

# COMMUNITIES FOR CLEAN WATER

LANL Stormwater IP

12-16-2020 Public Meeting

Rachel Conn – CCW and Amigos Bravos

## CCW BLESSING

Everyone here walks, lives, and breathes within these sacred lands of Tewa Peoples. As we begin our activities, let us fully acknowledge where we are and give thanks for living mountains, valleys and waters, which sustain our lives and form Tewa ancestral homelands and those of land-based Peoples. Let us ground our activities in awareness of where we are and may the mannerism of Tewa Peoples enter our lives and fill us with gratitude, love, care, and respect for all that is shared between us and all beings.



## ABOUT CCW

- Communities for Clean Water is a coalition of individuals and organizations rooted in a variety of traditions. Our growing coalition includes Tewa Women United, Concerned Citizens for Nuclear Safety (CCNS), Amigos Bravos, Honor Our Pueblo Existence (HOPE), the New Mexico Acequia Association, and the Partnership for Earth Spirituality.
- CCW's mission is to ensure that community waters impacted by Los Alamos National Laboratory (LANL) are kept safe for drinking, agriculture, sacred ceremonies, and a sustainable future.
- CCW member groups share in common an awareness that caring for clean water and the Rio Grande is a moral and ethical responsibility.



## STORMWATER RENEWAL PROCESS

- CCW remains committed to encouraging a permit that supports the following:
  - Construction of stormwater-quality control measures (BMPs) to mitigate the risk of polluted runoff leaving LANL property.
  - Ensuring long term stewardship & maintenance of controls.
  - Encouragement of treatment-oriented practices that go beyond retention.



# Bioremediation as a Collaborative Solution for Environmental Health

With bioremediation – the use of living materials to remediate toxic pollutants – we look at the system as a whole and try to restore the balance of that system so that it is healthy, and the soil life can come back. Fungi work in partnership with many members of soil life: with bacteria, insects, and plants creating and closing nutrient cycles which lead to environment’s recovery.

# Forms of Remediation

- There are many forms of remediation. They involve supporting the optimal health of natural systems as a whole.
- Concerns of water as a needed element can be addressed through underground cisterns and water conservation through Indigenous dryland farming technologies.
- Three forms of bioremediation using mushrooms/fungi: Mycosorption, Translocation and Mycoaccumulation and Metabolization and digestion of chemicals.

# What can fungi remediate?

- Heavy Metals: Arsenic, Cadmium, Cesium, Chromium, Lead, Nickel, Zinc, Agrochemical fertilizers, sewage sludge, and pesticides
- Polycyclic Aromatic Hydrocarbons: Crude oil, Asphalt chemicals, Jet fuel, Petroleum
- Modified Aromatic: PCB's, Pesticides, Synthetic dyes



**Blessing and Protecting Our Healing Waters**

Historically, clean up at LANL has focused on conventional methods of toxic remediation. In this IP much of the focus has been on sampling and monitoring, and slowing down toxic migration into the watershed.

We need a methodology of clean up that aligns with Indigenous systems of sustainability and caregiving. One that provides support to our entire ecology and centers the health of Indigenous and land-based Peoples. The Peoples health is equal only to the health of our environment.

This must include community engagement and collaboration with downstream impacted communities.

This must include equity and consideration of both Indigenous and Western science and technology.

CCW advocates for this form of remediation while recognizing that for us to support nature's healing and restoration, the harm needs to stop. We hold that intention alongside the ongoing work of harm reduction, advocacy, and restorative justice in the present moment.

# Collaborative Approach:

We can model our solutions after natural systems.

Like mycelium teaches, the path towards survival and long-term sustainability is collaborative and cooperative in nature.

- CCW would like to propose that we actively pursue a collaborative pilot project on an IP site to be determined.
- Possible funding source: EPA, The State Environmental Justice Cooperative Agreement Program (SEJCA)
- Community Experts are ready to engage: CCW core group members, Kaitlin Bryson, Mycologist Peter McCoy, Erin English of Bio habitats and more...

## PUBLIC MEETING COMMENTS

- Thank you for sending direct invitations to CCW members.
- CCW requests that in future years one of the public meetings be held in the Spring or early Summer.
- Could future virtual meetings include a general invite that could be shared with the public?