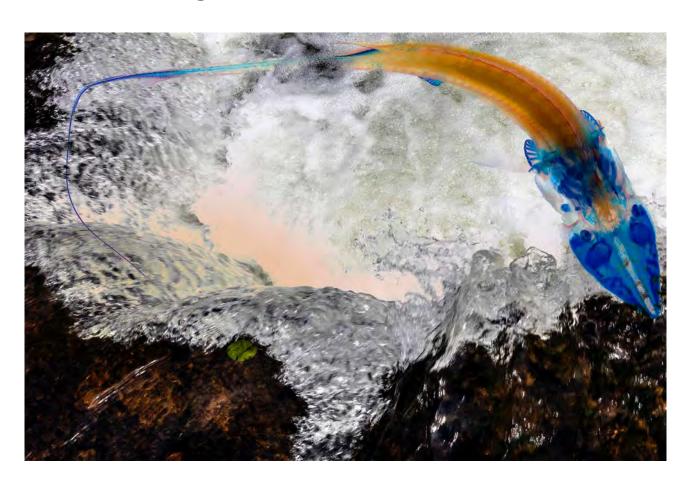
Teacher Package

THE STATE WE'RE IN WATER

Constructing a Sense of Place in the Hydrosphere





CONTENTS

- 1. Introduction
 - a. Exhibition Information
 - b. Partnerships
 - c. Artists Biography
- 2. Design Challenge One Day Lesson
- 3. Postcards from the Hydrosphere Project
 - a. Watercolor (all grade levels)
 - b. Collage (4th grade and up)
- 4. Haiku Poetry Flag (High School)
- 5. STEAM Public Service Announcement Unit Plan (Middle School)
- 6. Glossary of Terms
- 7. Acknowledgments and Museum Contact Information

INTRODUCTION

1.1 Exhibition Information



The State We're In: Constructing a Sense of Place in the Hydrosphere exhibition is an arts-based research project that explores human relationships to water. The artists collaborated with other researchers, water conservationists, and local community representatives to create a visual experience of their findings and observations.

The multimedia and interactive space includes personal stories, images, and visual experiences. The intention is to include various perspectives so visitors can better understand and guestion their personal and societal relationships to water.

The title refers to the many meanings of the word 'state,' as a geographic area or political boundary (the State of Oklahoma), a particular condition someone or something is in ('I'm in the state of shock), and as a reference to the physical forms of matter (liquid, solid or gas). Like water, the state we live in is always fluid as community concerns change, the physical landscape is modified, and technology continues to alter how we work and communicate.



Water in all forms is a powerful force to our sense of place or what makes a region unique. Water molds the landscape as it moves across the surface, removing, flattening, and reorganizing the land. Water makes life possible. We build our towns and cities along water for sustenance, recreation, and to feel connected with the natural world. But severe droughts,

floods, and tidal surges increased by climate change have destructive impacts on human and non-human communities.

Human activities release pollutants into the environment or alter the landscape affecting water quality and availability. And eventually, all water will find the ocean or travel across vast distances by evaporation and precipitation.

So, for better or worse, what we do locally has global repercussions. But we can also be agents of change for the better. If we have truly entered the Anthropocene (current geological age, during which humans have become the dominant influence on climate and the environment), we have the responsibility to provide a healthy environment for all communities present and future. We can only do this if we develop an appreciation for the natural systems that support our own lives and the lives of other living things.

This project is an investigation of how we relate to other people, communities, and physical environments. It also explores the impacts—good, bad, and between—of our decisions, actions, or inaction. An emphasis is placed on Oklahoma, but other locations will be referenced because local concerns are part of a whole.

1.2 Partners, Participants, and Selected Interview Subjects

The following is a partial list of community activists, municipal, state and federal agency representatives, scientists, creative individuals and cultural agents who have contributed to the project. This list of contributors and collaborators will continue to grow and develop throughout the run of the exhibition.

