



WATER PLANET • CHALLENGE •

Down the Drain: AN ACTION GUIDE for Water Quality

Written by Cathryn Berger Kaye, M.A.



A program of EarthEcho International
www.earthecho.org



Copyright © 2011 by Cathryn Berger Kaye, M.A.
Published by EarthEcho International

Special Thanks and Appreciation to Free Spirit Publishing for permissions to use excerpts from their books for this publication. www.freespirit.com

Pages 19-21, 27-28, and 30-32 adapted from *The Complete Guide to Service Learning: Proven, Practical Ways to Engage Students in Civic Responsibility, Academic Curriculum, & Social Action* (Revised & Updated Second Edition) by Cathryn Berger Kaye, M.A., © 2010. Used with permission of Free Spirit Publishing Inc., Minneapolis, MN: 800-735-7323; www.freespirit.com. All rights reserved.

5, 6, and 33 adapted from *Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands* by Cathryn Berger Kaye, M.A., with Philippe Cousteau and EarthEcho International © 2010. Used with permission of Free Spirit Publishing Inc., Minneapolis, MN: 800-735-7323; www.freespirit.com. All rights reserved. All rights reserved under International and Pan-American Copyright Conventions. Unless otherwise noted, no part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, or otherwise, without express written permission of the publisher, except for brief quotations or critical reviews.

EarthEcho International and Water Planet Challenge and associated logos are trademarks and/or registered trademarks of EarthEcho International.

For information about this publication please contact:
EarthEcho International
888 16th Street NW, Suite 800
Washington, DC 20006
202.349.9828

TABLE OF CONTENTS:

About this Action Guide	page 1
Are You Up to the Challenge?	page 2
A Message from Philippe Cousteau	
Service + Learning = Service-Learning	page 4
Stage 1: Find Out → INVESTIGATE	page 5
Stage 2: Get Ready → PREPARE	page 9
Stage 3: Do → ACT	page 13
Stage 4: Think Back → REFLECT	page 16
Stage 5: Tell the Story → DEMONSTRATE	page 16
What's Next?	page 17
Water Quality Resources	page 18
Personal Inventory	page 19
Gathering Information About a Community Need	page 20
Preparing for an Interview	page 22
An Interview with...	page 23
Defend Your Drain...part 1, Down the Drain Inventory: What is going down your drain?	page 24
Defend Your Drain...part 2, Ingredient Investigation 1 of 2: What's in it?	page 25
Defend Your Drain...part 2, Ingredient Investigation 2 of 2: What's on you?	page 26
Discussion Circle Roles and Discussion Circle	page 27
Plan for Water Quality	page 29
Service Learning Proposal	page 30
Progress Monitoring	page 31
Four Square Reflection Tool	page 32
Creating Your Message, Telling Your Story	page 33
For More Information	page 34
About The Partners	page 35
About the Author	page 35

About This Action Guide

This Water Planet Challenge Action Guide *Down the Drain: An Action Guide for Water Quality* offers an opportunity to engage students in a service-learning process. Participating in service-learning is an ideal way for youth to increase both knowledge and skills transferrable to many learning situations. As you review the document, consider that the youth involved—whether through a classroom, an afterschool program, or a youth-serving organization—will be integrating many academic standards as they *investigate* the water issues in their everyday lives. Based on their findings and further information gathered during *preparation*, they will *develop a plan* to recommend reasonable changes and then move to *taking action*. Throughout this process, be sure to engage the students in *reflection*, as this solidifies their learning and establishes personal and effective connections to what they are discovering. The section on *demonstration* allows students to consider all of the service-learning stages they have experienced and develop ways to tell their stories. Be certain to review *What's Next* on page 17, for ideas of where to go from here.

Also central to this publication are additional websites—including www.WaterPlanetChallenge.org—and resources that add layers of knowledge to what is provided. These are all options for further exploration during or following the implementation of this Action Guide.

If you are an educator or adult coordinator: As you are planning, consider that the time it takes to implement this Action Guide will vary. Allowing for this to be a part of your lessons over two to three weeks may be reasonable. If done as part of an afterschool program, this framework can extend from one to three weeks. In a summer intensive, one to two weeks can be spent on this unit with additional ideas to extend further.

