

MapThink
water



real-world experiential learning for high school classrooms

GO WITH THE FLOW: EMPOWER STUDENTS TO INVESTIGATE THEIR WATER SYSTEM USING MAPS-BASED RESEARCH METHODS



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CONTENTS

PLAN

1

INTRO FOR EDUCATORS page 3–4

A brief overview of what the *Go With the Flow* project entails, what to expect, how it might complement your own curriculum and why it is important.

INTRODUCE

2

INTRODUCTION pages 5–7

This summary gives students an idea of what to expect over the course of the project, puts the project into context and gives students a real world example.

PERSPECTIVES

3

CONCEPT MAPPING pages 8–13

- Introduce students to concept mapping, a powerful visual research tool.
- Help students play an active role in research by participating in a brainstorming activity where they will learn to draw connections between information and concepts and work to answer research questions.

4

HOW FAR CAN YOU SEE? pages 14–18

- Create a map of the school and surrounding community using student observations.
- Help students improve their visual communication skills, learn to read maps and use them in place based research.
- Help students recognize the power of documenting their own observations of the world, understand how their perspective impacts research results and how, by viewing issues from multiple perspectives, they can conduct more successful research.

INVESTIGATE

5

INTERVIEWS & SITE VISITS pages 19–33

- Help students learn to prepare, conduct and document an in-person interview and site visit to enhance research and communications skills.
- Have students experience firsthand how civic engagement can enable access to new information and situate abstract concepts within their physical, social, and geographical realities.

REFLECT

6

COMMUNITY MAPPING pages 34–41

- Students learn to construct a community map using research findings from previous activities
- Students acquire new methods for synthesizing information in preparation for writing up and sharing their research findings

SHARE

7

BLOGGER ACTIVITIES pages 42–50

- Students will learn to identify and fill the holes in their research and author a compelling narrative that effectively summarizes their findings
- Students will create a blog using Blogger and learn best practices for sharing via blog vs. other media vehicles

8

CREATE A HABITATMAP pages 51–63

- Introduce HabitatMap, an online mapping and social networking platform through which students can inform and engage audiences
- Students will use their investigative report to populate the class-specific HabitatMap with factual, objective information that connects their research to the community visually
- Students will learn how to embed a HabitatMap in their blog



PLAN

INTRODUCE

PERSPECTIVES

INVESTIGATE

REFLECT

SHARE

INTRO FOR EDUCATORS

Welcome to ***Go With the Flow***, part of HabitatMap's ***MapThink*** Toolkit series. *Go With the Flow* is a short-term group research project that empowers high school students to investigate their water system through real-world learning and document their research findings using interactive web-based media. This project aligns with the Common Core Standards, teaches effective research and communication techniques, and examines critical water issues from a geographical perspective. *Go With the Flow* is appropriate for high school English, science, and geography classes or courses with a focus on the environment and sustainability. Reading, writing, speaking and listening are emphasized throughout.

The research questions students will be answering concern water systems, but the toolkit can easily be re-purposed to investigate other “systems” that are part of the built environment, including but not limited to energy, waste, or transportation. Students will conduct original research using maps, site visits, interviews, and the Internet. They will utilize Cornell note taking, synthesize information by way of maps and an investigative narrative report, then learn to use technology to present and share information via online platforms, including Blogger and HabitatMap.

MapThink positions students as democratic citizens who are active participants in their community and advocates for just and sustainable cities. *Go With The Flow* will guide students in investigating how homes and businesses are connected to water sources, how the facilities that provide clean water and dispose of dirty water are integrated into material flows and institutional networks that extend throughout and beyond the city, and how these flows and networks impact the geographic distribution of environmental burdens and benefits.



Students will use these three research questions to guide their investigations and build higher level critical thinking skills:

- Where does our water come from?
- How does it get to us?
- What happens to it once we use it?

At the conclusion of the project, students will walk away with an understanding and appreciation of:

- Real-world and Inquiry-based Learning
- The Value of Teamwork, Group Problem Solving & Brainstorming
- Innovative Research Techniques & How to Write Effective Narrative
- Professional Communication Skills & Presentation Techniques
- Technology & New Media Platforms + Best Practices
- How We Relate to and Can Connect With the Community Around Us
- The Importance of Water

Aligns with These Common Core Standards:

- **READING:** Key Ideas and Details; Integration of Knowledge and Ideas; Range of Reading and Level of Text Complexity
- **WRITING:** Text Types and Purposes; Production and Distribution of Writing; Research to Build and Present Knowledge; Range of Writing
- **SPEAKING AND LISTENING:** Comprehension and Collaboration; Presentation of Knowledge and Ideas; Vocabulary Acquisition and Use

Note:

At beginning of each of the toolkit sections, you will find designated Educator pages. Because some sections require advance planning, we suggest you begin by reading through the Educator pages so you can prepare appropriately.



INTRODUCTION

Welcome to *Go With the Flow*, a collaborative maps-based research project where you will be working as a group to conduct original research on your water system, document your findings online, and contribute to a national inventory of water systems. You will learn to use maps in ways you never thought of before, develop your group brainstorming skills, evaluate Internet resources, conduct interviews & surveys and hone your note taking skills to uncover the answers to our research questions.

Objectives:

- Answer our three important research questions and uncover the importance of water
- Learn real world research techniques
- Make use of maps to synthesize information
- Learn professional communication and presentation skills
- Learn to use online media to share information and engage & educate audiences
- Connect with your community and become an active participant in advocating for just and sustainable cities

Included Worksheets:

- Go With the Flow
- Cornell Note Sheet

PROJECT HIGHLIGHTS

TRIPS & GUEST SPEAKERS

You will participate in class trips and in-class guest speaker presentations. You will help prepare for trips and in-class guest speakers; you will take part in the actual trips and presentation interviews as well as day after “reflections”.

LEARNING INNOVATIVE TECHNIQUES FOR RESEARCH & REFLECTION

During this process we will explore innovative ways to brainstorm, conduct research, and visualize connected concepts. After we conduct original research during a site visit and an interview, we will compile our findings in an investigative report.

FINAL PROJECT

For your final project you will work together as a group to create a blog about the water system and explain and exhibit your research findings using maps. We will use technology to educate neighbors and peers and engage audiences in our quest for just and sustainable cities.

EXAMPLE

This toolkit is based on a sustainability proficiency project conducted by English students at the Green School Academy in New York City. So you can envision where all of this might lead you, have a look at their final project: <http://greenschoolsustainability.blogspot.com>



Go with the Flow

Similar to the Green School Academy example, your research project will be about water, but will relate to your immediate community. Over the next few weeks, we will seek to answer these three questions:

- Where does our water come from?
- How does it get to us?
- What happens to it once we use it?

The research techniques we will use to answer our questions will be applicable to other problems and projects you may have going on and will help prepare you for future assignments and life beyond high school.

Why Water?

You may be wondering, *why water?* That is what we will uncover together, starting now. Water is everywhere! Water is integral to everything we do. It is not only in the soda we drink, it is in the air we breathe; it is in the food we eat and it is in the jeans we wear! In fact, the average American consumes 150 gallons of water per day. To kick-off the project, let's explore just how much water is actually in your jeans and other things we use or consume nearly everyday.

Your Assignment: Read the following article, practice taking notes using the Cornell Note Sheet template on the following page, and discuss the topic of water together as a group.:
www.bit.ly/WaterInEverything



Cornell Note Sheet

SUBJECT & DATE: _____

QUESTIONS / KEY POINTS	ANSWERS / DETAILS

SUMMARY



CONCEPT MAPPING

This section of the *Go With the Flow* research project offers an exciting method for diving into research, encouraging higher level thinking and learning how to synthesize information. This exercise can also be used to assess students' understanding at the beginning and end of the project.

Objective(s)

- Introduce students to concept mapping, a powerful visual research tool
- Help students play an active role in research by participating in a brainstorming activity where they will learn to draw connections between information and concepts and work to answer research questions.

Aligns with these

Common Core Standards

- Speaking and Listening:
Comprehension and Collaboration
- Speaking and Listening:
Presentation of Knowledge and Ideas

Duration

2 Days

Included Worksheets

- What is a Concept Map?
- Water System Concepts
- Concept Map Presentation and Group Discussion

Additional Materials

- Markers
- Scissors
- Stickie Notepads
- Poster Board or Chart Paper
- Cornell Note Sheet



How to Map Concepts

Concept mapping is a visual and creative way to access information and begin drawing associations. The best part is, concept mapping can be applied to any research project. By making information relatable and visual, concept maps are a great way to begin investigating complex questions.

“REGULAR PEOPLE ARE TALKING TO EACH OTHER, AND THEY’RE MAKING MAPS FOR EACH OTHER. AND THAT’S VERY IMPORTANT... THE STORY OF *WHERE* IS VERY IMPORTANT.”

Michael Jones, CTO of Google Earth, 2007



STUDENTS AT THE GREEN SCHOOL IN BROOKLYN, NY PRESENTING A CONCEPT MAP TO THE CLASS



During this exercise, students will cut out the enclosed water system concept icons, arrange them into a concept map, and discuss their significance to our city’s water system. This activity will help students gain an understanding of how our water system is put together and how we are all connected to it.

Concept maps work best if they are created in response to a specific question, for example “How does our water get to us?” Students endeavor to answer the question by placing the concept icons on chart paper or sticking them to a board and drawing lines and labeling actions between connected concepts. Many concepts may be unfamiliar to the students, those may remain on the side. Connections may be incorrect or non-existent and there may be a lack of structure. After making an initial attempt, students will briefly research any concepts they have difficulty integrating into their concept map and then rearrange their maps to reflect their research findings.

The concept mapping activity should be used to create a formative assessment of student knowledge and repeated later in the unit to assess content mastery.

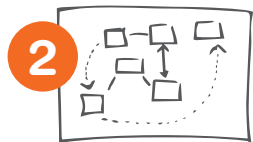
What is a Concept Map?

A concept map is a research tool that helps us see relationships between complicated ideas. Concept mapping is a creative way to brainstorm and can be done as a group or solo activity. It can be created using a piece of chart paper and sticky notes or on a computer. A concept map is a place where you can strategically arrange the key concepts of a given topic and draw connections between those concepts to show their relationship to one another. For the purpose of this project, you will be working as a group and using the enclosed water concept icons.

Your Assignment: Work together in your group to put together a concept map for the question, “How and why was our water system created?”



STEP ONE: Arrange as many of the water system icons on the chart paper as you can. Use your own knowledge to place the concepts in relation to one another. Organize them in a way that shows their relationship and makes sense to you.



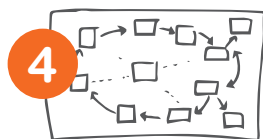
STEP TWO: Use a pencil to connect concepts with arrows and directional lines. Label the lines with “action” words that describe the type of connection that exists between the concepts.



STEP THREE: Research the concepts you don’t know so you can figure out how to revise your map. Here are some tips for conducting research:

- Choose a reliable source. It can be an article, video, website, blog post, etc.
- Read the text, or watch the video (print out if necessary)
- Use the Cornell Note Sheet to take notes that help answer our essential question and/or understand the water system concepts.

STEP FOUR: When you have finished your note sheet share it with your group members. Together, use your information to help revise your concept map and finalize connections and labels with a marker.

















STEP FIVE: Describe your map to the class, explaining how it’s organized and what it says about our water system.



Water System Concepts

The following icons represent concepts that relate to our water system. You will use these icons to compose your first concept map.

 <p>GROUNDWATER</p>	 <p>SURFACEWATER</p>	 <p>WELL</p>	 <p>WATERSHED</p>
 <p>AQUEDUCT</p>	 <p>POLLUTION</p>	 <p>FILTRATION</p>	 <p>TAP WATER</p>
 <p>SEWAGE OVERFLOW</p>	 <p>GREEN INFRASTRUCTURE</p>	 <p>IMPERMEABLE</p>	 <p>PIPES</p>
 <p>RESERVOIR</p>	 <p>SEWAGE TREATMENT</p>		

Concept Map Presentation and Group Discussion

Your Assignment: Answer the following questions and follow the process described below.

1 **STEP ONE:** Answer the following questions and follow the process described below.

1. Do you feel confident explaining how and why our water system was created?
Explain your answer and be specific.

2. Which concepts on your map are you most comfortable explaining?

3. Which concepts are you least comfortable explaining?



4. What does the structure of your map tell us about the way you see and understand our water system? Be specific.

5. What specific changes to your map did you make after you completed our research and note taking?

2 **STEP TWO:** Share your answers to questions 1–3 and then identify the concepts that you still are not clear about. List those here for the group:

3 **STEP THREE:** Then, share your answers to questions 4 and 5 and try to combine them to form answers that represent each of your ideas. List the main ideas that you all agree on:

4.

5.

4 **STEP FOUR:** Share your group answers to questions 4 and 5.



HOW FAR CAN YOU SEE?

This section of the *Go With the Flow* research project introduces an experiential learning technique that teaches students how to use maps for navigating, visual communication and conducting primary research in a team setting. *How Far Can You See* uses team mapping exercises to help students see the limitations of a single perspective and the benefits of gaining new perspectives through collaborative research.