Special thanks to:

- Paolo Sanza, RA, Professor, OSU School of Architecture
- Dr. Scott Stoodley, Director, OSU Environmental Sciences Graduate Program
- Lou Ann Fisher, Director of Compliance, formerly Superintendent of Wastewater Treatment, City of Stillwater, Oklahoma

OSU Programs and Departments:

- The Oklahoma State University Museum of Art
- The Prairie Arts Center, Stillwater
- Students and Faculty in the Unmanned Systems Research Institute (Dr. Jamey Jacobs, Director)
- The Office of the Vice President of Research (Dr. Kenneth Sewell, VP)
- Center for Sovereign Nations Oklahoma
- Water Resource Center
- Environmental Science Integrated Biology
- Allied Arts
- Freshmen in Transition/ Ferguson College of Agriculture
- Department of Art, Graphic Design, and Art History
- Edmon Low Library-Science Café
- Science Education
- Kelly Kerr, Student Media Coordinator, School of Media and Strategic Communications
- Environmental Engineering
- Department of Horticulture and Landscape Architecture
- Department of Natural Resource Ecology and Management

Community Partners:

- The Lake McMurtry Foundation (Jill van Egmond, Executive Director)
- Sara Hill, Cherokee Nation, Attorney General, Formerly Secretary of Natural Resources
- City of Stillwater, Oklahoma (Jason Tyler, Superintendent, Wastewater Treatment)
- Adam Johnson, Source Water Protection Manager, City of Tulsa
- Jason Aamodt, Attorney, Environmental & Social Justice, professor, University of Tulsa, College of Law
- Ashley Nealis, Regional Supervisor, Fish Division Kaw Lake, Ponca City, Oklahoma
- City of Tulsa Water Protection
- Oka' Yanahli Preserve: Nature Conservancy (Blue River), Stillwell
- The McGregor Herbarium at the University of Kansas Biodiversity
- Institute Great Salt Plains Lake
- Lake Carl Blackwell
- The Weather Report Contributors: Phyllis Lasser, Patrick Lydon, Suhee Kang, Takuma Usematsu, Masahiro Kawanaka

1.3 Artists Biographies



Marguerite Perret is an associate professor of art at Washburn University. Her arts-based research and social issue engaged studio practice explores the promise, complications and sometimes contradictory narratives inherent at the interstices of art, science, healthcare and personal experience. She is the lead artist for the international and interdisciplinary dialogue "The Waiting Room Projects," and has presented her

collaborative work nationally and internationally. Recent commissions, temporary public art projects, collaborative installations, exhibitions and artist residencies include those at the University Museum, Groningen, the Netherlands, and the International ZERO1 Biennial in San Jose, California, the Loyola University Museum of Art, Chicago, and the Montalvo Arts Center. Publications include A Waiting Room of One's Own: Contexts for the Waiting Room (2011), and "things you should know about"/Speak Loudly booklet series (2013 and ongoing). www.margueriteperret.com



Bruce Scherting is Director of Project Art and the Medical Museum at the University of Iowa Hospitals and Clinics. He plans to build on an extensive collection of original works of art and performing arts programming to provide an environment and experiences that promote healing. For more than twelve years, Scherting was Director of Exhibits at the University of Kansas Biodiversity Institute and Natural History Museum

developing exhibits that explored life on earth, past and present. He also supervised a conservation assessment for the Panorama of North American Plants and Animals, one of three extant historically important 360-degree dioramas created in the late 19th century. Scherting also taught in the KU Graduate Museum Studies Program supervising student collaborations with academic units and community organizations. Previously he worked at the Field Museum and the Shedd Aquarium, both in Chicago, and the University Of Iowa Museum Of Natural History where he also taught in the Museum Studies Program. www.brucescherting.com