If you are a student or youth participant: This Action Guide invites you to think about how your everyday actions impact the world around you. By looking closely at how your actions affect water, you are developing essential 21st century skills and knowledge. This topic will likely hold center stage for decades to come, as we depend on water for every part of our lives, and for life itself.

Keep in mind this is the beginning. While this Action Guide centers on water issues you can study at home, these ideas also belong in our schools and throughout our community. Join in. Share your ideas and talents. Take familiar and new topics and look at them in different ways and with an open mind. Discover fresh watery ideas. Our water planet will be grateful.



Take the Challenge!

Portions of this Action Guide are excerpted or adapted from *Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands* by Cathryn Berger Kaye with Philippe Cousteau and EarthEcho International (Free Spirit Publishing, 2010). This award winning book is filled with additional information that opens our eyes to many water related topics, including water quality.

Two Pathways to Water Quality

This Action Guide explores water quality issues related to what goes *Down the Drain*, and how our everyday actions matter.

Be sure to also explore *Out the Spout*, another action guide also available at www.WaterPlanetChallenge.org. While some of the information presented in these two Action Guides is similar, you will find many unique elements related to the theme, including different preparation topics, interviews with knowledgeable experts, examples of teens transforming ideas into action, and next steps.

Be certain to review the list of books also found on page 34.

ARE YOU UP TO THE CHALLENGE: Is Water a Drain? or What's the Matter with Water Quality?

*A Message from Philippe Cousteau
Co-founder and CEO, EarthEcho International*

Like most of you, I enjoy and depend on many of the creature comforts I have around me—a cell phone, television, public transportation. I depend on these regularly to get my work done and also to stay in touch with people and with what's happening in the world. If all of these vanished, however, I could still have a quality of life that would be good and productive. Not that long ago people did quite well without any of the trappings we “must have” today. But take away water and what would we have?

We need water for survival. We begin learning this in kindergarten, yet we may have left off the most important part of that lesson: humans have to think about water as a precious resource that we must protect and preserve. Our lives literally depend upon this. Since we do depend on water that is both gentle enough to use in a shower and powerful enough to wipe out cities in a tsunami, is there really a big deal about the quality of this water? Would any quality water be good enough?

Perhaps it's our casual attitude about water that is part of the problem. In many parts of the world we think that we have enough water, so if we keep the tap running while we finish a conversation with a buddy, no big deal. Or maybe we forget that by pouring the remnants of a cleanser down a sink, especially when the label says not to do so, no big deal. Let me express my opinion on this loud and clear: BIG DEAL! We live under the assumption that clean water will always be available. Increasingly, however, we are finding this is not the case. Water quality is a global issue, one that affects us closer to home than you may think.

You probably have realized that I take the topic of water very seriously. So now it's your turn. When you think about the important water issues, especially related to what goes “down the drain” in your home or at school, what might be your concern? Make your list, and then look at mine. You may or may not be surprised to realize that humans tend to be the primary cause of these issues:

- **Clean water:** 20% of water in the United States fails the clean water quality test.
- **There is no away.** Nothing that goes down the drain ever goes away. Old medications flushed down the toilet and chemical fertilizers washed into the storm drain are simply moving somewhere else, usually causing pollution or, in the case of items containing bleach, eroding pipes and killing countless organisms in the water. At school, are you careful about paints or turpentine in art class or chemicals in chemistry, or are they just going down the drain?

- **Phosphates.** These are inorganic chemicals commonly found in our environment and in many laundry detergents, dish soaps, and household cleaners to increase cleaning performance. Although phosphorus is vital to human, animal, and plant life, an abundance of phosphates can cause algae blooms; algae blooms deplete water of oxygen and kill all organisms living in that water. The mining of phosphorus compounds also impacts surrounding water and land. One such impact is the creation of waste ponds, or bodies of water specifically constructed to dispose of water pollutants. This may not sound so bad, until you consider that Florida has 100,000 acres of waste ponds left over from phosphorus mining.
- **Personal care products.** That's right, the variety of items I carry in my suitcase when I travel to brush my teeth or clean my face. Depending on what I purchase, I may be part of the problem of what is going down my drain.