Objective(s)

- Create a map of the school and surrounding community using student observations.
- Help students improve their visual communication skills, learn to read maps and use them in place based research.
- Help students recognize the power of documenting their own observations of the world, understand how their perspective impacts research results and how, by viewing issues from multiple perspectives, they can conduct more successful research.

Aligns with these

Common Core Standards

- Speaking and Listening: Comprehension and Collaboration
- Speaking and Listening: Presentation of Knowledge and Ideas
- Writing: Range of Writing: Write routinely over extended time frames for a range of tasks, purposes, and audiences

Duration

1 or 2 Days

Included Worksheets

- What's Your Point of View?
- What Do You See Activity Reflection

Additional Materials

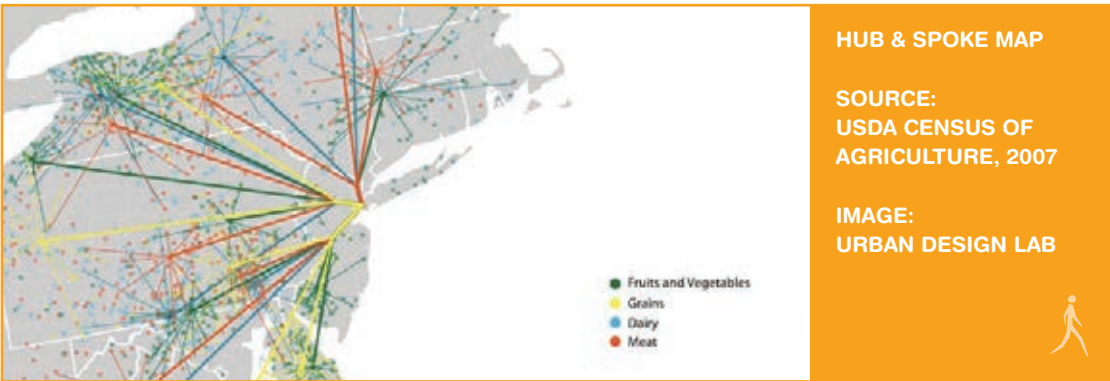
- Pre-printed Google Maps of the neighborhood (see instructions on pg. 12)
- Something hard for each student to write field notes on, e.g. clipboard
- Pens or Pencils
- Chart paper
- Markers

How to Use Maps to Teach Perspective and Enhance Research

Our perspective influences how we see the world and make decisions. From a fixed point of view, it’s easy to believe we can see or know everything about a place or concept, or on the opposite side of the spectrum, feel isolated and uninformed. However, when we look at a place, problem or system from multiple points of view, we can see more than is possible from any single position. The activities in this section will allow students to explore firsthand how documenting and combining their perspectives can bring fresh insights to their research projects. Future toolkit activities, like conducting interviews and visiting sites, will build upon this concept of collective, “on the ground” observation and inquiry to expand students’ views of the water system and see further.

“MAPS ARE NOT NEUTRAL REFERENCE OBJECTS, BUT RATHER INSTRUMENTS OF COMMUNICATION, PERSUASION, AND POWER. LIKE PAINTINGS, MAPS ALWAYS EXPRESS A POINT OF VIEW.”

Denis Wood, author of THE POWER OF MAPS



This is a one-day group mapping activity that will take place in the neighborhood surrounding your school. Each group of 4–5 students should get a unique Google map on letter size paper with one small section of the neighborhood printed on it. The maps for each group should show a different area near the school, and the edges of the maps should line up when you fit all the different groups’ maps together. Each map has a starting point marked for the groups to find when they go outside.

Each student will end up with their own hub and spoke map that shows their journey through and observations of the neighborhood. Back in the classroom, the students will combine their maps and learn how far they can see together.

How to Make the Google Maps for This Activity

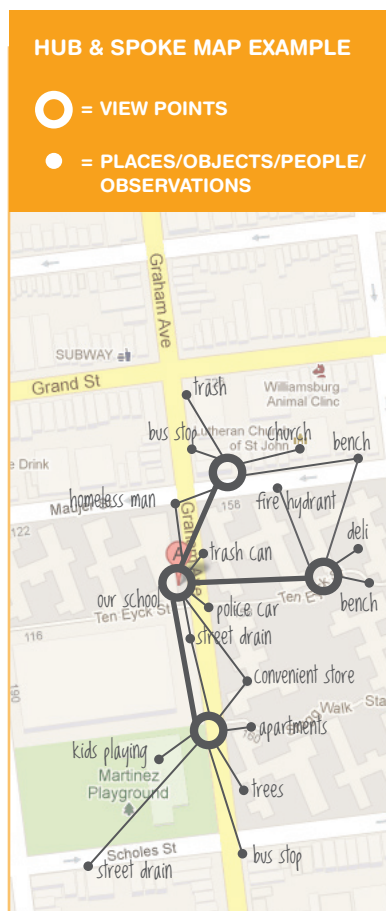
You are going to take a screenshot of your web browser window while viewing a map of the school and its surroundings. This will turn your browser window displaying the map into a JPEG image that you can crop four ways and print out for your students to use.

- 1 STEP ONE:** Navigate to your school on Google maps (www.maps.google.com) and zoom in or out until the map displays only the school and the areas within 100 yards of the school's perimeter.
- 2 STEP TWO:** Capture a screenshot of the Google map. (If using a PC hold down "alt" + "prt scr". If using a Mac hold down "command" + "shift" + "4" and drag your mouse to select the map.)
- 3 STEP THREE:** Open a blank Microsoft Word document and orient the page to landscape (click "Page Layout" > "Orientation" > "Landscape".)
- 4 STEP FOUR:** Paste the screenshot on to four consecutive pages (PC: hold down "ctrl" + "V", Mac: drag the screenshot from the desktop into the Word document.)
- 5 STEP FIVE:** Crop each map to display a different quarter of the map (click "Format" > "Crop" then pull the corners of the image). After you've cropped the map, click on the image again and pull one corner out until the map expands to fill the page. Then center the map on the page (PC: "ctrl" + "E", Mac: "command" + "E".)
- 6 STEP SIX:** Print out copies of the maps for the students to use.

What's Your Perspective?

Our view of the world is shaped by who we are and where we stand. Perspective can refer to your relationship to a place and it can also refer to your particular way of seeing a social or political issue. Your perspective and the perspective of others can be understood by paying attention to what you see and hear when you engage with places and people in the world. Perspectives are most useful when they are shared, compared, and combined with the perspectives of others to help us explore complex questions and uncover new ways of seeing the world. Today, we will work in groups and use maps to compile different perspectives and uncover how far we can see when we work together.

Your Assignment: Create a hub and spoke map with words about the neighborhood that explores different points of view.



- STEP ONE:** Go outside! Walk with your group to your assigned starting View Point and circle your location on the map.
- STEP TWO:** Take three minutes to observe the neighborhood from your View Point. What and who do you see, hear, smell? What do you care about? Draw straight lines to those things on your map and label them all with words.
- STEP THREE:** Everyone spread out to a different location on your map, but stay within line of sight of your starting View Point. Mark your new View Point with a circle and connect it to your starting View Point with a straight line.
- STEP FOUR:** Take three minutes and again draw straight lines between your View Point and the things around you and label these things with words. When you are done, your map should be full of your own thoughts and observations.
- STEP FIVE:** Return to the classroom, and together with your group, use the markers to draw your map on the chart paper. Start by outlining the roads, then transfer your View Points, lines, and words to the new map, combining your perspectives with those of your classmates.
- STEP SIX:** Pin or tape all the groups maps together on the wall or chalkboard to create an expanded view of the neighborhood.



How Far Can You See?

Activity Reflection

Group Reflection: As a class, answer the following questions.

- 1 Where are observations most dense? Most sparse? What influences how dense or sparse the observations are?
- 2 Did people notice the same things or different things? Do different people notice different things in the same exact place?
- 3 On the chalkboard, list as many of the observations as you can. What kinds of categories do your collective observations fit into? For example: People, Nature, Pollution, Shopping, Transportation, Safe, Unsafe, Play, Work or others not listed here.
- 4 What types of things were most likely to be observed and noted on your maps? What types of things were least likely to be observed and noted? Why do you think that is?
- 5 Is there anything missing from the maps? If so, what?

Individual Reflection: Take a few minutes and write a reflection about this activity. In your reflection address the following points.

- 1 How can combining more than one View Point affect the way we see our world? Is it helpful? Why?
- 2 What problems can arise when people with different View Points try to share their perspective about something with one another?
- 3 How did this activity change the way you saw the neighborhood?



INTERVIEWS & SITE VISITS

This section of the *Go With the Flow* research project employs civic engagement as an investigative research method. By talking with people and visiting places, students are able to make the leap between the water system concepts they mapped in abstract space in section one and the physical, social, and geographical realities of the water system infrastructure that permeates their everyday lives. Building on the *How Far Can You See?* activity, students learn how interviews and site visits can bring fresh perspectives to their research, enabling them to discover previously unseen elements and connections in their water system.

Objective(s)

- Help students learn to prepare, conduct and document an in-person interview and site visit to enhance research and communications skills.
- Have students experience firsthand how civic engagement can enable access to new information and situate abstract concepts within their physical, social, and geographical realities.

Aligns with these

Common Core Standards

- Speaking and Listening: Comprehension and Collaboration
- Speaking and Listening: Presentation of Knowledge and Ideas
- Writing: Range of Writing: Write routinely over extended time frames for a range of tasks, purposes, and audiences

Duration

4+ Days

***NOTE:** Please see an important note on the following page regarding prep for this section.

Included Worksheets

- Interview as Research Tool: Background Prep & Question Construction
- Interview Question Examples
- Interview Task Group Sign-up
- Assignment for Group A
- Assignment for Group B
- Assignment for Group C
- Assignment for Group D
- Conducting Research Through Site Visits
- Site Visit Reflection
- Compiling our Interviews

Additional Materials

- Guest Speaker Biography
- Pre-assembled class questions for guest interview (created after Question Construction activity)
- Cornell Note Sheet(s)
- Something hard for each student to write field notes on, e.g. clipboard
- Pens or pencils
- Video camera or smart phone/tablet device & tripod, external microphone if possible
- Still camera or camera phones



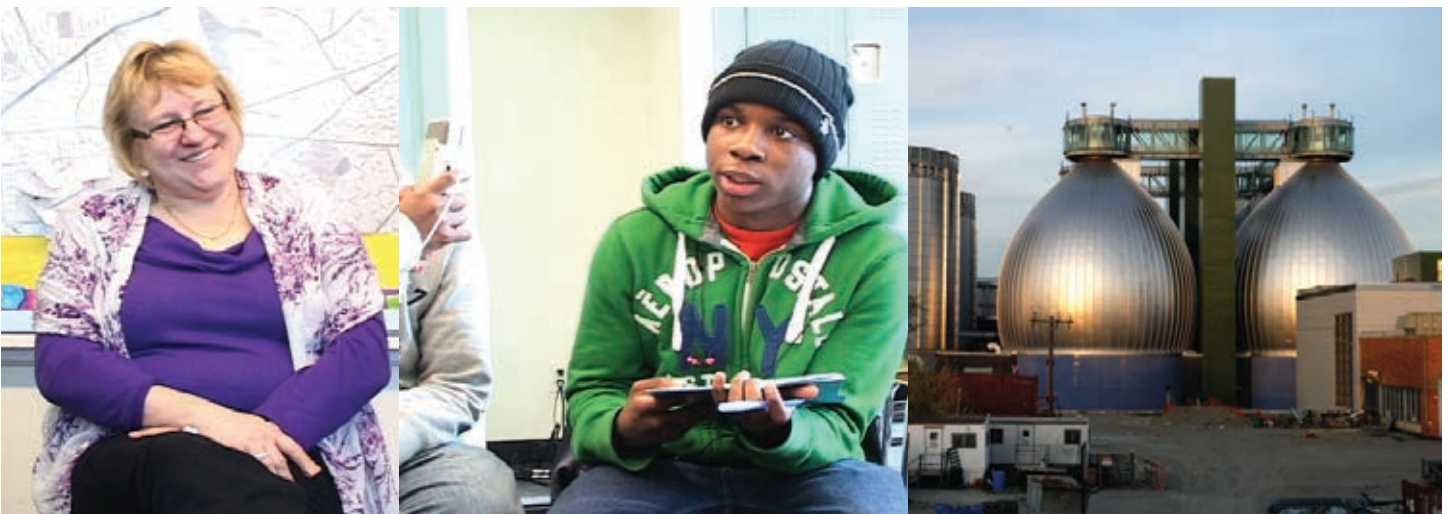
Why Interviews & Site Visits are Important

The interview and site visit mark the portion of the project where students will begin to physically locate concepts in space. These activities are a way to access more information and understand how everything fits together. This section will require more planning on your part, but you'll likely find that the interactive nature of interview and site visit activities will be a highlight of the project for many students, providing "ah-ha" moments for students as the water system concepts and connections click in to place.

"MAPS ARE GRAPHIC REPRESENTATIONS THAT FACILITATE A SPATIAL UNDERSTANDING OF THINGS, CONCEPTS, CONDITIONS, PROCESSES, AND EVENTS IN THE HUMAN WORLD. ITS ABOUT HUMAN EXPERIENCE."

