



# Waterborne Frequencies

Brianna Bates and Sydney McDonald

# Table of Contents

**01**

## **Inspiration**

A journey to the Walters Art Museum

**02**

## **Selecting a Piece**

A look at the inspiration

**03**

## **Combining our Disciplines**

A blending of two art forms

**04**

## **Bri's Process**

A look at the audio elements

**05**

## **Sydney's Process**

A look at the visual elements

**06**

## **The Final Work**

The end result

A dark, atmospheric photograph of a city square. In the center, the Washington Monument stands tall. To its right is a Gothic cathedral with a prominent spire. In the foreground, a equestrian statue is visible. The scene is dimly lit, suggesting dusk or dawn. The text '01 A Trip To The Walters' is overlaid in white.

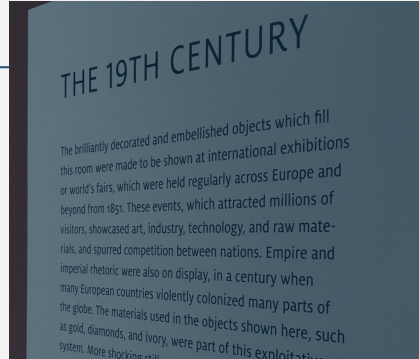
# 01 A Trip To The Walters

## Walters Art Museum

In early October, the first year Linehan scholars traveled to Walters Art Museum. Here, a vast collection of pieces have been collected and can be viewed for free. The museum is divided into sections and features pieces from different periods in time.



## Inside the Galleries



Here are some photos from our trip!



Our  
Inspiration  
Piece

02



## Hudson River Landscape

Our inspiration was the *Hudson River Landscape*, painted by James McDougal Hart in 1858. It is a calm landscape, picturing trees, water, and peace in the area. It suggests a calm place, however, tensions in America were rapidly growing at the time. Being illustrated just prior to the Civil War, the United States was on the brink of an unprecedented time in the nation's history.



03

Combining  
our  
Disciplines



# Visual and Sound

After selecting our piece, we had to brainstorm how to combine our two art forms. Instead of limiting music to notes on a page, we broadened our perspective sounds. Instead of playing different pitches in a specified rhythm, we thought of the sounds that we would hear in the painting. Sounds of nature.

## Moving Forward

We knew that photography would be the element that Sydney would bring to the table. In a previous work, she had discovered the idea of capturing frequencies through water. Taking images of vibrations played through a liquid was a way to literally see sound. We knew that we wanted to expand on this idea that she had experimented with before.

A close-up photograph of a person wearing clear-framed glasses, looking down at a piece of white bubble wrap they are holding with their hands. The background is blurred, suggesting an indoor setting. The overall image has a blueish tint.

Bri's Process

04

# Planning

---

The following week, we went to seek advice from Professor Donahue to see how we could produce such strong vibrations in water. He suggested striking the instrument in a tub of water. We went and filled up a bucket, then put various percussive instruments inside. While we did get some vibrations, we needed more. We tried a thinner container, and instruments with lower frequencies. After more failure, we decided it would be best to record our sounds as audio files, then use a speaker in the water. We decided on four sounds, that would create four final images.

## The Sounds

### Rain Stick

I used a rainstick to create the sounds of flowing water.

### Shekere

Another sound used to represent water, a rush of a current.

### Bubble Wrap

The sounds of crinkling bubble wrap sound as wind blowing through blades of grass.

### Vibraphone

I played a whole tone scale on the vibraphone. It is mysterious and yet calming all at once.

## A Listen





05

Sydney's  
Process

## Experimentation and testing

---

After some planning, we settled on a simple setup. We would lay a thin pan on top of a speaker and allow the speaker to vibrate the pan. This would shake the water and create patterns that could be captured. To make sure the setup was efficient, we tested it out using a few songs and then moved to the sounds that we would be using.

