Coal Ash Art by Caroline Rutledge Armijo

This journey began in 2010 with a simple question: What's in the water? The discovery of my best friend's brain tumor was what finally compelled me to start investigating why so many people were sick and dying in a small, rural, predominantly African-American and previously unincorporated community. The local utility, Duke Energy, began burning coal in 1974 and dumping the coal ash in an unlined lagoon on the Dan River and into their cooling pond, Belews Lake, which also served as a recreational attraction in the area.

A large environmental justice movement unfolded over the next decade, resulting in North Carolina officials Governor Roy Cooper and DEQ Secretary Michael Regan (now the EPA Secretary) deciding that Duke had to remove over 80 million tons away from North Carolina rivers and streams. The officials announced their decision on April 1, 2019.

The coal ash problem in Walnut Cove made Danielle Bailey-Lash an environmental advocate. As a patient, she tried to get her doctors to understand that she had heavy metal poisoning from living near the local power plant. She had eaten the fish out of the contaminated lake she swam in, which was within walking distance of her house. Her water had high levels of radon. Plus, huge trucks carrying coal ash and releasing fugitive dust passed her house several times a day. Yet her doctors dismissed her concerns. (https://theliliesproject.org/celebrating-courage-danielle-bailey-lash)

Part of our advocacy efforts involved working with UNC School of Public Health on a program called Well Empowered, which tested the local soil and water. We also underwent efforts to collect health surveys to determine a connection between the local pollution to the significant deaths and health impacts in the area.

After years of environmental advocacy alongside Danielle, community members and the support of environmental organizations, I was awarded an Art Place America National Creative Placemaking Fund grant in 2017. With the funding, I founded The Lilies Project, which uses the arts to address coal ash-impacted communities.

The main goal of The Lilies Project was to make art out of coal ash. The sculptural pieces are made from encapsulated coal ash developed in partnership with the North Carolina A&T Center for Composite Materials. Through the collaboration, 33 eight-and-a-half-foot posts were made to be used in a variety of installations. The Center's encapsulation process makes the coal ash safe for a range of uses and applications, including roof tiles, signage, and other building materials as well as public art.

The decision to use encapsulated coal ash came from a desire to take something that was a burden on our community and transform it into something beautiful, joyful, and healing.

THE FACES OF BELEWS CREEK



READ THE COMMENTS OF COMMUNITY MEMBERS SHARED IN OUR COMMUNITY BOOTH ON JANUARY 10TH, 2019



ARTISTS: A community collaborative project with PHOTOGRAPHY BY WILL WARASILA INTERVIEWEES' TEXT BY MARIE GARLOCK SOUND DESIGN BY MICHAEL BETTS II ORGANIZING AND LAYOUT BY CAROLINE ARMIJO TITLE: Faces of Belews Creek DATE OF WORK: Published March 2019 MEDIUM: Slideshow of Portraits (No Audio) and Bound Book of Portraits and Interviews PRICE: NFS DIMENSIONS: Softbound Book 8 1/2" x 11"

LINKS:

2019 Press Conference and Public Comment Collection: https://theliliesproject.org/final-closure-plans Exhibit Link: https://theliliesproject.org/collaborating-with-will-warasila PDF of collected comments in book format

Photos and interviews are from January 10, 2019, at a North Carolina Department of Environmental Quality Q&A Session to share with the community Duke Energy's Final Closure Options for the coal ash basin at Belews Creek Power Station. The information session held at Walnut Cove Elementary School in Stokes County, NC. It was the first of six information sessions held throughout the state to decide the plans for Duke's six remaining coal ash basins.

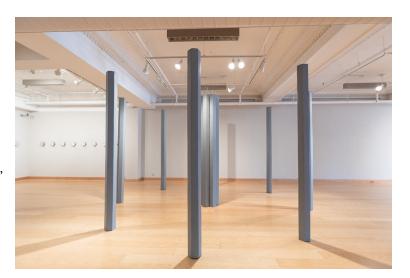
The text is presented in its original, unedited form, which represents the voice of those present willing to share their testimonies. Minor edits were made for clarity. Emphasis has been added using italics to show the inflections in the voices of those interviewed.

Installation: Digital Slideshow, ideally with seating for extended viewing and to review soft bound book

LABYRINTH

ARTIST: CAROLINE RUTLEDGE ARMIJO TITLE: LABYRINTH DATE OF WORK: 2022 MEDIUM: 14 ENCAPSULATED COAL ASH HEXAGONAL POSTS, PAINT PRICE: NFS DIMENSIONS: OBJECT H: 8 ½ W: 12' D: 12'

Exhibit Link: https://theliliesproject.org/coalash-art-labyrinth



During the discernment process for The Lilies Project in Walnut Cove,

labyrinths became a reoccurring theme. Community members wanted to walk, meditate, and pray for healing. Armijo considered the labyrinths, events, and art installations in various locations around Walnut Cove to be like acupuncture needles, healing the community at each point.

This installation provides a simple path to walk around the posts. The exterior eight posts represent the retired coal ash plants. The interior six represent the strength of community among the six active coal plant sites. The interior of the six remains empty allowing for the Spirit to flow through in the healing process. Visitors are encouraged to walk meditatively around the space. Prayers may be tucked gently between posts, like the Western Wall, also known as the Wailing Wall, in Jerusalem.