Harley and Woodward, 1987

IMPORTANT NOTE: Because this section will require more planning than other portions of the toolkit, we recommend that you read through this section in its entirety first. The activities contained in this section will require video equipment (a smartphone or tablet that has video capability is fine), coordinating student transportation and gathering permission slips. (Note that permission slips may also be required by the operator of the site you'll visit.) For these reasons, it is suggested that you start planning and scheduling these activities months in advance.



A COMMUNITY LIAISON FROM A LOCAL WATER TREATMENT FACILITY IS INTERVIEWED BY A STUDENT AT THE GREEN SCHOOL IN BROOKLYN, NY; RIGHT: STUDENTS VISIT THE WATER TREATMENT FACILITY AND DOCUMENT INTERVIEWS WITH COMMUNITY MEMBERS AND WORKERS.





Tips for Planning the Interview

- 1 WHO:** It is important to select people that will help your class understand how our water system is constructed, how it operates and how it affects the community and environment surrounding them. You may try contacting your local water authority, a community activist group, or an environmental protection nonprofit organization to find out if they have staff who are qualified and willing to sit for an interview. Searching the website of your local paper(s) for water related news may also generate some leads. Once you have recruited an interviewee, ask for a brief professional bio or short statement describing what they do and why they are passionate about it. This will aid your students in preparing for the interview.
- 2 WHERE:** Ideally, you can invite the selected speaker to visit your classroom for the interview.
- 3 WHEN:** It is best to have this interview scheduled as early in the semester as possible. More than likely the person your class will be interviewing has many other obligations and will want to schedule something like this far in advance.
- 4 HOW:** This is their project, so your students should drive the process, but it is important that your students use the days prior to get completely prepared for the interview. The toolkit will walk you through the process of preparing for the interview on page 24.
- 5 STUDENT PREPARATION:** Students will need to understand what tasks they are responsible for, including but not limited to having video equipment ready and tested beforehand. They should have all their questions prepared, ready and rehearsed. Encourage them to think through and anticipate how the interview will progress. You should also take a moment to make sure the students fully understand what is expected of them and how they are expected to behave with this important guest in the classroom.



Tips for Planning the Site Visit

- 1 WHERE:** The site visit will take place offsite, but ideally not too far from school. This means you will more than likely need to schedule transportation and all the implied logistics that come along with that.
- 2 WHEN:** Once transportation to and from the site is taken into account, the site visit is often an all day activity. Make sure students bring sack lunches or organize lunch at the site. Optionally, students can arrive in the area of the site visit early to conduct impromptu interviews with community members and business owners near the site you are visiting.
- 3 STUDENT PREPARATION:** Students should wear comfortable clothes and shoes and have the proper materials (clipboard and pens) to take detailed notes during the visit. Formally encourage the students to write down their own observations, ideas or new questions that come up as they are participating in the site visit. The notes and observations students record are called “field notes.” Every good researcher keeps field notes because they will be important reflections for the rest of the project. If the site has any dress requirements, e.g. closed toe shoes, make sure all the students are aware of the requirements beforehand and come dressed appropriately.



Sample Guest Biography & Questions Developed by Students

Once you have identified and selected your guest speaker, request a professional biography or short statement describing what they do and why they are passionate about it. The class will use the biography to construct questions that will help them understand how the water system is constructed, how it operates and how it affects communities. Encourage students to think creatively when developing their questions. For example, you may ask them to take on the role of a resident living next to the water facility, what would they want know?

SAMPLE BIO: CHRISTINE HOLOWACZ, VICE-CHAIR OF THE NCA, is the Community Liaison at the Newtown Creek Wastewater Treatment plant for the Newtown Creek Monitor Committee. President of the Greenpoint Property Owners since 1989, Christine devotes much of her time to issues concerning senior citizen homeowners.

She is also the Church of St. Cecilia political and housing coordinator. She holds a BA in Economics and Accounting from Brooklyn College. Christine is a savvy advocate and lobbyist on behalf of the Greenpoint community and environment. She is largely responsible for the over \$30 million dollars in environmental benefits funds that have recently come to communities neighboring the Creek.

SAMPLE QUESTIONS STUDENTS CREATED FOR THE SPEAKER:

1. Why did you become the Community Liaison for the Newtown Creek Wastewater Treatment facility?
2. Why does the facility need a Community Liaison?
3. Your bio says you are the Vice-Chair of the Newtown Creek Alliance. What is the Newtown Creek Alliance and why did the Newtown Creek Alliance form?
4. You are closely connected to residents who live near Newtown Creek and the Wastewater Treatment Facility. What do they say it is like living near the creek and all that industrial activity?
5. What are the Greenpoint community's main problems and concerns with the Newtown Creek Wastewater Treatment Facility? Are there tensions between residents and industrial waste management at Newtown Creek?
6. Are there things youth or adults can do to help your projects? Why should people get involved?



Interview as a Research Tool

In the coming days, we will have a guest speaker visit class to help with our water system research project. Today, we will **develop interview questions and organize our work in preparation for his/her visit**. Interviews are an effective way to add new perspectives to your research, enabling you to discover previously unseen elements and connections in our water system and see further.

Your Assignment: Read the short statement from our upcoming guest speaker and answer the questions that follow. Then, within your group construct your own interview questions for him/her. Remember he/she is here to help us gain information about how our water system is constructed, how it operates and how it affects different communities and the surrounding environment. You should create at least one question for each of the following categories:

- 1 FACTUAL QUESTIONS**—What, when and where questions.
- 2 DESCRIPTIVE QUESTIONS**—For example, “Could you fill in the details about...?” or “Can you describe a typical day...?”
- 3 EVALUATION QUESTIONS**—For example, “Could you explain...?” “Can you discuss the meaning of...?” or “What do you think about...” or “How do you feel when...?”

TIP: AVOID YES/NO QUESTIONS—“Did you like your job?” A better question would be “What did you like best about your job” or “Could you tell me about your first experiences at your job?”



Interview Tasks Sign-Up

GROUP A: Greeting/Follow Up
Introduce yourselves, welcome our guest to our school, thank them for coming, send them a thank you email after the interview.

1 _____
2 _____
3 _____
4 _____
5 _____

GROUP B: Video Crew
Work with your teacher to set up a video camera and external microphone (optional) or camera on a mobile device and record our interview for the blog/web.

1 _____
2 _____
3 _____
4 _____
5 _____

GROUP C: Question and Answer (Q&A) Notetakers
Responsible for asking our guest our pre-planned questions, listen well and write down their responses in detail on the Q & A worksheet.

1 _____
2 _____
3 _____
4 _____
5 _____

GROUP D: Follow Up Questions
Be on alert for new questions that come up while interviewing our guest. Write down the Q's and their responses on the Q & A worksheet.

1 _____
2 _____
3 _____
4 _____
5 _____



GROUP A: Greeting/Follow-up Checklist

Your Assignment: You must complete two of the tasks on this checklist. You will be graded today on participating in this activity.

- GREETING:** At the beginning of class, greet our Guest. If you don't know what to say, here is an example:

“Hi _____. My name is _____. Welcome to _____.
Thanks for visiting our class today.”

You can continue to talk with him/her about whatever you like until we start the interview.

- ASSISTANCE:** If our Guest needs anything like a bottle of water, help putting their jacket away, a chair, etc. help accomplish these things.

- FAREWELL:** At end of class, briefly thank our Guest for visiting. You can shake their hand and tell them something you learned from the interview.

- FOLLOW-UP:** Send our Guest a follow up email. Below is an example email, personalize this template so it sounds like you.

Dear Christine,

Thank you for visiting our class and agreeing to be interviewed at the Green School Academy on March 5th. We learned so much from speaking with you. I did not know that (insert cool new fact you learned here). We are looking forward to adding what we learned from you to our research project on New York City's water system. Thanks again.

Sincerely,

(Your names here)
Students from Mr. O's Honors English Class
The Green School

GROUP B: Video Crew Checklist

Half the Group: You are responsible for these tasks:

- Setting up the video camera or recording device and tripod
- Setting up the chair and background location. Try to pick a background that is interesting and related to materials you made for this project! Avoid sitting the interviewee in front of a window.
- Uploading the video to the blog
- Working as a team

Half the Group: You are responsible for these tasks:

- Loading the tape or ensuring sufficient available memory
- Checking the battery level and charging and replacing batteries if required
- Checking and setting the “white balance”. Usually auto works just fine.
- Setting, monitoring and adjusting the audio levels using earphones
- Filming the entire interview, include both students and the guest
- Panning and zooming in/out to frame students when asking questions and our guest when giving responses
- Working as a team

In Class Reflection: Write what you are learning/doing about the recording equipment and interviews below.



GROUP C: Question & Answer Recording

Your Assignment: The following pages contain a list of student questions pulled from the “Interview Questions” activity you completed. There were so many great questions we could not use every single one! You are responsible for asking one or two of these questions of our Guest and you are also responsible for writing down detailed responses to ALL of the questions.



GROUP D: Response Question & Answer Recording

Your Assignment: You are responsible for carefully listening to our interviewee and asking one or two follow up questions based on their answers to our first round of questions. You are also responsible for writing down the responses to all of the first round questions asked today and listed on the following pages.

MY FOLLOW UP QUESTIONS:

1 QUESTION:

RESPONSE:

2 QUESTION:

RESPONSE:



Conducting Research Through Site Visits

Today we will be visiting _____ and the surrounding neighborhood. While we are there, we will get a lot of information that will help us answer our three major questions: Where does our water come from? How does our water get to us? What happens to our water after we use it? We also want to explore how our water system infrastructure and operations impact the communities and environment that surround them. One of the goals of our visit is to explore the way people feel about living near the facility we are visiting. Therefore, you will also be responsible for conducting field interviews in the surrounding area.

Your Assignment:

I. Working in your groups from yesterday, take notes at the facility using the Cornell Notes sheet. Your notes should include any information that helps you answer our three key questions.

II. Find at least one business owner and one resident in the surrounding area. You can ask them these starter questions. Also, write down the questions and answers for anything else you ask them.

What is your name and where do you live?

What do you know about _____?

Do you drink our community's tap water?

Does living/or working near _____ bother you?

Site Visit Reflection

Today, you will work in your group one final time before we mix things up. The first task for today is to reflect on our site visit and update those group members who missed the trip.

Your Assignment: Each group member should take 3-4 minutes and reflect on the following categories and answer the questions. Then, take another 5 minutes to share your reflections. Finally, combine your information onto the group reflection on the back of this handout.

OBSERVATIONS & REACTIONS: What struck you as interesting about the trip? What surprised you? What did you notice?

FACTS: What specific information did you find out that you think is interesting and that might help your group to answer our three major questions: Where does our water come from? How does our water get to us? What happens to our water after we use it?

QUESTIONS: What do you now wonder about in regards to our water system? What questions do you have that might help us answer our three major questions.



Compiling Our Interviews

Interviews are an effective way to add new perspectives to your research, enabling you to discover previously unseen elements and connections in our water system and see further. In addition, by documenting the views and insights of people who know about our water system, interviews bring a human centered focus to the project, which should get your audience to care more about your topic.

Your Assignment: You and your group members will need to go through your interview notes and organize your information. For each interviewee, please neatly record the following information on the included handout.

Before you do, take a moment to reflect on the interview process. How did it go? What was challenging? What can you do differently next time to improve the quality of answers that you received?



Compiling Our Interviews

**Who did you interview?
(Name and general
description.)**

**When and where did
the interview take
place?**

**What question(s) did
you ask?**

**What responses did
you get? (These should
be exact quotes.)**

**What perspective did
you gain from asking
your questions and
listening to how
people answer you?**

**What conclusion(s)
can be drawn from
this interview? What
significance does this
interview have for our
project?**



COMMUNITY MAPPING

This is the section where the research begins to come together for students. Students will use information gathered during their interviews and site visit to construct a community map. Community mapping will help students execute two key components of this project: 1) to locate on a physical map the water system concepts we mapped on chart paper in section one; and 2) to map the network of connections between water system facilities and the communities that host them as well as the connections between water system facilities and their own lives. Reflections will help students prepare for the last section of the *Go With the Flow* project, where students will create a blog, a HabitatMap and write a narrative to share their research with their peers and the world.

Objective(s)

- Students learn to construct a community map using research findings from previous activities
- Students acquire new methods for synthesizing information in preparation for writing up and sharing their research findings

Aligns with these

Common Core Standards

- Reading: Integration of Knowledge and Ideas—Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
- Writing: Research to Build and Present Knowledge
- Speaking and Listening: Presentation of Knowledge and Ideas
- Language: Vocabulary Acquisition and Use

Duration

2+ Days

Included Worksheets

- Community Mapping Activity
- Community Map Labels
- Turning Notes into an Investigative Report

Additional Materials

- Pre-printed Poster Map (see instructions pg. 33–34)
- Markers
- Scissors
- Toothpicks and Tape or Stick Pins for Community Map Labels
- Foam Core for Mounting Poster Map (optional)



Community Mapping as a Research Method

When crafting a traditional map we begin by asking “What is that place?” and we answer with a name and a boundary. Within this model, places occupy defined coordinates within space and remain relatively unaltered by changes in their surroundings or the activities of the people within and around them. “What is that place?”...“That’s the Newtown Creek Wastewater Treatment Plant”

“HOW MANY MAPS... MIGHT BE NEEDED TO DEAL EXHAUSTIVELY WITH A GIVEN SPACE, TO CODE AND DECODE ALL ITS MEANINGS?”.