By now you are likely getting the message. Your everyday actions matter when it comes to water quality. What are examples of everyday actions you can take to ensure water quality?

Be particular about the products you use on a daily basis. When I am shopping, I look at the back of soaps, shampoos, and conditioners. I put the product down if there are many words that I cannot easily pronounce or identify. Some of these ingredients are filler chemicals for making suds that really only cause harm. These products wash off of our hands and face or rinse out of our hair and go *down the drain*. Some of these potentially harmful chemicals may soak into our bodies through our largest organ—the skin, which is a permeable membrane. Scary.

The same is true if I use a highly-abrasive cleanser on my sink. I consistently check out the cleansers and other products I am buying for general household use and always select the ones with the least residue and harm. I do my homework and research *before* I go shopping. Do I want to contribute to a polluted water system? Obviously not.

Remain educated about this topic and keep up with the ever changing related news and information. Scientists—including teen scientists—are inspecting what's in these products that we see advertised as the next MUST HAVE item for beauty or a sparkling sink. I find the more simple the product the better it is for me and the planet. Still, there is much to learn and I implore you to join me in staying informed and to share your knowledge with others.

The earth contains a finite amount of fresh, drinkable water. If you keep this in mind and your actions reflect this thought, then you are serving as part of the solution. We all hear about environmental issues every day in the news. Some of the topics seem out of our reach. What I have discovered, however, is most topics are within our reach, especially as we gain the skills and knowledge that help transform our ideas into action. That's why this Action Guide is in your hands—to provide the content and the process that makes you a planetary steward and that allows you to have increasing influence on others.

Throughout this Action Guide, you will be presented with a range of topics to help you know, think, and do—all about improving and protecting our water quality. You will have the opportunity to investigate water quality issues and formulate an action plan to improve the standard of the single most important substance we put into our body. Join me as a water advocate. Let's *defend the drain* and ensure our water has the quality we need for a quality life.

Service + Learning = Service-Learning

Service: Service means contributing or helping to benefit others and the common good.

Learning: Learning means gaining understanding of a subject or skill through study, experience, or an exchange of ideas.

Service-Learning: The ideas of service and learning combine to create service-learning. Investigation, preparation, action, reflection, and demonstration are the five stages of service-learning. By understanding how each stage works, you can be more effective in making plans to help in our community.



While the *Down the Drain Action Guide* focuses on what you can do at home, you can easily translate these actions to another location, such as your school, as part of *What's Next* on page 17.

The Five Stages of Service-Learning

Stage 1: Find Out → INVESTIGATE: Begin the service-learning process by asking, "What resources do we have in our group? What are our skills and talents?" Then investigate further by using newspapers, interviews, surveys (what do people at school know about this topic?), and especially by testing water at your home or school to become more aware of water quality issues.

Stage 2: Dive In → PREPARE: What do you need to know to be well informed about the topic? Finding out might involve talking with other people and organizations, reading newspapers, watching

a video, or attending a community meeting. What skills do you need to be effective? The ability to listen well, document what you learn, and select a way to take action as an informed advocate all come into play. All this preparing leads to knowing what form of action you will take. Then you are ready to ...

Stage 3: Get Going → ACT: Create your plan and set your ideas in motion. Implementing your plan for improving water quality in your life and those of others around you can look like:

- **Direct Service:** changing the products you and others use at home or school to protect the local water supply
- **Indirect Service:** posting Save the Drain tips throughout your school
- **Advocacy:** creating a public service announcement for a television station to educate others and influence behavior toward improved water quality in your community
- **Research:** collecting data that informs your school district about recommendations for your campus and other schools so your good ideas can have widespread impact.

Stage 4: Think Back → REFLECT: During ALL of the stages it is important to pause and consider: How is this going? What am I learning? Does anything need to be changed? Checking in through reflection keeps us on track as we connect our thoughts, feelings, and actions.

Stage 5: Tell it → DEMONSTRATE: Tell the story of what happened as you learned and took action regarding water quality. This is when you showcase the service-learning process. Remember to document every stage of service-learning, beginning with investigate, so that you will have all you need to present your complete journey. Consider who would want to know what you did, what skills you learned, the interests you developed, and the results. Include your reflections. Remember that your success can inspire other youth to do the same. Be bold! Share the learning AND the service!

