



Welcome to Full Circle Newsletter

■ **Welcome to the Newest Members of the Tribal Waste and Response Steering Committee**

Following a very tough decision process, with many exceptional candidates applying to serve on the TWAR SC, four tribal professionals were selected to serve new two-year terms on this Tribal Partnership Group. We are all very excited to welcome:

- Tracy Horst, Natural Resources and Environmental Science Program Director for the Choctaw Nation
- Page Hingst, Tribal Response Coordinator for the Santee Sioux Nation
- Nicole Johnson, Tribal Administrator for the Qawalangin Tribe of Unalaska
- Quinton Jacket, Brownfields Coordinator for the Ute Mountain Ute

In addition to these new additions to the TWAR SC, Rebecca Stevens (Coeur d'Alene Tribe), Victoria Flowers (Oneida Nation), and John Wheaton (Nez Perce Tribe) were selected to serve new terms. All of them join Mark Junker (Sac and Fox Nation of Missouri in Kansas and Nebraska), Virginia LeClere (Prairie Band of Potawatomi), and Rob Roy (La Jolla Band of Luiseno Indians). Congratulations to you all, and thank you to the very many talented and dedicated Tribal professionals who applied for these openings.

To learn more about the TWAR SC visit <http://www7.nau.edu/itep/main/twarsc/Home/Index>.

■ **Special Webinar on Phytoremediation**

As part of our work with the Tribal Superfund Working Group (TSFWG) we are always looking for people involved in interesting research, or who are developing new techniques to address contaminated sites, to deliver webinars for tribal professionals. We are very excited to offer a webinar focused on phytoremediation on November 15, 2018, at 10:00 Pacific Standard Time.

During this webinar, Dr. John L. Freeman will report findings from a successful four-year field trial phytoremediation on the Middlefield-Ellis-Whisman Superfund in the Silicon Valley of California located on NASA-Ames Research Park using poplar trees for internal, onsite, remediation of Trichloroethylene (TCE) and Gas/Oil PAH volatile organic compounds (VOC's) present in groundwater and associated soil. These are two widespread environmental pollutant classes common in groundwater plumes associated with industrial manufacturing, fuel and chemical storage areas.

Dr. Freeman will discuss how the combination of native pollutant-degrading endophytic bacteria and fast-growing poplar tree systems offers a readily deployable, cost-effective approach for the degradation of TCE, and may help mitigate potential transfer up the food chain, volatilization to the atmosphere, as well as direct phyto-toxic impacts to plants used in this type of phytoremediation. Field trial results show that poplar trees inoculated with naturally occurring

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■ **Full Circle Network**
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bacterial strains exhibited increased growth and an enhanced rate of degradation of the chlorinated solvents in the inoculated trees. Test well groundwater analyses demonstrated a marked decrease in concentration of TCE and its derivatives from the tree-associated groundwater plume, providing strong evidence of the ability of the inoculated trees to effectively remove TCE from affected groundwater. Furthermore, recent successful field deployments of a second poplar tree bacterial endophyte is responsible for degrading Petroleum VOC's (phenanthrene, DRO/GRO, benzene). Results from establishing these strains in Mixed Waste Groundwater Poplar Tree Phytoremediation Sites for addressing multiple contaminant classes [e.g., Chlorinated Solvents (TCE, DCE, VC), PAH's (DRO/GRO, benzene) and 1-4 Dioxane] will also be discussed.

Please register for **Using Bacterial Endophyte Enhanced Poplar Trees to Remediate Groundwater Contaminated with Volatile Organic Compounds** on Nov 15, 2018 10:00 AM PST at: <https://attendee.gotowebinar.com/register/7292847715023700994>

After registering, you will receive a confirmation email containing information about joining the webinar.

■ **Presentations – and a Special Video – of the 2018 Tribal Lands and Environment Forum are Now Online**

If you would like to access presentations from the 2018 TLEF, or watch our new highlights video, you can find them – as well as presentations from all the past TLEF's at the TLEF website: http://www7.nau.edu/itep/main/Conferences/confr_tlef.

Thank you to everyone who joined us this year in Spokane, Washington! We are right now in the process of selecting the location for next year's TLEF, which will take place August 19-22, 2018.

■ **ITEP Waste and Response Trainings for 2018-2019**

Our team has been busy putting plans in place for a record number of in-person courses over the next 12 months. We will be offering trainings covering solid waste code development, Tribal Solid Waste Management Plans, food waste and composting, recycling, planning and waste diversion, Tribal transfer stations and household hazardous waste, Superfund, and emergency response.

We are currently accepting applications for two solid waste courses that will take place in November:

- Development and Implementation of Tribal Solid Waste Codes, November 6-8
- Implementing and Managing Tribal Recycling Programs, November 27-29

You can access the applications for these two courses, and see what other courses we'll be offering, at our training page: http://www7.nau.edu/itep/main/Training/training_waste

■ **September is National Preparedness Month**

Every September, National Preparedness Month encourages Americans to be prepared for disasters or emergencies in their homes, businesses, and communities. Good preparation can decrease fear, reduce losses, and speed recovery in time of disaster or emergency. The Federal Emergency Management Agency (FEMA) has a nation-to-nation relationship with tribal

governments and works with tribal officials to help communities prepare for and recover from emergencies and disasters. *Ready Indian Country* is a collaboration with tribal governments to build emergency management capability and partnerships to ensure continued survival of tribal nations and communities. For more information: <https://www.ready.gov/make-a-plan/indian-country> and <https://www.epa.gov/natural-disasters/september-preparedness-month>

■ Other Training Opportunities and News of Interest

Preparing for the October Changes to UST Regulations

Many of you are familiar with Ben Thomas, of UST Training. He has conducted UST webinars for us in the past, and has also participated in the Tribal Lands and Environment Forum. Ben has created some online trainings to assist with preparing for the upcoming changes in UST regulations. You can learn more about what he is offering on the attached flyer.