Henri Lefebvre, The Production of Space, 1974

In contrast, when making a community map we begin by asking “How do you know that place?” and we answer with a story. Within this model, places are fluid and interconnected, changing as the constellation of relationships within which they are embedded are continually redefined by the storytellers. Community maps are network maps because they not only tell us about a particular place, they also tell us how that place is connected to the larger world.

“How do you know that place.”... “That’s where my mom works.”

“How do you know that place.”...“That’s where my toilet flushes to.”

Community mapping can offer insight into how people - children, parents, employees, business owners - see their world and reveal what is important to them, where they spend their time and how they relate to one another and their surroundings. In addition to providing an illustration of the physical spaces we move through, community maps show us how we construct the world around us and bring meaning to it, representing spaces not as singularly defined locations but as places that are multiply (re)constructed through the activities and personal narratives of the people who live in, work in, or travel through an area.



LEFT: STUDENTS OF THE GREEN SCHOOL IN BROOKLYN, NY DISCUSS THEIR COMMUNITY MAP WITH THEIR PEERS

RIGHT: ENLARGED VIEW OF STUDENTS’ CONTRIBUTIONS TO A COMMUNITY MAP OF THEIR WATER SYSTEM





How to Make a Poster Map

Below you'll find instructions for making your own poster map. The poster map serves as the base layer upon which your students will construct a community map by layering the observations they made during their interviews and site visits. If the geographic extent of your city and your city's water system are nearly the same, then you will make one map. However, if the geographic extent of your water system is substantially greater than your city, e.g. your city draws water from reservoirs located dozens of miles away, then you may elect to make two poster maps: one displaying only your city and another that includes both your city and the area around your city that contains water system infrastructure that services your city. Also note that you may elect to use professionally printed maps if you have ones on hand that are the appropriate size and scale or would prefer to purchase such maps.

- 1** If the Firefox web browser is not already installed on your computer, download and install it by visiting www.mozilla.org and clicking the "download" button. Follow the on screen instructions to complete the installation.
- 2** Launch the Firefox web browser, navigate to addons.mozilla.org/en-US/firefox/, search for "screengrab", select "Screengrab (fix version)" from the list of add-ons, and then click "Add to Firefox". Next, close all the Firefox browser windows and launch Firefox again to activate the "Screengrab" add-on.
- 3** Navigate to www.maps.google.com, hover your mouse over the "Satellite" icon in the upper right hand corner and check "Terrain".
- 4** Zoom in or out until the map displays the entire area you want to capture for your poster map. Then use the "+" sign on the zoom meter located in the upper left hand corner of the map to zoom in two units.
- 5** Click the "link" button located just left of the left hand corner of the map, then copy the text that appears in the field labeled "Paste HTML to embed in website".
- 6** Open a text editing program like "Notepad" for Windows or "Text Edit" for Mac. Paste the HTML code into the document, then change the width and height values to "5000", e.g. width="5000" height="5000". If using a Mac, select "Format > Make Plain Text" from the Text Edit menu. Then save the file to your desktop. When saving in Windows, change the "Save as type" field to "All Files" and name the file "postermap.html". When saving on a Mac, you will need to manually change the file extension to ".html" when naming the file "postermap.html".



- 7** Right click (Mac ctrl+click) the poster map file on your desktop and open it with Firefox. Then click the Screengrab icon in the upper right hand corner of the browser window and select “Save . . . “ > “Complete Page/Frame” and save the map to your desktop. You have now created a PNG image file for your poster map. If you’re using a Mac, your file may not have the extension “.png”. You will need to resave the file with the extension “.png” or manually add it to the end of the file name to complete some of the next steps.
- 8** Open and view your poster map. If the map is less detailed than you want, return to step 4 and zoom in additional units. If the map is smaller than you want then return to step 6 and increase the width and height values. If the map is not cropped the way you want, i.e. it is too big or contains areas that are not relevant to the water system, then open the map in an image editing program like Windows Picture Manager or iPhoto and crop and save the map to your desktop.
- 9** Now check the dimensions of your map by right clicking the file on your desktop, selecting “Properties” and clicking the “Details” tab. 2,600 pixels is equal to about 3 feet which is a good size for a poster map, but sizes will vary depending on personal preference, wall space, and whether your map is square or rectangular. If the map is bigger, smaller, or cropped different from what you want, return to step 8. Getting the right size and detail may require some trial and error.
- 10** Once your poster map image is to your liking, it’s time to print it out. You can take it to a print shop and have it professionally printed on a plotter or continue following the instructions to print the poster map using a regular printer.
- 11** Your poster map is saved as a PNG file type. The easiest way to print it out using a regular printer is to convert the file type to PDF and print it out as tiles. To convert from PNG to PDF, visit www.zamzar.com and follow the instructions.
- 12** Once you’ve downloaded the PDF version of your poster map from Zamzar, it’s time to print it out. Open the file using Adobe Acrobat. If you don’t have Adobe Acrobat download and install it by visiting www.get.adobe.com/reader, clicking “download”, and follow the on screen instructions. Once the poster map is open in Adobe Acrobat, select “File” > “Print” and under “Page Sizing & Handling” select “Poster”. You may also elect to print in black & white rather than color or change the print quality to save ink. When you’re done click “Print”.
- 13** Finally, lay all the sheets out, align them properly and tape them together from behind. It is suggested that you mount your poster map on foam core (can be found in most office supply stores) as students will need to stick items to the map using toothpicks or pins (though other fastening methods that don’t require foam core, e.g. tape, will suffice if foam core is not available).



Community Mapping Activity

Two key components of this project are: 1) to locate on a physical map the water system concepts we mapped on chart paper in section one; and 2) to map the network of connections between water system facilities and the communities that host them as well as the connections between water system facilities and our own lives. By adding what we learned during our interviews and site visit to a map, creating a community map, we can physically locate where our water system is and visually illustrate how our water system is connected to the lives of the people who are impacted by it and depend on it, including ourselves.

Your Assignment: Place the information we learned from our interviews and site visit on the large poster map. Cut-out and use the provided labels on the following page to draw, write and pin (or tape) your contributions to the map. You must add at least one of each of these 3 types of labels to the map:

1

Water system concept labeled with local place names

Example:



2

Community & environmental impacts

Example:



3

How and where you are connected to the water system

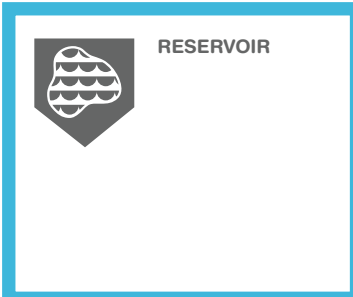
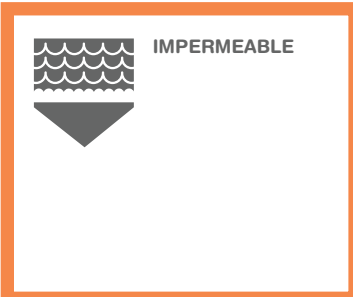
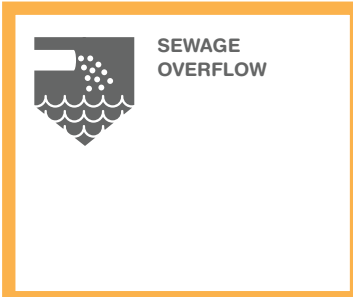
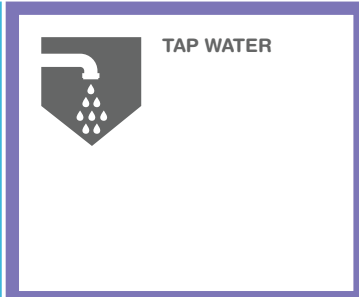
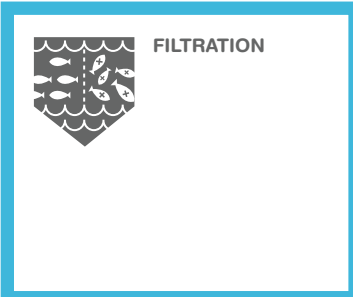
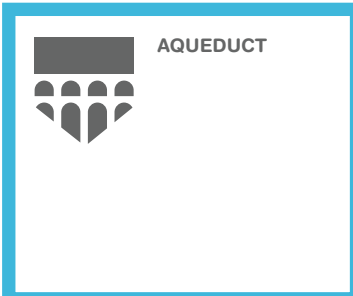
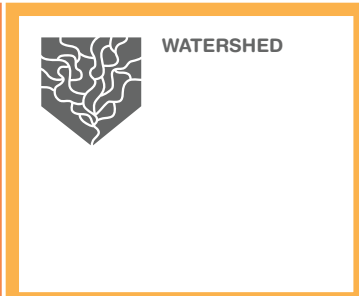
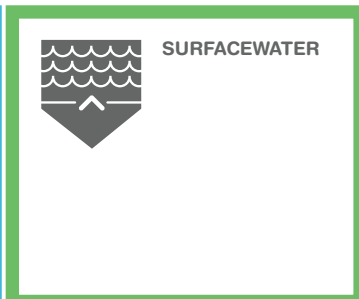
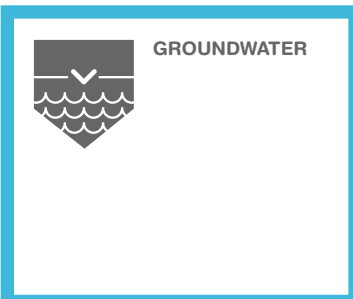
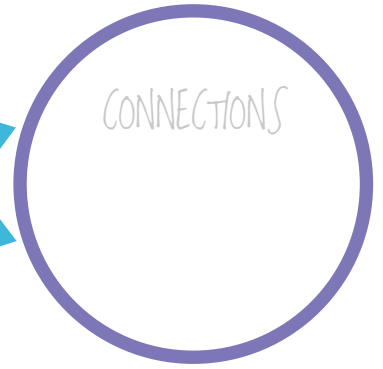
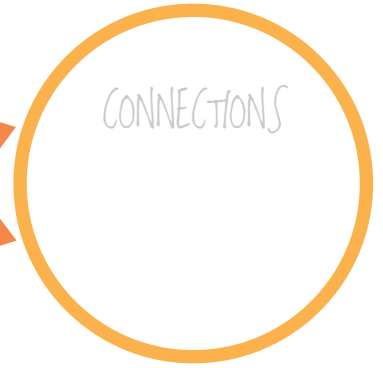
Example:



Look at everyone's contributions. What do you notice? What can we see? What is still unclear about the system?



Community Map Labels





Turning Notes into an Investigative Report

The goal of this activity is to conduct independent research to learn more about the workings of our water system, blog about your research experiences, and document your findings using HabitatMap, an interactive mapping website. Everyone is responsible for creating a HabitatMap marker based on one of the water system concepts. Your HabitatMap marker will mark the physical location of a water system concept, identifying a related real world water system facility by name. When you click on the marker, it will open to reveal a mini-research paper on that location and facility, written by you. You took notes during your interviews and site visits; now it is time to cull through those notes to find evidence and fill in any missing information with your own independent research. When you're done with your research and writing you will split the text you have written into two separate pieces: one will be posted to your HabitatMap marker, this will be factual and objective, and the other will be posted to the blog, this will be experiential and subjective.

Your Assignment: For this assignment you will be playing the role of an investigative reporter. Your job is to investigate one of the water system concepts, connect it to an actual water system facility, determine what role your facility plays in the system and examine how this facility affects the surrounding community and environment.

1 STEP ONE: SELECT A CONCEPT

Select the one concept you want to investigate or were assigned by your teacher.

Reservoir
Watershed
Aqueduct
Tap Water

Pollution
Well
Filtration
Groundwater

Surface water
Impermeable
Sewage Treatment
Sewage Overflow

Pipes
Green Infrastructure



Turning Notes into an Investigative Report (cont.)

2 STEP TWO: REVIEW THE RESEARCH QUESTIONS

- A. What water system concept did you select and what related real world water system facility will you be researching?
- B. Where is the water system facility you are researching located?
- C. What role does the facility you selected play in the functioning of the whole water system?
- D. What is the most essential information a person must know to understand how this facility works and why it's important?
- E. How does the water system facility you selected impact the people of our city. What about surrounding cities? Your own community?
- F. How can people work to protect, improve or change this water system facility?
- G. Are there people who are actively working to protect, improve, or change this facility? What problems or issues are they working to address?
- H. What evidence can you find to support your answers to the previous questions?
- I. How might this water system facility be improved or designed differently?
- J. Find at least two images, maps, or videos related to your water system facility or water system concept.
- K. Find at least two web links to other resources people might explore if they want to find out more about this water system facility or concept.