Stage 1: Find Out → INVESTIGATE

Water Quality: It's Up to You

We use water from the moment we get up in the morning until we go to sleep at night. We flush, shower, brush, eat, drink—and every action adds to what goes down the drain. This occurs all day long in our homes, schools, communities, regions, and countries all across the globe. Do these actions matter?

Yes. Every action matters, even small ones like washing our hair, cleaning the sink, or turning on a half-filled dishwasher. Since clean, fresh water is a fragile resource becoming scarce or depleted in many locales, we need to protect what we have. The first step toward being a responsible steward of our water resources is to gain information and knowledge. What we know can influence the choices that we make. Our choices add up.

Water quality indicates its suitability to meet our most basic needs. High quality water is drinkable, or potable. High quality water has few, if any, contaminants, and may have been treated to meet minimum standards.

So why should we care about water quality? Water relates to every possible issue of the quality and sustainability of life. We need clean water for drinking, food preparation, and washing. Water affects human health, the health of ecosystems, and food production; without fresh, clean water, humans suffer from disease and poor nutrition. Water is even important for recreation—fishing, water sports, or simply diving into a lake. Water truly is integral to all parts of our life. But when humans (that's us) use water wastefully, we deprive natural systems of water: rivers dry up, lakes are polluted, animals and plants die. Our quality of life is diminished.

Today, every water resource, every water resource, is at risk from contaminants that seep into our groundwater or pour from storm drains or pipes into rivers and waterways.

In many parts of the world we simply take water for granted. We expect pipes to be in place and faucets to deliver clean water 24/7. Keep in mind that this expectation simply does not exist in many developing countries, where potable water is often scarce, outhouses are the norm, and drains as we know them are nonexistent.

Water knows no political boundaries. Actions affecting water in one place can affect people and nature in other places. Consider that demand for water increases as worldwide population numbers continue to rise. The amount of water on earth, however, stays the same. Water evaporates from the earth's surface and falls as precipitation in the form of rain, snow, and sleet back onto the land, oceans, and interconnected system of waterways. The water then returns to the oceans as river runoff and groundwater flow. This exchange of earth's water in the process of evaporation and precipitation is known as the *hydrologic cycle*. In fact, water is finite and resources are limited. This means we are all using recycled water! In other words, there is never any "new" water.

Earth does have a *lot* of water, about one and a half billion cubic kilometers. When it comes to drinking water, however, limitations are noteworthy. Consider that 99 percent of earth's water is unfit to drink, leaving just one percent freshwater for consumption by

Gathering All Questions

Every good investigation results in questions that you want to have answered. This will occur throughout the service-learning process (that's part of the *learning*). Designate a place on a classroom wall or in your notebook to log questions as they arise, and keep track of the answers.

"From the top of Mount Everest

to the deepest oceans and all the way around, we live within a continuous flow of water. The water from the Ganges in India could rain over the plains of Kenya, end up in a cup of tea in the Queen's castle, or fill a swimming pool in a Dallas suburb. When we know this, we may behave differently and take action in our own lives."

—Alexandra Cousteau, Blue Legacy International, from *Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands*

through your kitchen and bathroom drains at home? Who can you ask? Use the *Gathering Information About a Community Need* document on pages 20-21 to help you learn more about the big picture and how this informs what is happening in your own backyard. Brainstorm methods of finding out, plan what you will do, and investigate the answers to your essential questions. Use the following methods to gather information about water quality. Read on!

Investigating Your Skills and Talents!

As you begin to learn more about water quality, find out, also, the unique abilities of every member of your group. Conduct a Personal Inventory by interviewing each other about your interests, skills, and talents. Make a list. Refer to this list as you develop your plan of action. Any photographers? Great for documentation. Does someone like to write? Ideal for composing a press release. Any artists? Excellent for designing signs. Find a *Personal Inventory* document on page 19.

Media: Newspapers, television, film, magazine and journal articles, the Internet, photographs, and similar resources are all media tools to use for investigation. Begin with newspapers. Cut out articles addressing water quality issues. Sort the articles into categories. This might include global concerns, policy, legislation, local initiatives, expenditures, environmental and social impacts, and business ideas. Read, discuss, and consider: What keeps water quality in the news? What issues seem most important to the international community and which are most important in your community? How do these intersect?