Robin Lasser is an artist residing in Oakland, California and currently a Professor of Art at San Jose State University. She produces photographs, video, site-specific installations and public art dealing with socially and culturally significant imagery and themes. Lasser often works in a collaborative mode with other artists, writers, students, public agencies, community organizations, and international coalitions to produce

public art and promote public dialogue. Recent international exhibitions include solo shows at museums such as: The Metenkov Museum of Photography, Yekaterinburg, Russia, The Recoleta Cultural Center in Buenos Aires, Argentina, and The Caixa Cultural Center in Rio de Janeiro. Lasser also participates in international biennials such as ZERO1: Global Art on the Edge, San Jose, California, Nuit Blanche, Toronto, Canada and the Pingyao International Photography Festival in Pingyao, China. Her work has been published in numerous books and periodicals. www.robinlasser.com

DESIGN CHALLENGE

Students will solve an open-ended problem with time and material constraints. Working in small groups, solutions are developed quickly and yield surprising solutions that may not have been immediately obvious. Educators can create packs out of simple and inexpensive materials or request a classroom kit by emailing catarin@okstate.edu. Adapted from the Cooper Hewitt - Smithsonian Design Museum's Ready, Set, Design, our challenges include real-life or engaging scenarios related to water concerns.

DIY Kit Instructions

- 1. Gather Materials
 - Paper lunch bags
 - Print the challenge cards and instructions*
 - Fastener items (e.g., pipe cleaners, rubber bands, paper clips, string)
 - Surface items (e.g., coffee filters, cardboard squares, balloons, paper)
 - Structure items (e.g., straws, tongue depressors, wood skewers, foil)
- 2. Stuff one lunch bag for each team. Each bag should contain three fastener items, two or three surface items, and three structure items.
- 3. Write your own challenge(s) on index cards or use ours*. Each group can receive the same problem or different ones. It is up to you!

Lesson

- 1. Divide the group into teams (2-4). Each team gets ONE Bag.
- 2. Introduction: "Today, you will be finding a solution to a problem by designing a prototype. A prototype is a small model built to test a product. The first thing you're going to do is read your challenge card. Your team's job is to share ideas, brainstorm, and build a prototype using only the materials in your bag. You'll have 20 minutes to finish. So Ready, Set, GO!"
- 3. Share: When time is up, each group chooses a speaker to present their solutions to the other teams.







^{*}The following two pages each have 6 challenges related to water issues.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

There has been a flood. You need a device to float on.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

You are planning to go on a very long walk and don't want to get thirsty. Design a device to collect and carry water.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

Create a way to safely bathe a cat.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

Oh no! There has been an oil spill.

Create a device that will separate
the oil from the water without
trapping fish and animals.

Remember that oil floats on water.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

It is "Oklahoma hot" and your grass is very dry! Create a device that will water your grass as fast as possible.

Using the supplies inside the bag, design a prototype to meet the challenge below.

• • • • • • • • • • • •

YOUR CHALLENGE IS...

Your float was taken by the water current at Lake Carl Blackwell. Create a device that can catch your float and bring it back to you.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

There is a zombie apocalypse. Create a device that will take you to the safety of a deserted island as fast as possible.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

The running water at your house is contaminated. Create a device to pull clean water from the ground until the problem is fixed.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

Regular energy sources are depleted but water is in abundance in your town. Create a device to harvest water energy.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

When it rains, it pours. Your backyard is full of unwanted water. Design a system to direct the water away from your yard.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

Your water pipe broke, flooding your yard and leaving your house without running water. Create a device to collect, transport, and clean the water to be used inside your home.

Using the supplies inside the bag, design a prototype to meet the challenge below.

YOUR CHALLENGE IS...

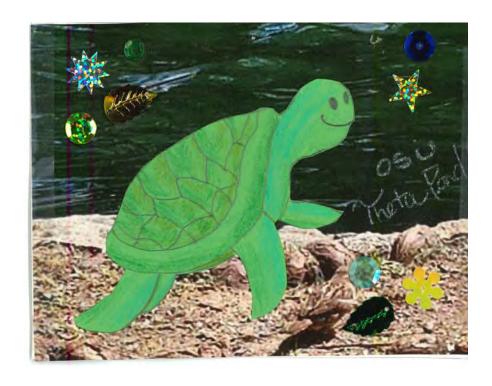
You and a friend went swimming at Lake McMurtry. Your friend swam too far away and is too tired to swim back. Create a device to rescue your friend as fast as possible.

