  - Includes tips and tricks, common mistakes to avoid, and frequently asked questions (FAQs)

# SiteWise™ Overview



- Created by Battelle, U.S. Navy, U.S. Army Corps of Engineers, and U.S. Army
  - Updated October 2018 – Version 3.2
  - Designed to evaluate and compare the environmental footprint of remedial activity
- Videos will focus on project setup, data input, generating alternatives, comparing alternatives, and common pitfalls or issues

## Guidance, Tools, and Other Resources

### **\*\*NEWLY ADDED\*\***

#### SITewise VERSION 3.2

Sitewise Version 3.2 User Guide [Download](#)

#### Excel worksheets:

Sitewise Input Sheet [Download](#)

Worksheet [Download](#)

Component 1 spreadsheet [Download](#)

Component 2 spreadsheet [Download](#)

Component 3 spreadsheet [Download](#)

Component 4 spreadsheet [Download](#)

Summary worksheet [Download](#)

Final Summary spreadsheet [Download](#)

SiteWise™ is available for download from the SURF website  
<https://www.sustainableremediation.org/guidance-tools-and-other-resources>

# SEFA Overview



- Spreadsheets for Environmental Footprint Analysis (SEFA)
- Created by the EPA in 2012, updated in 2019
- Designed to evaluate the environmental footprint of remedial activity

- Videos will focus on project setup and structure, input worksheets, calculations, results and summary, and common pitfalls or issues

# Red Carpet Preview!



- Check out a preview of some of our instructional videos on the SURF Virtual Booth at the conference.
  - Or the SURF YouTube page <https://www.youtube.com/channel/UC6DUyfCOiRJuhgZolGgNGw/featured>
- Upon completion, all videos and comparison matrix will be available on the SURF website.



# Discussion: What's next?



**What other tools  
should be included  
in this TI?**

**Thoughts on if/how  
we could/should  
include proprietary  
tools?**

# SUSTREM 2022 AND SURF INTERNATIONAL UPDATE

Roy Thun

Senior Environmental Specialist, GHD

SURF At-Large Trustee

# SuRF Internationale



International Sustainable Remediation Alliance



FÓRUM BRASILEIRO  
DE REMEDIAÇÃO  
SUSTENTÁVEL



SUSTAINABLE REMEDIATION FORUM



**SuRF Italy**  
Forum per la Sostenibilità  
applicata alle Bonifiche  
*Sustainable Remediation Forum*



**SuRF**  
FORUM SUR LA  
RÉHABILITATION  
DURABLE



**SuRF**  
SUSTAINABLE  
REMEDIATION  
FORUM



SUSTAINABLE REMEDIATION FORUM

# Progress in Sustainable Remediation Worldwide



- Applying sustainable practices to remediate degraded environments has become an area of global interest with public and private sector organizations.
- SuRF chapters and affiliates are now well established in the USA, UK, Canada, Australia, New Zealand, Italy, Taiwan, Brazil, Columbia and Japan, with further interest in China and France.
- SURF continues to support global sustainability interests through the annual SustRem conference.

Looking for an international SuRF chapter or affiliate contact? Feel free to email Roy Thun at [roy.thun@sustainableremediation.org](mailto:roy.thun@sustainableremediation.org)



**SUSTAINABLE REMEDIATION FORUM**



# Save the Date! March 14-17, 2022



*save the date for*



## **SustRem2022:**

### **Creating a Healthier, More Resilient World through Sustainable Practices**

7th International Sustainable Remediation Conference in consort with the  
31st Annual International Conference on Soil, Water, Energy, and Air  
14-17 March 2022 | San Diego, California, USA

*potential topics include*

- Environmental, Social and Governance (ESG)
- Sustainability Standards & Regulatory Trends
- Climate Change, Sustainability & Resiliency
- Social Equity/Environmental Justice
- Green & Sustainable Remediation
- Regenerative Land Management
- Natural Capital & Biodiversity
- Resource Management
- Remedy Resiliency
- Embodied Carbon



**SUSTAINABLE REMEDIATION FORUM**

# DISCUSSION: How's SURF ENGAGEMENT?

Facilitator:  
Betsy Collins

Environmental Engineer and  
Project Manager, Jacobs  
SURF President

# 2021 SURF ORGANIZATION

## BOARD OF TRUSTEES

**Officers:** Betsy Collins (President), Kyle Waldron (Vice President), Stacey Hellekson (Secretary), Jason McNew (Treasurer)

### At-Large:

**Emerald Erickson-Mulanax, Rob Rebel, Chris Schultz, Kristen Thornton, Roy Thun**

### Communication SURF President

**Newsletter**  
Technical Editor

**Social Media**  
Emerald Erickson-Mulanax

**Website Management**  
Maile Smith  
Betsy Collins

**Outreach**  
Keith Thomsen  
Rob Rebel

**SURF International and  
SustRem 2022**  
Roy Thun

### Technical Initiatives SURF Vice President

**Sustainable Tools Review**  
Nikki Carfi  
Evan Starr  
Gerlinde Wolf

**Case Studies**  
Rob Rebel

**Webinar Series**  
Chris Schultz

**Climate Change and  
Resilience**  
Barbara Maco  
Cathy Rockwell

### Membership SURF Secretary

**E-Mail Distribution**  
Gerlinde Wolf  
Kristen Thornton

**AEHS and Membership  
Meeting**  
Matt Ambrusch

**Membership Engagement**  
*Open*

### Finance SURF Treasurer

**Sponsor Coordinator**  
*Open*

**Accountant**  
Marcum, LLP

**Auditor**  
Smart Devine

**Lawyer (pro bono)**  
Dawn Monsen Lamparello  
K&L Gates

**Technical Editor**  
Kathy Adams  
Writing Unlimited

# SURF Calendar



# Wrap Up and Final Questions

**Tonight:**  
**SURF Social**  
Open to All  
AEHS Conference  
Participants  
7 p.m. – 8 p.m. (Eastern)

## THANK YOU SPONSORS

### Gold



**CORTEVA**<sup>™</sup>  
agriscience

**LANGAN**



### Silver

**AECOM**

**BURNS**  **MCDONNELL**



**CASCADE**  
DRILLING | TECHNICAL SERVICES



EA Engineering, Science,  
and Technology, Inc., PBC



**Jacobs**



**Trihydro**



**Terra Systems**  
INCORPORATED

### Bronze

**bsi.**

 **EARTHCON**<sup>®</sup>

**provectus**  
ENVIRONMENTAL PRODUCTS<sup>®</sup>



[www.sustainableremediation.org](http://www.sustainableremediation.org)