3 STEP THREE: READ, HIGHLIGHT, ANNOTATE

Read through your class, interview, and site visit notes with a highlighter and a pen. As you read, highlight any information that you can use to answer your research questions. As you highlight, annotate the margins of your notes and identify which question(s) can be answered with that information. You may also want to create note cards for each question that you are going to answer and fill them with the highlighted information from your notes. Be sure to label where you got each piece of information.

4 STEP FOUR: SYNTHESIZE YOUR INFORMATION

Now that you have found your evidence, it is time to begin answering each of the research questions. Any questions that cannot be fully answered with the evidence from your notes will require additional independent research.

ONLINE RESEARCH TIPS

Tip #1: Identify key terms—like the name of your water system facility, water system concept, or city—and place these in quotes when conducting online searches. Combine key terms in quotes to narrow your results.

Tip #2: Rapidly evaluate whether web pages returned when conducting online searches are relevant by searching for key terms: hold down ctrl+F (Mac: command+F), enter your key term, then evaluate whether the key term is used in a context that is relevant to your research.

Tip #3: When searching online, consider narrowing your search to PDF documents, which often contain information from technical sources and experts, by entering "filetype:PDF" before your search terms.



BLOGGER ACTIVITIES

During the *Share* section of the toolkit students will conduct independent research, build their own blog and learn to share their research with their peers and the public using web-based tools. Students will also learn to write compelling and relevant narratives and discover how to effectively disseminate their findings to online audiences.

Objective(s)

- Students will learn to identify and fill the holes in their research and author a compelling narrative that effectively summarizes their findings
- Students will create a blog using Blogger and learn to differentiate between the types of content that are best suited to sharing via blog versus other media vehicles

Aligns with these

Common Core Standards

- Writing: Text Types and Purposes:
Write Informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content
- Writing: Production and Distribution of Writing –
 - > Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience
 - > Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
 - > Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Duration

2+ Days

Included Worksheets

- Turning Your Investigative Report into a Blog Post
- Tips For Writing Your Blog Post
- How to Blog

Additional Materials

- Computers & Internet Access

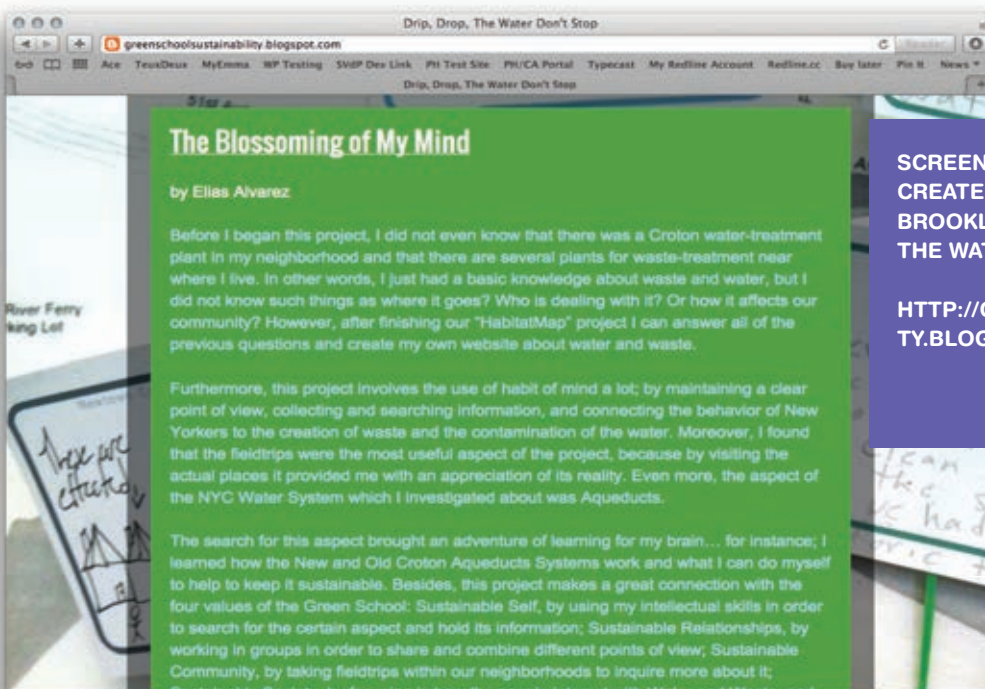


Introducing New Ways to Share Information

This is a critical lesson that provides an opportunity to evaluate the project. Students will master tips for conducting independent research that will enable them to dig beneath the surface of their chosen topic and they will “flex their writing muscles”—learning to craft narratives that capture the essence of the project and summarize the hours of research they have conducted. In addition, students will learn to differentiate between the types of content that are best suited to sharing via blog versus other media vehicles. During this section, students will acquire communication skills that will not only help them execute this project, but will also serve them well in future endeavors. They may even discover a passion for writing, presenting, or using online media to share ideas. Encourage students to think creatively about how they might apply what they have learned from this section to their own projects or hobbies.

“ANYTHING ELSE YOU’RE INTERESTED IN IS NOT GOING TO HAPPEN IF YOU CAN’T BREATHE THE AIR AND DRINK THE WATER . DON’T SIT THIS ONE OUT. DO SOMETHING. YOU ARE BY ACCIDENT OF FATE ALIVE AT AN ABSOLUTELY CRITICAL MOMENT IN THE HISTORY OF OUR PLANET.”

Carl Sagan, Astrophysicist



SCREENSHOT FROM THE CLASS BLOG CREATED BY THE GREEN SCHOOL IN BROOKLYN, NY TITLED “DRIP, DROP, THE WATER DON’T STOP ”

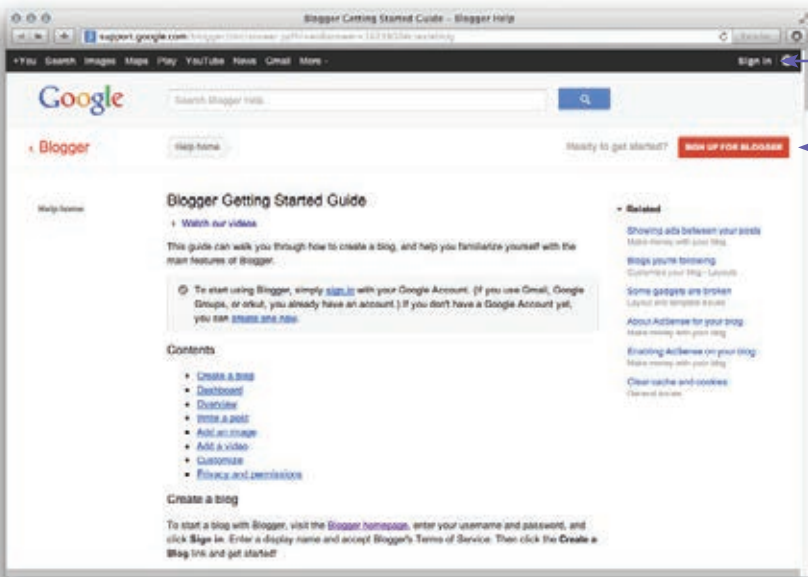
[HTTP://GREENSCHOOLSUSTAINABILITY.BLOGSPOT.COM](http://greenschoolsustainability.blogspot.com)



Creating a Blog with Blogger For Your Class

Source: <http://support.google.com/blogger/bin/answer.py?hl=en&answer=1623800#createblog>

To start using **Blogger** you'll need a Google Account. If you use Gmail you already have an account, but you may consider creating a new account since you will be sharing the sign-in details with your students. To create a new Google Account navigate to www.google.com, sign out if you are already signed in, click "sign in", then click "sign-up" and enter your details.



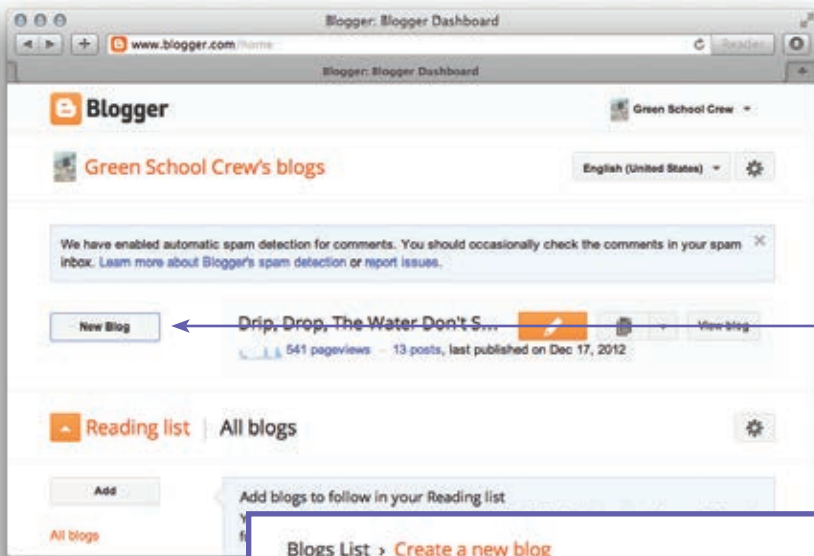
LOGIN

SIGN UP

Creating a Blog with Blogger For Your Class (cont.)

Source: <http://support.google.com/blogger/bin/answer.py?hl=en&answer=1623800#createblog>

To start a blog with **Blogger**, visit the *Blogger* homepage at www.blogger.com. If you aren't automatically signed in, enter your Google Account email and password and click "sign in". If prompted, confirm or change your profile, click "continue to blogger", click "new blog", select a blog title, address, and template, and then click "create blog".



NEW BLOG



IMPORTANT NOTE:

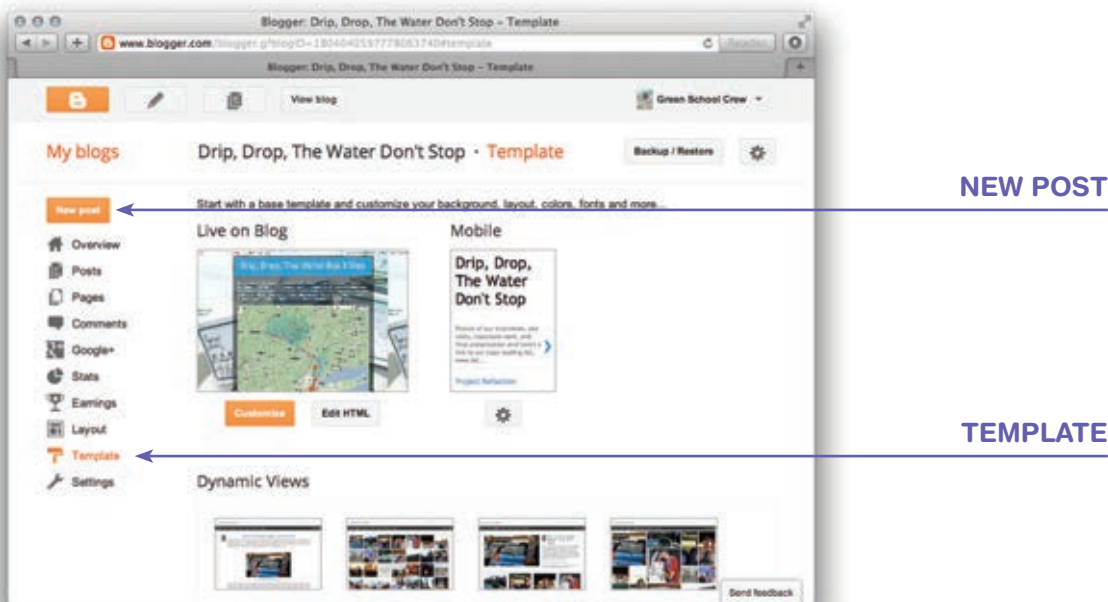
By default Blogger selects a "Dynamic Views" template for you. Make sure to select a new template that is **not within the "Dynamic Views" category** as these templates do not support embedding HabitatMaps.

Creating a Blog with Blogger For Your Class (cont.)

Source: <http://support.google.com/blogger/bin/answer.py?hl=en&answer=1623800#createblog>

Next, click the title of your blog to navigate to your blog dashboard. If this is your first time using *Blogger*, experiment by clicking “new post”, entering some sample text, and clicking “publish”. Then click “view blog” to review the layout and template of your blog as it appears to readers. If you decide to change the look of your blog the best place to start is by playing around with the layout: click “Layout”, and by tweaking the template: click “Template”, select a new template or click “customize” to make changes to your current template.

Important Note: by default Blogger selects a “Dynamic Views” template for you. Make sure to select a new template that is **not within the “Dynamic Views”** category as these templates do not support embedding HabitatMaps.





Turning Your Investigative Report Into a Blog Post

Over the past few weeks, we have learned a lot about our subject. Now it is time to capture your audience's attention by writing a compelling, well-organized narrative that summarizes your research experiences. A narrative connects events and facts to create a story about people, places, and things. Your narrative will explain your point of view and include relevant information from your research. It will include lots of details so your audience gets a complete picture of your subject. This is a critical portion of the project because this is how you will communicate your research findings to your audience. A well written narrative will capture the attention of your audience, hold it, and compel them to consider your point of view.