POSTCARDS FROM THE HYDROSPHERE

An educational community engagement project that will be exhibited online and selected works put on display at the OSU Museum of Art as part of the exhibition, *The State We're In*. Adaptable to different grade levels. To request a classroom kit with materials, printed instructions, and a link to a short video tutorial, email catarin@okstate.edu.



A watercolor postcard by Cat de Araujo.



A collage postcard by Christina Elliott.

WATERCOLOR POSTCARD

All ages

Water connects us, and it makes our lives possible. We build our homes near water for food, recreation, and to connect with nature. With this in mind, paint a postcard that speaks to your personal experience with water. Mail your finished artwork to the Museum to be displayed as a part of a community project. We hope this activity will help you slow down, think about your personal experiences with water, and connect with others.

Materials:

- Watercolor postcard
- Scraps of watercolor paper to practice
- Prepaid envelope with Museum address
- Watercolor set

To request a classroom kit with materials, printed instructions, and a link to a short video tutorial, email <u>catarin@okstate.edu</u>.

Steps:

- 1. **Reflect**: What is your relationship with water? How do you use water? Where and why? How about other humans within your community and around the world?
- 2. Create: Use your watercolor to paint your experience.
- 3. **Write**: On the back of your postcard, write a few sentences describing your feelings.
- 4. **Mail**: Use a prepaid envelope to send your postcard to the Museum. Your work will be included in the exhibition for all to see. Postcards will be returned to teachers before the end of the school year.





A few tips - Use painters tape to secure your postcard. Work from light to dark. Test your colors using scrap paper. Allow your card to dry before adding more layers.

COLLAGE POSTCARD

4th grade and up

Water makes life possible. We build our towns and cities along water for sustenance, recreation, and to feel connected with the natural world. But human activities release pollutants and alter the landscape affecting water quality and availability. So, for better or worse, what we do locally has global repercussions. Now, more than ever, we need to provide a healthy environment for all communities, present and future. But we can only do this if we develop an appreciation for the natural systems that support our own lives and the lives of other living things. With this in mind, create a postcard that speaks to your thoughts about humanity's relationship to the hydrosphere. Mail your finished artwork to the Museum to be displayed as a part of a community project.

Materials:

- Blank postcard paper
- Prepaid envelope with Museum address
- Collage materials and glue stick

To request a classroom kit with materials, printed instructions, and a link to a short video tutorial, email catarin@okstate.edu.

Steps:

- 1. **Reflect**: What is your relationship with water? How about other humans within your community and around the world, can you think about their experiences with water? Do all humans have equal access to water? Why and why not? How does human interaction with water affect our environment? What can you do to help the environment?
- 2. Create: Use collage materials to represent your thoughts and experience visually.
- 3. Write: On the back of your postcard, write a few sentences describing your feelings.
- 4. **Mail**: Use a prepaid envelope to send your postcard to the Museum. Your work will be included in the exhibition for all to see. Postcards will be returned to teachers before the end of the school year.

High School

Create poetry inspired flags based on water conservation issues. This activity is inspired by a long-term collaborative project organized by the *Signaling Water* artists, sponsored by the OSU Museum of Art. No previous art or poetry experience necessary and adaptable to different grade levels. To request a classroom kit with materials, printed instructions, and a link to a short video tutorial, email catarin@okstate.edu.



Vocabulary

- Google: verb, to search for information about (someone or something) on the Internet using the search engine Google (dictionary.com).
- Haiku: A Japanese verse form most often composed, in English versions, of three unrhymed lines of five, seven, and five syllables (poetryfoundation.org).
- **Syllable**: a unit of pronunciation having one vowel sound, with or without surrounding consonants, forming the whole or a part of a word; e.g., there are two syllables in water and three in inferno (Oxford languages).





Images provided by Robin Lasser and Marguerite Perret.