Installation: The posts are installed using i-hooks in the top of each post and another i-hook in the ceiling. The six interior posts were looped together for stability. A piece of folded duct tape was added to help stabilize the posts. The exterior posts stood the same way with i-hooks into the ceiling and duct tape on the floor.

About the Coal Ash Art: The material is lightweight, like floral foam. Each post weighs about 40 pounds each. I can carry one by myself. These posts have not been cut, so there shouldn't be any issue with the material. However, there is fiberglass in the material, so do not rub any exposed interior. Mask and gloves are advisable, but not necessary. The coal ash is encapsulated in a polymer that covers the heavy metals. Any loose particles will fall to the floor like grit instead of becoming airborne. The polymer also prevents the heavy metals from lodging in organs of humans and wildlife, if ingested. You should be safe in the installation of this art.

SANDBAR

ARTIST: CAROLINE RUTLEDGE ARMIJO TITLE: SANDBAR DATE OF WORK: 2022 MEDIUM: 80 SLICES OF ENCAPSULATED COAL ASH HEXAGONAL POSTS, PAINT PRICE: NFS DIMENSIONS: OBJECT H: 2" W: 31" D: 10'

Exhibit Link: https://theliliesproject.org/coal-ash-artsandbar



This piece represents the 70-mile sandbar of coal ash released into the Dan River in February 2014. Eighty slices of the hex-shaped posts represent the 80 million tons of coal ash to be excavated under the decision.

Following the Dan River Spill, a legal pathway appeared to clean up the 12 million tons of coal ash in the storage lagoon at Belews Creek, along with the coal ash ponds at all of the Duke Energy locations in North Carolina. Five years later, after a lengthy journey of statewide coalition with Alliance of Carolinians Together (ACT) Against Coal Ash, the former North Carolina Secretary of the Department of Environmental Quality Michael Regan (now EPA Secretary) and Governor Roy Cooper demanded that Duke Energy excavate the six remaining coal ash ponds on Monday, April 1st, 2019. The sites include Allen, Belews, Cliffside/Rogers, Marshall, Mayo and Roxboro facilities.

Installation: I used painters' tape to gently adhere the exterior pieces of the sandbar on the floor. The interior slices are simply placed on the floor.

About the Coal Ash Art: The material is lightweight, like floral foam. There is fiberglass in the material, so do not rub the exposed interior. Mask and gloves are advisable, but not necessary. The coal ash is encapsulated in a polymer that covers the heavy metals. The particles fall to the floor like grit instead of becoming airborne. The polymer also prevents the heavy metals from lodging in organs of humans and wildlife, if ingested. You should be safe in the installation of this art.

Additional Sources of Major Decisions: https://theliliesproject.org/coal-ash-art-sandbar

COAL ASH POND MAPS (14 TOTAL)

ARTIST: CAROLINE RUTLEDGE ARMIJO TITLE: (Location of Coal Ash Pond) DATE OF WORK: 2022 MEDIUM: ENCAPSULATED COAL ASH HEXAGONAL POSTS, PAINT, ARCHIVAL PRINT, STAINLESS STEEL PIN PRICE: NFS DIMENSIONS: OBJECT H: 6" W: 6.75" D: 2"

https://theliliesproject.org/coal-ash-art-coal-ash-pondmaps

COLLECTION OF WALL MAPS

This collection of maps highlights the intentional practice of utility companies to build power plants on top of small creeks and next to rivers or waterways to actual as natural drainage for their coal ash storage systems.

The first set of six maps represent the active coal ash plants and include the date the power plant is set to retire. Some of the plants have shifted to natural gas, including: Belews Creek, Cliffside, and Marshall. Duke Energy will discontinue burning coal by 2035.

My Comments from interacting with others at GreenHill:

People were most responsive to two pieces because they are most iconic - Dan River (2nd on third row), from the 2014 Dan River Spill, and Belews Creek (3rd on top row), which is the focus of The Lilies Project. My favorite art piece is Marshall (2nd on top row), because the paper cut looks like the silhouette of a dragon kidnapping a little girl. This location near Charlotte is home to a high school where 26 students have thyroid cancer and six have died. Coal ash was found on the lot adjacent to the school after the earth split open following a heavy rain.

By the groupings of the maps, you can see how the locations Duke agreed to clean up were small, contained ponds. These eight hang on the right wall. The six on the left wall are more organic because of Duke creating lagoons by dumping directly into



the landscape. They are much more difficult to clean up.

Installation: Paper cut maps are pinned on the front of the coal ash slice. The slices are hung using two nails on the back of each piece. The nails are stacked like a colon (:) to stabilize the piece and prevent swinging. The encapsulated coal ash is a very porous material, so it's easy to slide on and hang. The groupings can be installed to be meet the needs of the exhibit space.

About the Coal Ash Art: The material is lightweight, like floral foam. There is fiberglass in the material, so do not rub the exposed interior. Mask and gloves are advisable, but not necessary. The coal ash is encapsulated in a polymer that covers the heavy metals. The particles fall to the floor like grit instead of becoming airborne. The polymer also prevents the heavy metals from lodging in organs of humans and wildlife, if ingested. You should be safe in the installation of this art.