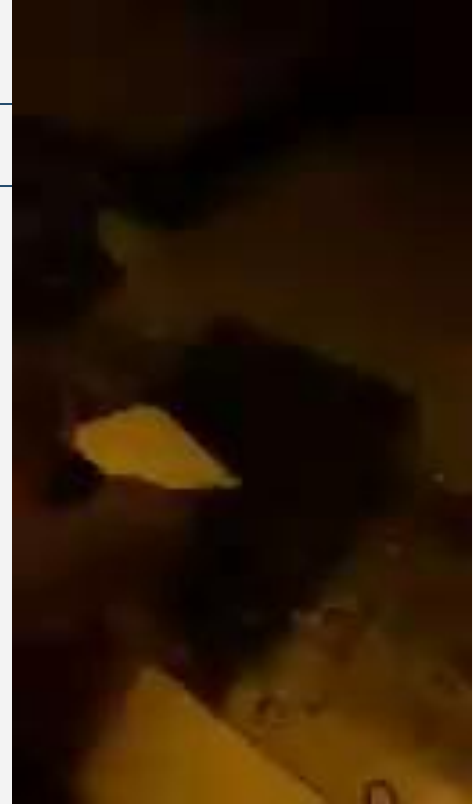




## Darkroom process

---

To capture the patterns of the different sounds, I used an alternative photographic process called a "Watergram". First, I would set the light-sensitive paper in the water and then play the sound through the speaker. Once the water is moving I expose the paper to light using a flash and develop the photograph.