High School

In the following examples, art students at Washburn University (Topeka, Kansas, U.S.) worked in small groups collaboratively. Each member of the group contributed a 'found' phrase based on their own interests as related to the *signaling water* project.

Oil spill masks villains

Devil in the deep blue sea,

name comes from the dark

Sailors for the sea
Oil toxins are a trade off
Destructive species
~ Haiku by John Claybrook, Gabbi
Rollins and Sammie Veal

Descending below surface Climate change endangers reefs. Risk becoming obsolete

Plunge headfirst into the water
Temperatures rising
I'm often fiercely questioned
~ Haiku by Sabrina
Fesler, Zandra Snead-Dawkins and
Aaron Zentner

Swamped by water woes Strip mining ice caps on mars Cone of depression

An overburdened
polar bear disappearing
Man-made injustice
~ Haiku by Stevie Delgado, Craig
Thomas, Jenna Erickson and Morgan
Roberts

Evacuation notice,
a towering thundercloud,
colorful poison;
the impact on our oceans
and they all turn black and white
~ Tanka by Miku Motoi, Rachel Ribera
Ramos, Yue Li and Brooke Province

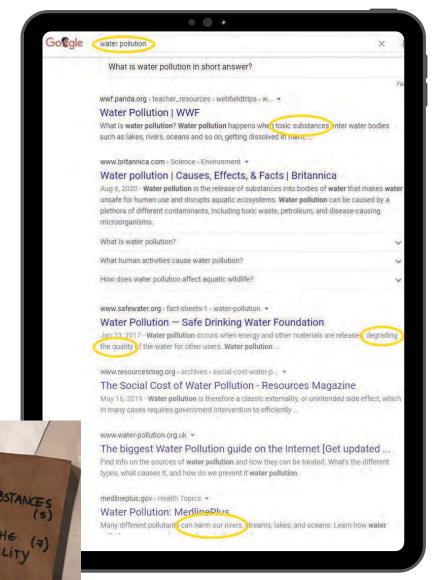


High school students in Osaka, Japan participating in workshop.

High School

Haiku Instructions

- **1.** Google a short phrase related to your concerns about water (ie: watershed pollution, reclamation of urban wetlands, oil spill, well-water contamination).
- 2. Scan the "common searches" (drop-down list from the search) of the first page of your results. Use only the text available on that one Google search page.
- 3. Select segments from the first page results that match the syllable count for a Haiku (5-7-5). You can choose which phrases you want to use, but you cannot change the phrase to meet the syllable count. You can select a fragment from one result and follow it with a fragment from another. You may add short connector words including the, it, an, a, as, with, for, in, on, or, etc.



Google results for "water pollution." This participant selected "toxic substances," "degrading the quality," and "can harm our rivers."

High School

Flag Instructions

- 1. Create a flag inspired by your poem using acrylic paint and markers.
- 2. Write your haiku or Tanka on the flag.
- 3. String the flags together and let them fly!





Paint your flag. Use colors, lines, symbols and/or words to illustrate your poem.

PUBLIC SERVICE ANNOUNCEMENT

Middle and Junior High

This STEAM Unit Plan is designed for middle school students but adaptable to various classroom settings. Essential questions and big ideas are based on *The State We're In:* Constructing a Sense of Place in the Hydrosphere exhibition. To request classroom assistance, email catarin@okstate.edu.

Unit: The State We're In Water, Public Service Announcement

- Summary: Students will conduct research, write a script, and collaborate to produce a video that educates the community about societal and environmental concerns related to water.
- Duration: 4 Weeks
- Grade Level(s): 6 8
- Subject(s): Environmental Science, Technology, Language Arts, Journalism, Visual Arts

Big Idea(s):

- Historically, humans have built communities surrounding water for nutrition, recreation, and to feel connected to the natural world.
- Human activities release pollutants into the environment or alter the landscape affecting water quality and availability.
- Taking an active role by educating ourselves and others about water issues may positively contribute to the health of our environment.