Your Assignment: Your blog post is a subjective account of your experiences as a researcher. Think of it as a diary or journal entry sharing your thoughts and insights as the project developed. To get started, read over the investigative report and copy and paste those sections that include your thoughts, feeling, opinions and reflections into a new document. After you do this, begin adding text to connect the sections into a story that details how your understanding of the water system has changed.



Tips For Writing Your Blog Post

Consider writing about what you thought on the very first day of the project, how you think about it now, and in what ways you believe your findings will affect your life moving forward. Maybe you changed your mind about something or learned something new. Maybe you have advice for your peers or policy suggestions for your elected officials. Consider sharing these ideas in your blog post. You aren't obligated to stick to this format. Feel free to be creative as you are forming your blog post.

- 1 TIP #1:** First, write topic sentences. A good topic sentence explains what the paragraph, page or, in this case, the paper will be about and includes your ideas about the topic. The topic sentence signals to readers what they are going to be reading about and helps keep your writing focused.
- 2 TIP #2:** As you start to write your narrative, always refer back to the topic sentence.
- 3 TIP #3:** After you have written your narrative look back and think...did you touch on the WHO, WHAT, WHERE, WHEN and WHY? This general rule helps ensure you have painted a full picture for the audience.
- 4 TIP #4:** Write a concluding paragraph to sum up your most important thought; the idea you most want the reader to remember.



How To Blog

Source: <http://support.google.com/blogger/bin/answer.py?hl=en&answer=1623800#createblog>

1 LOG IN

Log in to the blog by navigating to www.blogger.com and entering the email and password provided by your teacher. If not prompted for an email and password, then you've been automatically signed in. Confirm that you are on the correct blog by checking the title of the blog. If you are not signed in to the correct blog then sign out and sign back in with the email and password provided by your teacher.

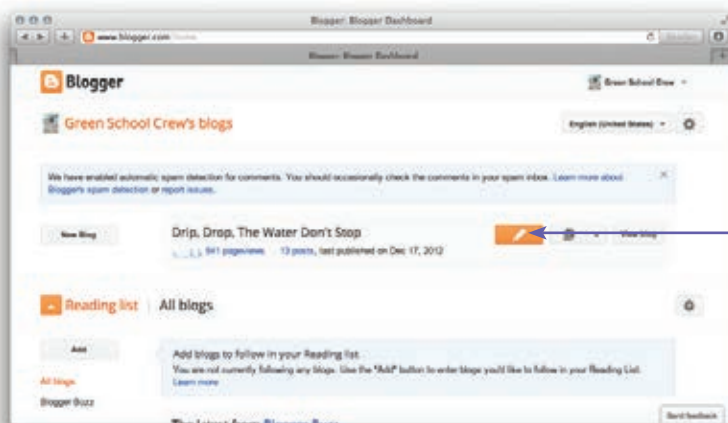
USERNAME:

PASSWORD:

2 WRITE YOUR POST

Once you have signed in to Blogger, you will see your dashboard with your list of blogs. Here's what you need to do:

- 1 Click the orange pencil icon to write a new post.
- 2 Next, you'll see the Post Editor page. Start by giving your post a title, then copy and paste the narrative you authored when you turned your investigative report into a blog post.
- 3 When you are done pasting your narrative and making any formatting changes, click the "preview" button at the top to preview how readers will see your post. If necessary, make changes. Once everything is to your liking click "publish" to publish your post. Note that you can always make changes after your post has been published by clicking "posts", hovering over your post title, and clicking "edit".



**CLICK TO
WRITE A
NEW POST**

How To Blog (cont.)

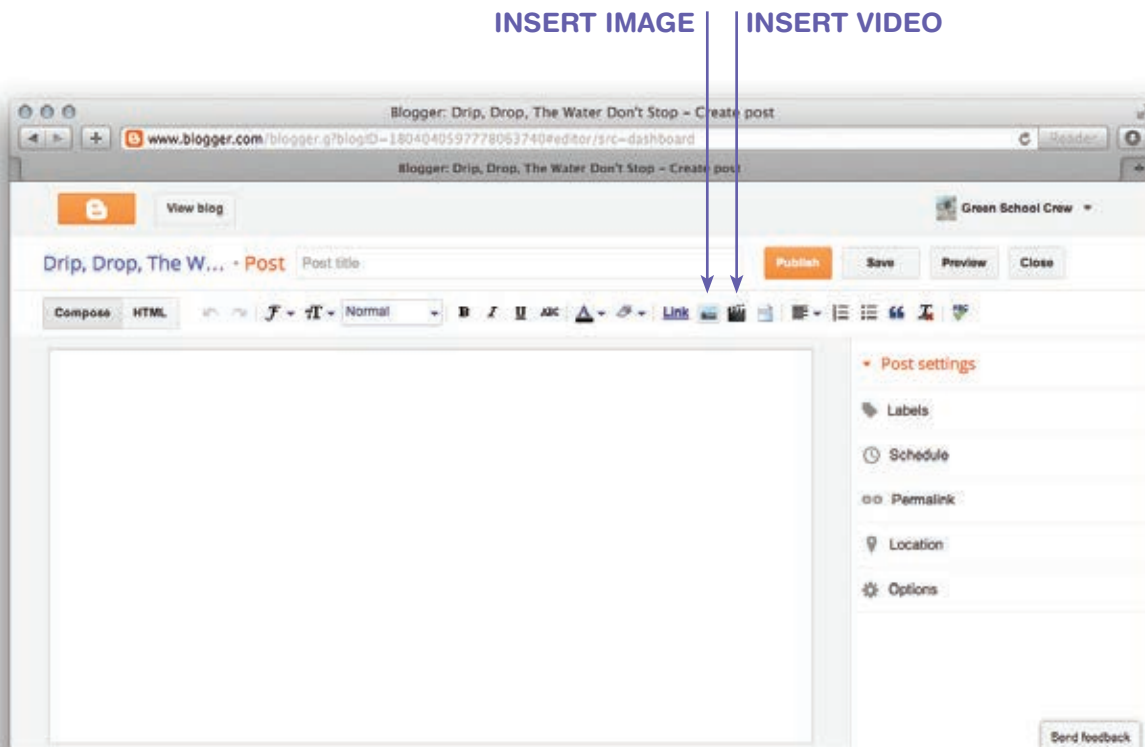
Source: <http://support.google.com/blogger/bin/answer.py?hl=en&answer=1623800#createblog>

3 ADD AN IMAGE

Add an image from your computer or the Web to your blog by clicking the “insert image” icon in the Post Editor toolbar. A window will appear prompting you to browse for an image file on your computer or enter the address of an image on the Web. Once you have inserted an image, click on it to change the size, layout, or add a caption.

4 ADD A VIDEO

To add a video to your blog post, click the “insert a video” icon in the Post Editor toolbar. A window will appear prompting you to browse for a video file on your computer or search for the video on YouTube. Note that Blogger accepts AVI, MPEG, QuickTime, Real and Windows Media files and that your video must be less than 100MB in size. While your video uploads, you’ll see a placeholder in the post editor showing where your video will appear. You’ll also see a status message below the post editor letting you know that your upload is in progress. Depending on the size of your video, this usually takes about five minutes. When it is complete, your video will appear in the post editor.





CREATE A HabitatMap

This portion of the toolkit introduces HabitatMap.org, an online mapping and social networking platform for sharing community knowledge. Students will learn how to create a HabitatMap to share factual, objective research with their peers and the public in a way that connects water system concepts to real world “names & places”. Your class will also learn how to embed their HabitatMap in their blog, so it serves as a rich visual aid for blog posts. There are many different ways to use HabitatMap.org. We encourage you to explore the website and think of other ways students can use this tool to engage and inform audiences.

Objective(s)

- Introduce HabitatMap, an online mapping and social networking platform through which students can inform and engage audiences
- Students will use their investigative report to populate the class-specific HabitatMap with factual, objective information that connects their research to the community visually
- Students will learn how to embed a HabitatMap in their blog

Aligns with these

Common Core Standards

- Writing: Text Types and Purposes: Write Informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content
- Writing: Production and Distribution of Writing –
 - > Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience
 - > Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
 - > Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Duration

2+ Days

Included Worksheets

- Using HabitatMap to Share Your Narrative
- How To Create a HabitatMap Marker
- Embedding Your HabitatMap into Your Blog

Additional Materials

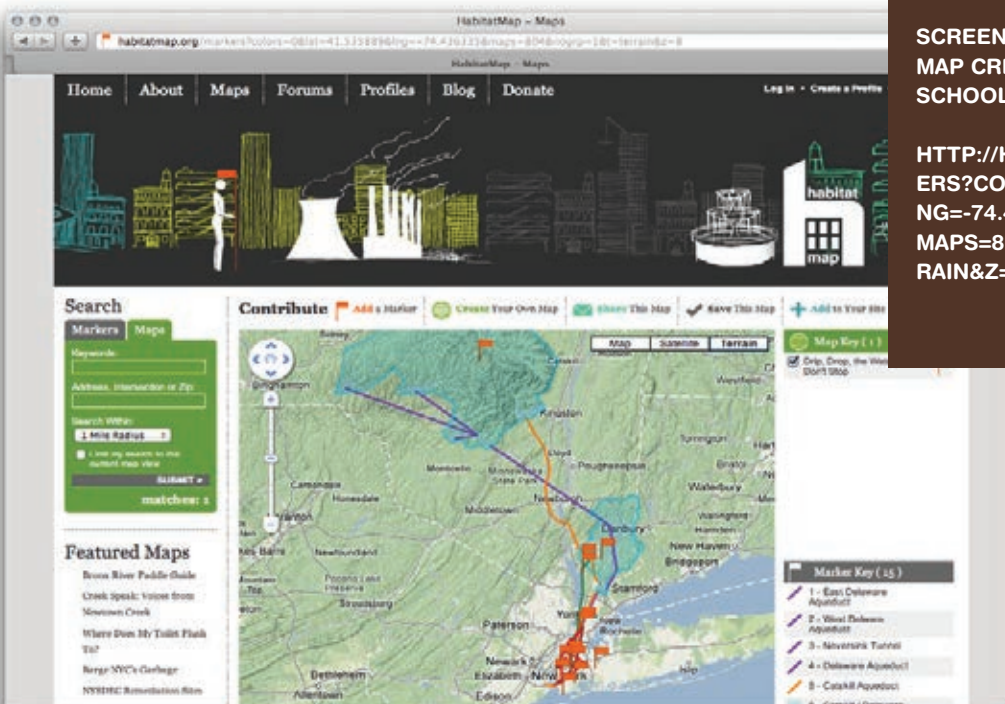
- Computers & Internet Access

Getting Familiar With HabitatMap

HabitatMap is an online mapping and social networking platform that was designed to maximize the impact of community voices by providing a venue for sharing factual information about a specific community. In seconds you can begin advocating for your community and join a worldwide movement for just and sustainable cities. People all over the world are getting involved by identifying and mapping things in their neighborhoods that either enhance quality of life, such as a local farmers market or public park, or are cause for concern, such as a historic building threatened by bulldozers or a contaminated property down the block. You can also create your own map highlighting a specific area of interest and embed maps in your website or blog.

“PROFESSIONAL MAP MAKERS ARE BEING CHALLENGED BY THE EMERGENCE OF NEW CITIZEN MAPPERS. IT IS PART OF A LARGER MOVEMENT OF COUNTER-KNOWLEDGES THAT ARE OCCURRING IN THE FACE OF EVER INCREASING CORPORATIZATION OF INFORMATION”.

— *Jeremy Crampton, critical geographer, 2010*



SCREENSHOT OF THE HABITAT-MAP CREATED BY THE GREEN SCHOOL IN BROOKLYN, NY

HTTP://HABITATMAP.ORG/MARKERS?COLORS=0&LAT=41.535889&LONG=-74.436335&MAPS=804&NOGRP=1&T=TERRAIN&Z=8



Creating a HabitatMap Profile & Map For Your Class

Now that students have created an investigative report on a water system concept from their research, they can modify and expand upon this text to create their HabitatMap marker, which will appear on **HabitatMap.org**. Below are step by step instructions for creating a HabitatMap Profile and Map for your class. The following pages contain instructions for students to add their marker to the map. Later they can add photos and videos to their markers and draw lines and shapes on the map to mark aqueducts, reservoirs, watersheds, or other features of your city’s waters system.

1 CREATING A HABITATMAP PROFILE FOR YOUR CLASS
 Visit www.habitatmap.org and click “Create a Profile” in the upper right hand corner of the screen. Create one user profile for the class on the HabitatMap website that everyone will sign into. Use your preferred email to manage the profile but give the students the username and password.