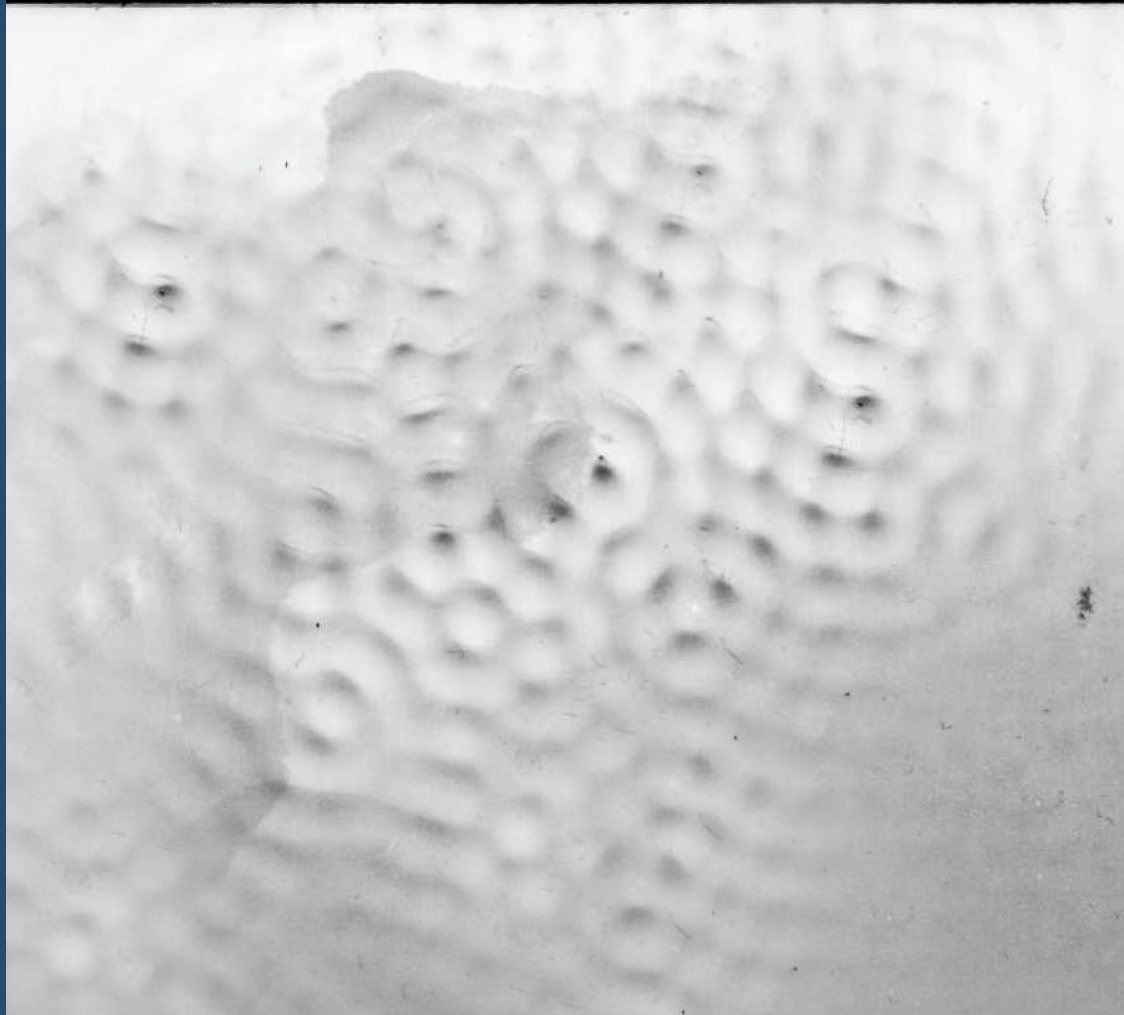




Final  
Images

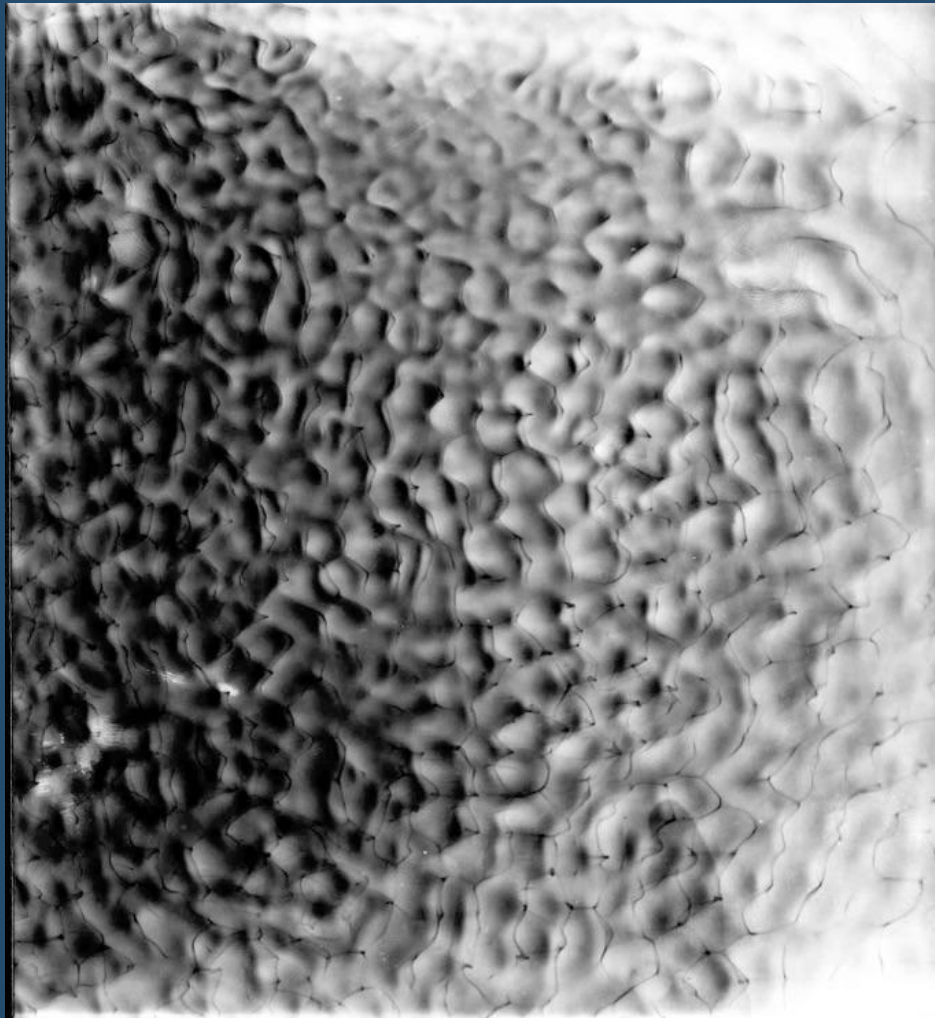
06

# Rain Stick



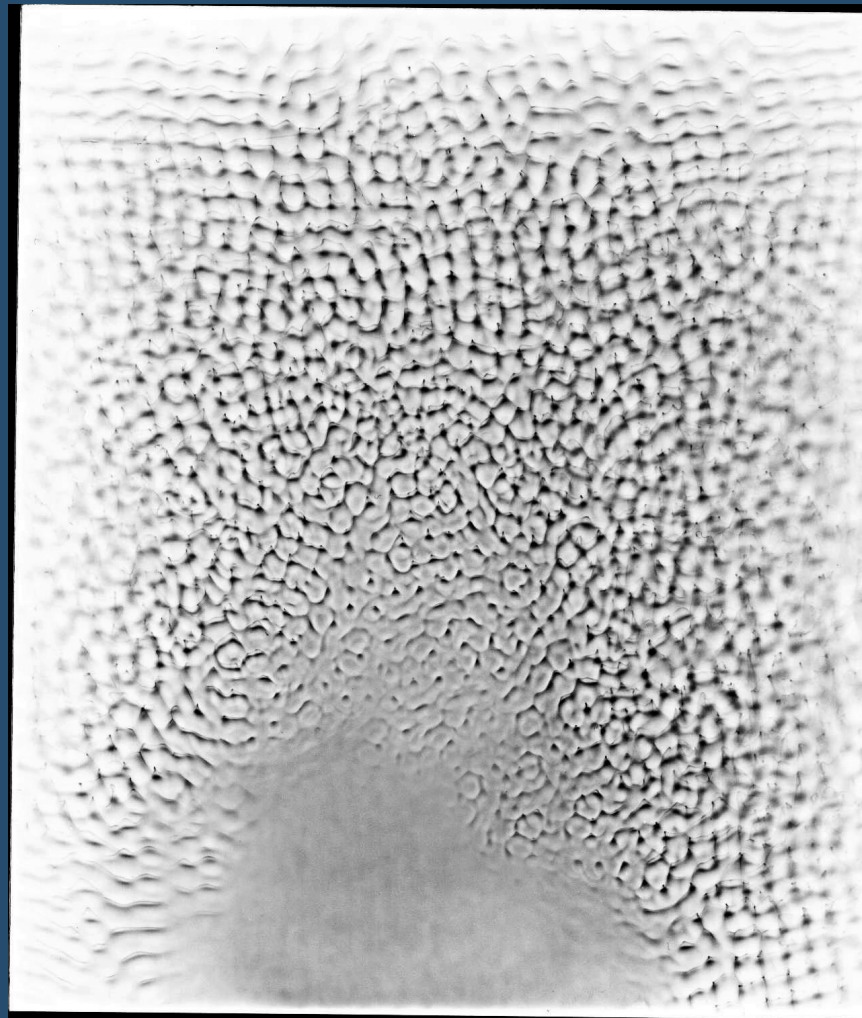
Gentle River

# Shekere



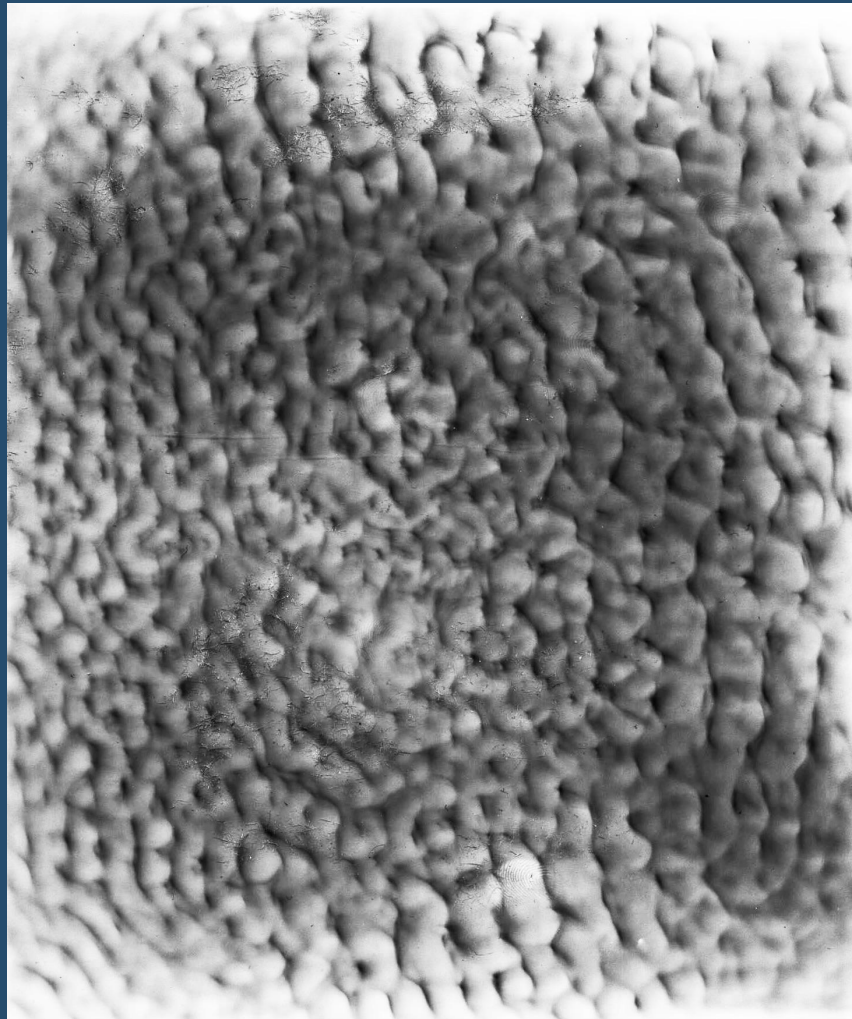
Rushing Current

# Bubble Wrap



Still Ground

# Vibraphone



Unknown Future

An ancient Egyptian mummy is displayed in a museum case. The mummy is wrapped in a shroud with vibrant, colorful patterns in shades of blue, red, and white. The mummy's face is visible, showing dark eye sockets and a nose. The background is a dark, modern museum setting with glass display cases.

Questions?