Essential Question(s):

- What is your personal relationship with water? When do you use water? When, where, and why? Where does your water come from?
- · What is the relationship between humans and water, locally and globally?
- What human activities may pollute water? What human activities may affect water accessibility?
- How can we effectively educate others about water concerns that are affecting our communities?

PUBLIC SERVICE ANNOUNCEMENT

Middle and Junior High

Related Standards:

Oklahoma Science Standards

7.LS2.1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

7.ESS3.1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes

Oklahoma Language Arts Standards

6.1.R.1 Students will actively listen and speak clearly using appropriate discussion rules with awareness of verbal and nonverbal cues.

8.1.W.1 Students will give formal and informal presentations in a group or individually, providing textual and visual evidence to support a main idea.

National Core Visual Arts Standards

Performing: Realizing artistic ideas and work through interpretation and presentation.

Presenting: Interpreting and sharing artistic work.

Producing: Realizing and presenting artistic ideas and work

Assessment/Evidence

- Written summary and script based on research
- Public Service Announcement Video
- Classroom Critique
- Individual Self-Reflection

PUBLIC SERVICE ANNOUNCEMENT

Middle and Junior High

Learning Plan

- Lesson 1: Introduce topic and exhibition content by going on a field trip to the OSU
 Museum of Art, requesting a classroom visit, or using our virtual tour platform.
 Students will look at different artworks to investigate and respond to the essential
 questions.
- Lesson 2: Brainstorm problems and select a topic. In groups, students choose an area of their interest. Topics may vary from local to national to global concerns surrounding water conservation, pollution, and accessibility.
- Lesson 3: Share PSA examples Students will look at examples of Public Service Announcement videos and discuss their importance to a community
- Lesson 4: Research topic, take notes, and write a script. Individual students choose a method of research and each writes a portion of the script that will be used for the video.
- Lesson 5: Create Video. Students collaborate and choose roles to film, edit, and review the final product. Examples of Roles: Director, Talent, Editor, and Producer.
- Lesson 6: Classroom Critique and Individual Self-Evaluation. Students present their finished PSA video to class and listen to their peers' feedback. Students write a self-evaluating one-page essay describing their role in the activity and reflecting on what they learned from the project.

GLOSSARY

Art-based research*

Art-based research can be defined as the systematic use of the artistic process, the actual making of artistic expressions in all of the different forms of the arts, as a primary way of understanding and examining experience by both researchers and the people that they involve in their studies.

Anthropocene

The term Anthropocene has been adopted to refer to the era of geological time during which human activity is considered to be the dominant influence on the environment, climate, and ecology of the earth.

Aquifer

A layer of rock or soil that can take in and hold water.

Conservation

The protection of the natural environment

Conservationists

A person who takes an active part in the protection of the environment

Flood

A large amount of water covering an area that is usually dry

Hydrosphere

All of the water on or over the earth's surface

Installation (art)

A piece of modern sculpture that is made using sound, light, etc. as well as objects

Irrigation

The practice of supplying water to an area of land through pipes or channels so that crops will grow

Multimedia

The use of several different ways of giving information or several different materials

Transmutation

An act of changing, or of being changed, into something different

Definitions from Oxford Learner's Dictionary

*Definition from EduTechWiki

ACKNOWLEDGEMENTS & CONTACTS

We would like to thank all the people who were a part of the exhibition and who supported our role as a teaching and learning arts institution.

To Marguerite, Bruce, and Robin for being an endless source of inspiration, and for and allowing us to adapt their lessons and projects to fit local needs. To all Stillwater Public School Teachers for providing students with a quality education that inspires, challenges, and fosters long-term love for learning. To the Museum's Art Advocates for their continuous support, including funding our educational programs and making classroom assistance possible. Their commitment to arts education is a tremendous asset to our community and will forever continue to change lives.

For more information, questions or to request assistance contact:

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To make a donation to the OSU Museum of Art Advocate fund visit our website at https://museum.okstate.edu/give

Exhibition images by Phil Shockley.