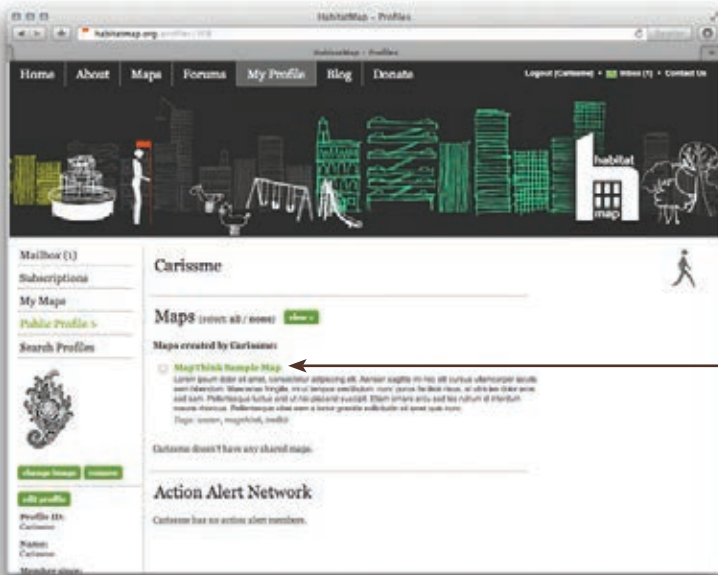
For example:
 Username: Go With the Flow
 Password: water
 Email: yourproject@gmail.com

2 CREATE A MAP PROJECT FOR YOUR CLASS ON HABITATMAP
 Every time you view this map, only the markers, lines and shapes your students have made will appear on the map. Your map is public which means other people can search for and find your map on HabitatMap. It also means your map will be added to the collection of water system HabitatMaps that are being authored by students all across the country!

Click “Maps” at the top of the screen, then click “Create Your Own Map” and enter a map name, description and tags. Note that you can always edit or add to these fields later by clicking “My Profile” at the top of the page, then “My Maps”, checking the name of the map you want to edit and clicking “Edit”.

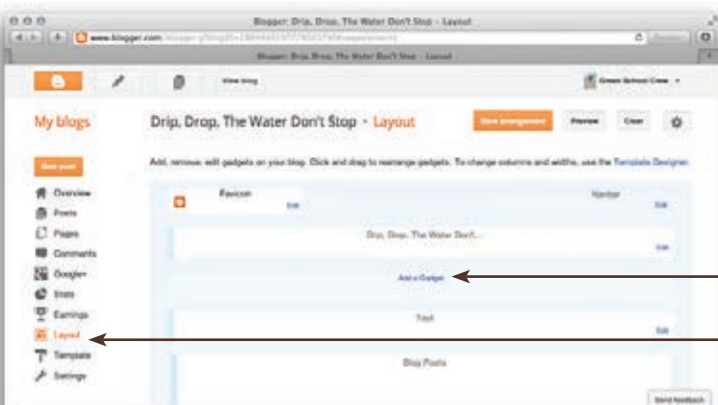
Embedding Your HabitatMap in Your Blog

- 1 To embed your map inside your blog click “My Profile” at the top of the page, click the name of your class map and click “Add to Your Site” in the upper right hand corner. Then click and drag the black arrows to resize the map, and zoom in or out and drag the map until all the markers, lines, and shapes are included and centered. Next, copy the code and sign into your blog.



MAP

- 2 Once you are signed into your blog, click “Layout” and then add a “Text” widget to the top of your blog by clicking “Add a Gadget”.

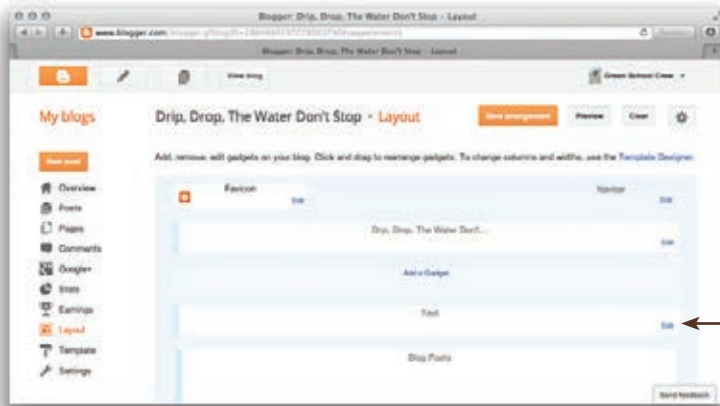


ADD A GADGET

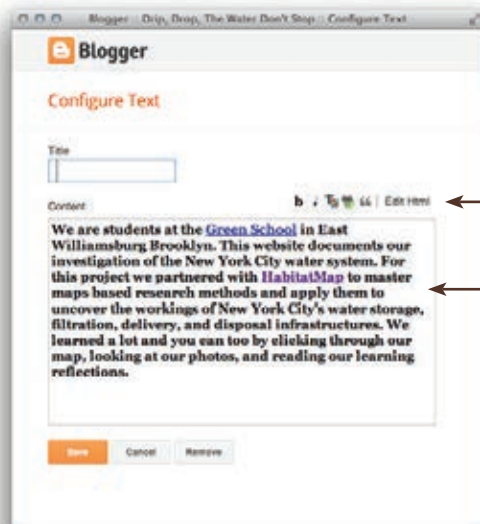
LAYOUT

Embedding Your HabitatMap in Your Blog

3 Once you've added the text gadget, click "Edit", enter a brief description of your map, click "Edit HTML", paste the embed code below the text you just entered, click "Save" and you're done. When you view your blog you should now see your HabitatMap near the top of the page. If your HabitatMap doesn't show up you may have forgotten to change your default template. To change your template click "Template" and select a template that is not within the "Dynamic Views" category.



EDIT TEXT GADGET



EDIT HTML
DESCRIPTION

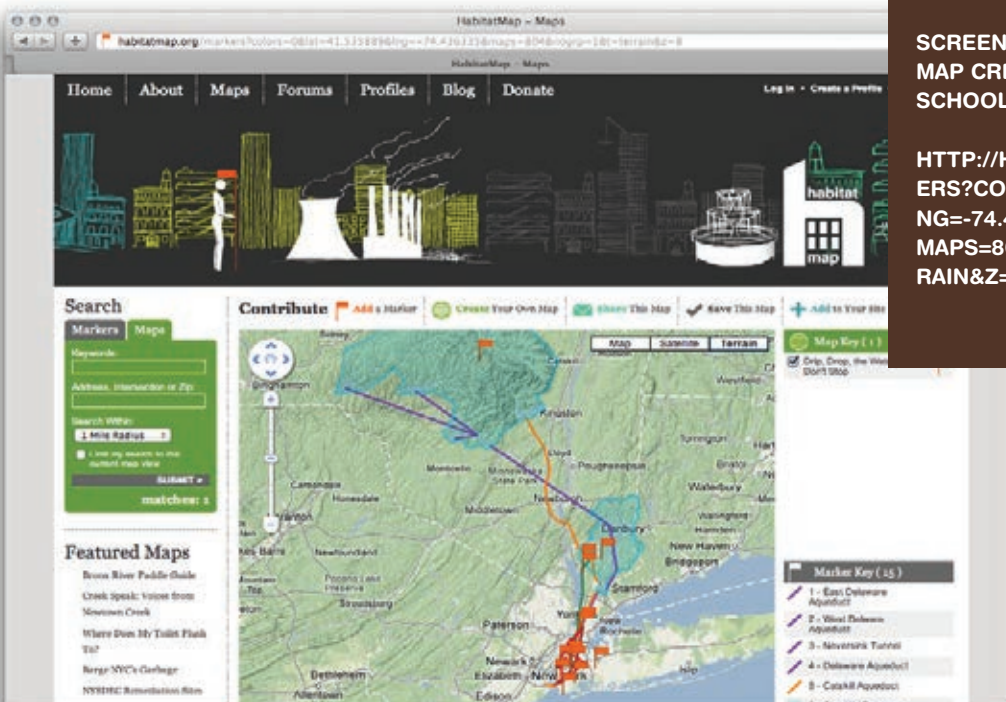


EMBEDDED CODE

Using HabitatMap to Share Your Narrative


Everyone is responsible for creating a HabitatMap marker based on the water system concept they selected. Your HabitatMap marker will mark the physical location of this water system concept, identifying a related real world water system facility by name. When you click on the marker, it will open to reveal a mini research paper on that location and facility, written by you. Since you have already written your investigative report and created a blog post, pulling together information for your HabitatMap marker will be straightforward. Remember, information posted to HabitatMap will be factual and objective, and therefore different from the information you posted to your blog, which was experiential and subjective.

Your Assignment: Log-in to HabitatMap and add a marker to the map. At the end of this activity the class will be revisiting the blog you created and embedding your HabitatMap in the blog.



SCREENSHOT OF THE HABITAT-MAP CREATED BY THE GREEN SCHOOL IN BROOKLYN, NY

[HTTP://HABITATMAP.ORG/MARKERS?COLORS=0&LAT=41.535889&LONG=-74.436335&MAPS=804&NOGRP=1&T=TERRAIN&Z=8](http://habitatmap.org/markers?COLORS=0&LAT=41.535889&LONG=-74.436335&MAPS=804&NOGRP=1&T=TERRAIN&Z=8)



How to Create a HabitatMap Marker

Adding a marker to HabitatMap will allow us to document our research findings in a visual and detailed way that will be indexed on the Internet and available for others to see. Your marker will include information such as address, neighborhood, location details, keywords, and additional resources. Let’s get started and GET ON THE MAP!

1 OPEN A WEB BROWSER, VISIT WWW.HABITATMAP.ORG & LOG IN

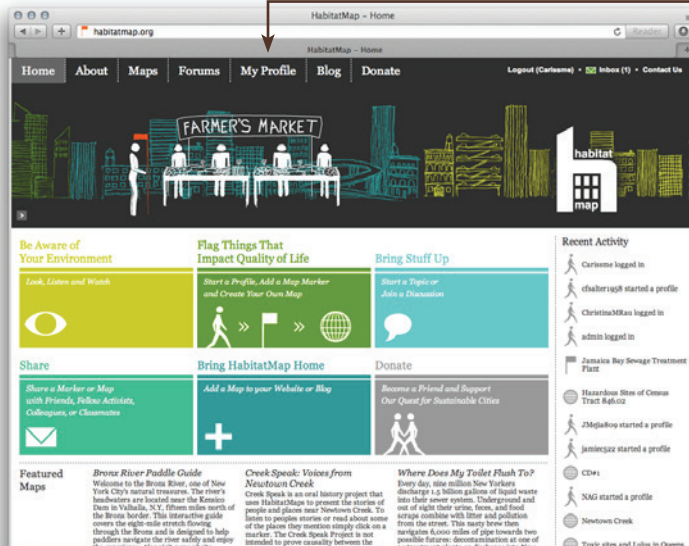
Click “Log in” in the upper right hand corner and enter the log in name and password provided by your teacher:

LOG IN NAME:

PASSWORD:

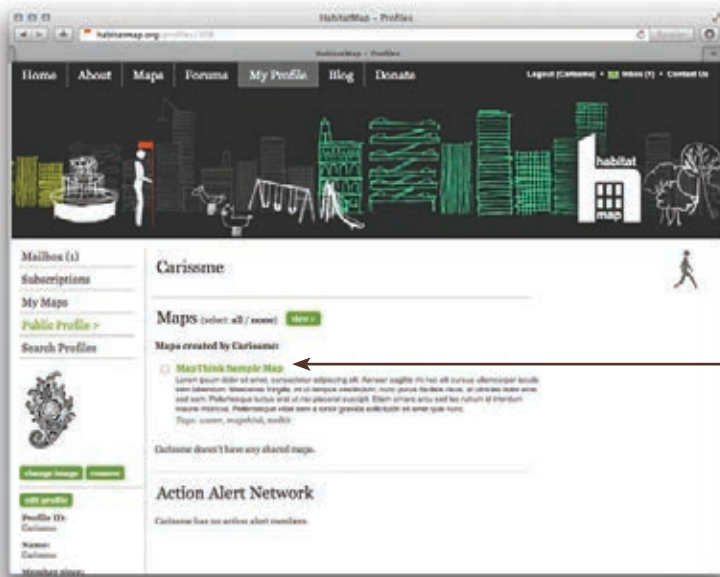
2 CLICK “MY PROFILE” AT THE TOP OF PAGE

MY PROFILE



How To Create a HabitatMap Marker (cont.)

3 CLICK THE NAME OF THE MAP CREATED BY YOUR TEACHER



MAP

4 CLICK “ADD A MARKER” DIRECTLY ABOVE THE MAP
A marker can be started, submitted unfinished and then edited and resubmitted at any time.



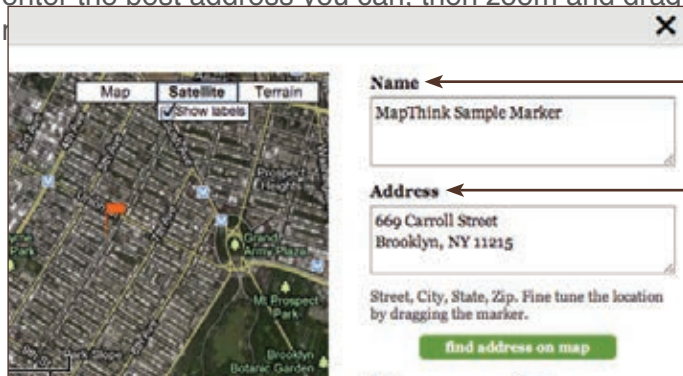
ADD A MARKER

How To Create a HabitatMap Marker (cont.)