EPA Proposes to Add the Copper Bluff Mine Site to the National Priorities List or

"Superfund List" - On September 11, 2018, the EPA announced that Copper Bluff Mine, in Humboldt County, Calif., is being proposed for addition to the Superfund program's National Priorities List (NPL). This mine is one of six hazardous waste sites proposed for listing. An additional five sites will be added to the NPL. The Copper Bluff Mine is located within the Hoopa Valley Reservation adjacent to California State Highway 96. Historically used for mining copper, zinc, silver, and gold, the site was operated by private companies from about 1928 to 1964. Acid mine drainage has been flowing into the Trinity River since the mine closed, harming the fishery on which the Hoopa Valley Tribe depends. In July 2018, EPA received concurrence from the Hoopa Valley Tribe to add the Copper Bluff Mine site to the NPL. A Federal Register notice for this proposal published on September 13, 2018, which began a 60-day public comment period. Public Comment Period Starts September 13, 2018 and Ends on November 13, 2018. For more info: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0901923>.

Article: [Ninth Circuit Court of Appeals affirms Colville Tribes' lower court victories over Teck](#). In a resounding legal victory for the Colville Tribes against international mining giant Teck Metals Ltd., the Ninth Circuit Court of Appeals today affirmed lower court rulings holding Teck responsible for cleaning up its releases of hazardous substances in the Upper Columbia River.

Apply for Local Foods, Local Places Technical Assistance to Create Healthy, Economically Vibrant Communities

-Informational webinar October 4, deadline for applications October 22. Federal agency partners invite communities to apply for technical assistance to help revitalize their economy, improve health, and protect the environment. [Local Foods, Local Places](#) helps communities revitalize neighborhoods through development of local food systems. To date, 94 communities have benefited from assistance with support from EPA, the U.S. Department of Agriculture, the Centers for Disease Control and Prevention, and the Delta Regional Authority, among others. In 2018, the Northern Border Regional Commission will join as a program sponsor. **Eligibility:** Eligible applicants include local governments, Indian tribes, and nonprofit institutions and organizations proposing to work in a neighborhood, town, or city of any size anywhere in the United States. Special consideration will be given to communities in the northern border region of Maine, New Hampshire, New York, and Vermont, and the Delta region of Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and

Tennessee. **Deadline:** 11:59 p.m. Eastern Time on October 22, 2018. **How to apply:** See complete application instructions at <https://www.epa.gov/smartgrowth/local-foods-local-places-2018-2019-application>. EPA will host a webinar to explain more about the program and selection process on **October 4, 2018, from 3:00-4:00 EDT**. To register for the webinar, visit: <https://epawebconferencing.acms.com/lflp-5/event/registration.html>.

Webinar: Updates on the Infrastructure Task Force (ITF) Waste Programs Sub-workgroup and Addressing Open Dumps in Partnership with HIS - Date: Tuesday, October 16, 2018. Time: 1:00 – 2:30 PM EDT. Click on this link to register for the Webinar: <https://attendee.gotowebinar.com/register/7699812152187838209> (If you have difficulty opening the link, please try it in a different browser). The Infrastructure Task Force (ITF) is a multi-agency task force which was created to develop and coordinate federal activities in delivering water infrastructure, wastewater infrastructure and solid waste management services to tribal communities. The ITF federal partners include the Department of Agriculture, Environmental Protection Agency, Department of Health and Human Services, Department of Housing and Urban Development and the Department of the Interior. The ITF established a Waste Programs Sub-workgroup to identify and develop solutions to tribal waste management challenges. The Sub-Workgroup established three Work Teams, which include representatives from the federal government, tribes, circuit riders and tribal consortia. Work Team 1 worked on “Barriers and Potentials Resources to Solid Waste Implementation in Indian Country,” Team 2: “Community Engagement Strategy,” and Team 3: “Proposed Approach to Improve Open Dumps Data and Solid Waste Projects and Programs in Indian Country.” An update on the Work Team’s efforts will be presented. The second part of the Webinar will focus on the IHS and EPA partnership through a Memorandum of Understanding (MOU) to better coordinate their efforts in the area of solid waste projects, programs and open dump data. A status update on the implementation of the MOU on open dump data and solid waste projects and programs will be given. In addition, attendees will be provided with an understanding of how tribes can seek funding for open dump solid waste projects through the Sanitation Deficiency System (SDS) process.



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➔ **[Tribal Waste and Response Assistance Program \(TWRAP\)](#)**

TWRAP is a program focused on assisting tribes with all waste management, brownfields, USTs, contaminated sites, and response programs. This program is funded by the USEPA's Office of Land and Emergency Management.

➔ **[Tribal Solid Waste Education and Assistance Program \(TSWEAP\)](#)**

TSWEAP's focus is providing training and assistance to tribes working on solid and hazardous waste management and diversion. This program is funded by the USDA, IHS, and USEPA.