5

ENTER THE “NAME” AND “ADDRESS” OF YOUR WATER SYSTEM FACILITY

Then click “find address on map”. This will mark your location on the mini-map with an orange flag. Zoom in on the map and drag the flag with your mouse to pinpoint the location. If you trigger the “Address not found” message make sure the city, state and zip are included in the “Address” field. In some instances, your water system facility may not have a traditional address. If this is the case, enter the best address you can, then zoom and drag the map to the proper location and click on the

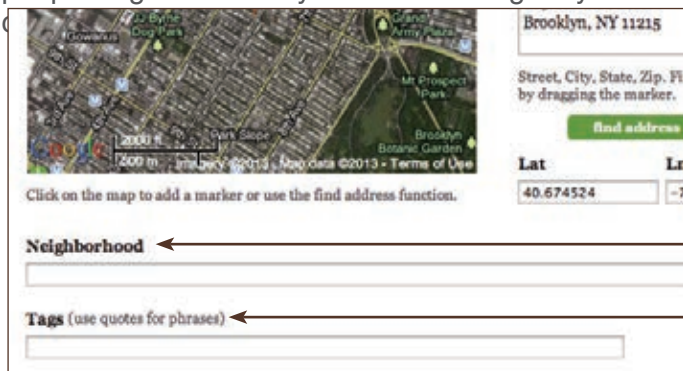



	NAME
Name ← MapThink Sample Marker	
Address ← 669 Carroll Street Brooklyn, NY 11215 <small>Street, City, State, Zip. Fine tune the location by dragging the marker.</small> find address on map	LOCATION

6

ENTER A “NEIGHBORHOOD” AND “TAGS”

If you’re not sure what neighborhood your water system facility is located in check the mini-map; if that doesn’t help use the nearest city. When entering “Tags”, choose three to six keywords that other people might use if they were searching for your water system facility. If your keywords are more than

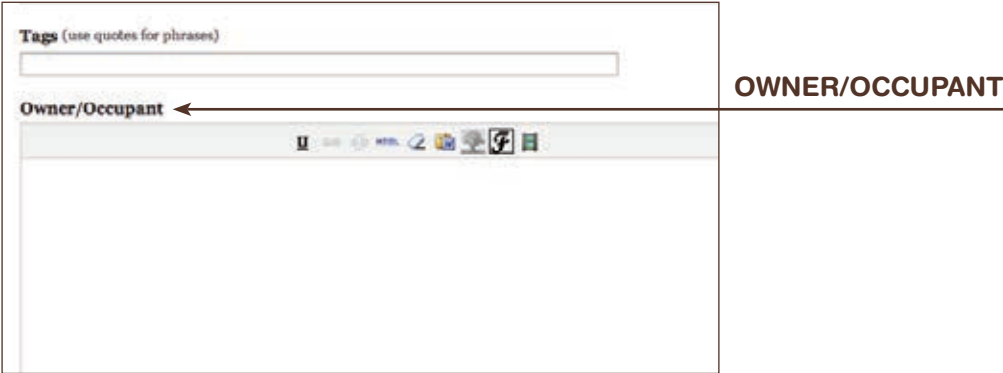


 Click on the map to add a marker or use the find address function.	Brooklyn, NY 11215 Street, City, State, Zip. Fine tune the location by dragging the marker. find address on map Lat 40.674524
Neighborhood ←	NEIGHBORHOOD
Tags (use quotes for phrases) ←	TAGS

How To Create a HabitatMap Marker (cont.)

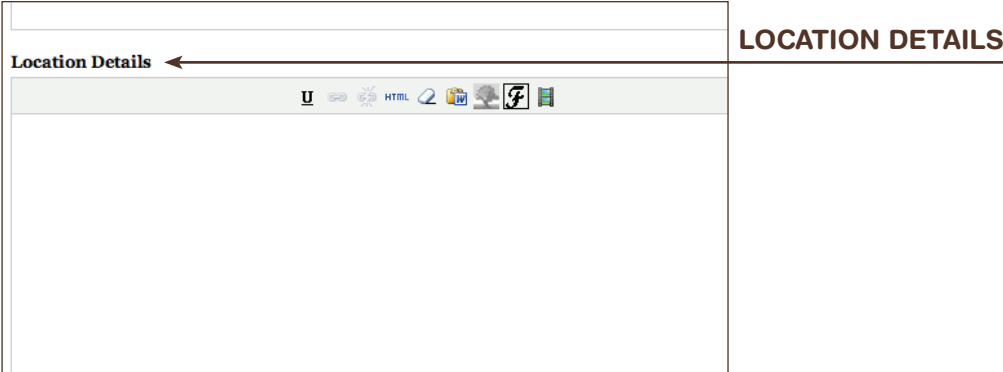
7 ENTER “OWNER/OCCUPANT”

Your water system facility is owned and operated by a government agency, a private business, or an individual. Find out who and enter the information here. Note that in some instances the owner of the property may be different than the occupant. For example, if you rent an apartment or home you are considered the occupant but not the owner. In instances where the owner and occupant are not one and the same list both.



8 ENTER “LOCATION DETAILS”

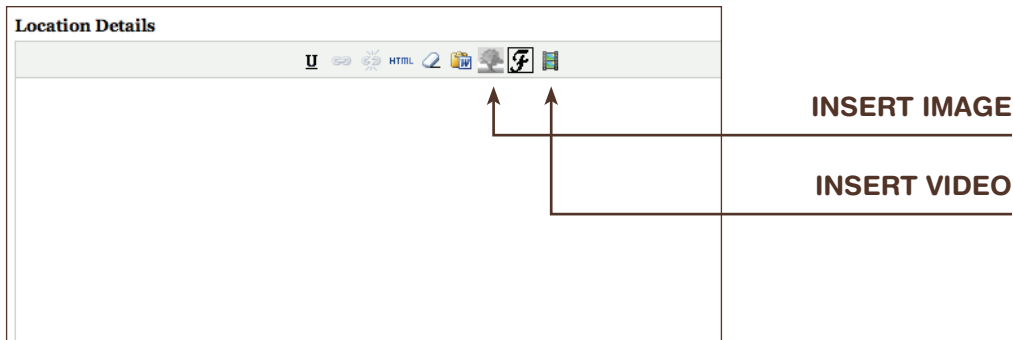
This is where the factual findings from your investigative report will go. Think of it as an encyclopedia entry on your water system facility. To get started, read over your investigative report and copy and paste those sections that are factual, leaving out your thoughts, feeling, and opinions (those belong in your blog post). After you do this, review the text, decide on useful headings and rearrange the text under these headings. Headings are main ideas or keywords that sum up the paragraphs below. Headings should be underlined by highlighting them with your mouse and clicking the “Underline” button (the U icon) on the “Location Details” editor.



How To Create a HabitatMap Marker (cont.)

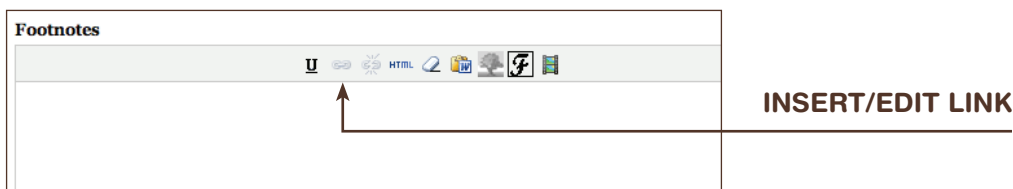
9 ADD AN IMAGE OR YOUTUBE VIDEO

Your marker will be more informative and interesting if it includes pictures or videos. To add a picture to your HabitatMap marker you first need to save the picture to your computer. If you found an image online that you want to use, perhaps by searching for the name of your water system facility using “Google Images”, you can save it to your computer by right clicking on the image (Mac: command + click), selecting “save image as”, and choosing a place on your computer to save it. Then return to the “Location Details” field, place your cursor where you would like your image to appear, click the “Insert Image” button (the tree icon) on the “Location Details” editor, browse for the image you saved, enter a caption, and click submit. To add a YouTube video place your cursor where you would like the video to appear, click the “Embed a YouTube video” button (the film strip icon) on the “Location Details” editor, copy the address of the video and paste it into the “File/URL” field, and click “Insert”. Note that when you’ve successfully inserted a video, it will appear as a yellow box with a dotted outline.



10 IDENTIFY SOURCES USING HYPERLINKS AND FOOTNOTES

People viewing your marker may want to learn more about your topic or confirm your facts first hand. This is where hyperlinks and footnotes come in handy. To insert a hyperlink, highlight the text you want to link, click the “Insert/edit link” button (the chain icon) on the “Location Details” editor, paste the link into the “Link URL” field, and click “Insert”. Include at least three hyperlinks in your marker. Ideally, every online source you used should be hyperlinked using this method. If you used a source that wasn’t online, document these facts using footnotes. Place your cursor at the end of the sentence wherein the fact is cited, click the “Insert Footnote” button (the F icon), and enter information regarding your source.

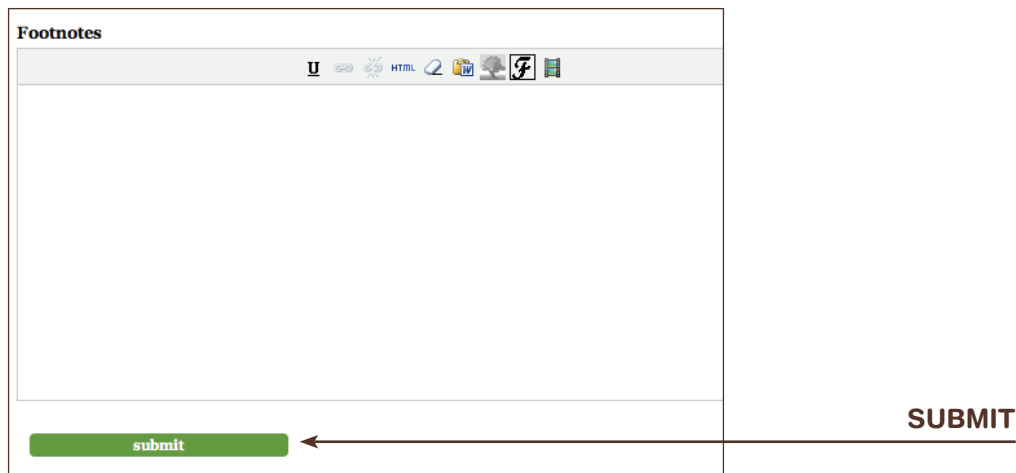




How To Create a HabitatMap Marker (cont.)

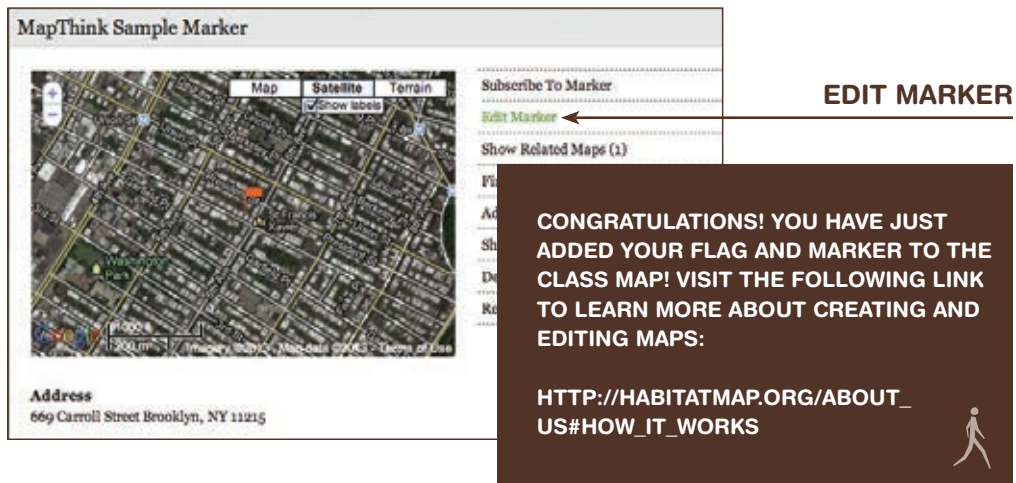
11 SUBMIT YOUR MARKER

When you are finished entering information, click “submit” at the bottom of the window to officially add your marker to the class map.



12 EDIT YOUR MARKER

If you’d like to go back and edit or add information to your marker simply click on the marker, click “Edit Marker”, make your changes, and save them by clicking “submit” at the bottom of the window. If you can’t find your marker, search for it by clicking the “Markers” tab on the left hand side of the “Maps” page, entering the name of your marker in the “Keywords” field, and clicking “Submit”.





How To Create a HabitatMap Marker (cont.)

13 ADDING LINES AND SHAPES TO YOUR MAP

To draw map lines and shapes, Click “My Profile” at the top of the page, click the name of your class map, then hover your mouse cursor over the map title (located in the upper right hand corner of the screen), click “draw map lines/shapes”, and follow the directions at the top of the window.



**DRAW MAP
LINES/SHPES**

Thank you for your interest and participation in the MapThink curriculum. We are constantly working to improve our tools for educators, students and community activists. If you have suggestions or would simply like to share your experience using the toolkit, contact us via email at info@habitatmap.org.



www.mapthink.org