Is what you are putting down the drain causing any harm? Media can help you find out. Water companies provide fact sheets, updates, and reports about water quality issues that are often available on their websites or in print material you can request. Knowing this information can be extremely helpful as you make a plan for action.

Try this: Advertisements are unique media resources you can use to learn more about what is going down your drain at home. How do companies use media to convince you that their products are desirable? Do they give information about environmental impact as part of their sales pitch?

Interview: Through the interview process you gain personal knowledge from an individual with expertise in the topic you are investigating. Who would know about water quality issues in your community? At your school? Who might be part of developing a plan of action for improving and protecting our water resources? Once you determine who you will be interviewing, use the *Preparing for an Interview* document as you compile your questions, and *An Interview with...* document during the actual interview, on pages 22-23. Many organizations, including some established by teens, are highly concerned with what goes down our drains. Consider that interviews can be in person, by phone, or via Skype.

all living creatures, including plants and animals. With this in mind, *does quality matter?*

To find out more about water quality and what you do every day, *investigate*. Water quality issues are always popping up in the news! With little effort you can find a story that addresses critical issues about limited supplies, concerns about tainted water, or water privatization. What does this mean to your specific community? How will you find out? What about the chemicals and substances commonly flowing down

Survey: A survey can help you quickly determine what concerns people in your school community and how they may be willing to be involved. What do people know about water quality? Are they guided by facts or fiction? A survey can help you find out and may help you determine your plan of action. Develop a few basic questions to start. Determine whether you want to do an in-person survey during school lunch or at the mall. Some students create an online survey to involve large numbers of respondents and then use this to establish community buy-in as the action becomes based on the findings. Consider the following questions as you are planning:

Do people know the ingredients that regularly go down the drain from the common products they purchase? How many people read the labels? If they do read the labels, do they really know what these ingredients are? If the ingredients are a mystery, do they purchase the product anyway? What is most influential: hype or content? Do their detergents or cleansers contain phosphates? Are unused pharmaceuticals casually flushed down the toilet? Remember, every product you put on your body or in your body ends up down the drain.

Observation: We can begin with a water quality *audit*. Audits give you a way to collect information by asking questions and making observations. Audits typically require a document to record what the present situation is. In this case, you're looking for evidence at home that shows how you impact water quality through everyday actions. This can lead to an action plan that informs your family and the broader community about behaviors they can change and alternative products that protect water supplies. Conducting an audit will also help you consider how personal actions decrease or increase water quality. This information will prove valuable as you make an informed case for changes, both at home and at school. When possible, document your findings with photographs for presentations yet to come.

Several *Defend Your Drain* audit documents are provided to assist you with your water quality investigation on pages 24-26. This audit helps you identify products commonly found in kitchens, bathrooms, and laundry rooms that contain ingredients that are unhealthy or hazardous to water supplies. These may include such unlikely suspects as soaps, shampoos, toothpastes, and cleansers. What about products that pass through you before they enter the waste water stream, such as caffeine? The *Defend Your Drain* audit documents will assist you in identifying hazardous substances that you purposely put down the drain, that wash off your skin, or that may be a complete surprise! Ideally, the results will guide you in making better-informed decisions in the future about the products that you purchase and use.

Keep track of your progress. Set a timeline for a follow up audit to determine what has changed after you have implemented your action plan. Keep taking photos! Compare! Two documents are provided to assist you: *Progress Monitoring* and *Creating Your Message, Telling Your Story* on pages 31 and 33 will help you make a compelling case for water quality.

STAY MEDIA SAVVY!

As you become more knowledgeable about water quality issues, stay aware of any breaking news stories. Also consider how YOU can generate news stories! Visit EarthEcho's STREAM website at www.EarthEcho.org/STREAM to find out how students report the news.

CHANGE, ANYONE?

Introducing the idea of change can be challenging. To achieve buy-in or participation, you may need convincing, appropriately constructed documentation and explanations for different groups of people. Students, teachers, and administrators may all require different kinds of "convincing." Who would be willing to change what they do if they knew more about water quality? What would convince *you*? How could involving change agents during your investigation assist you with your action later on?

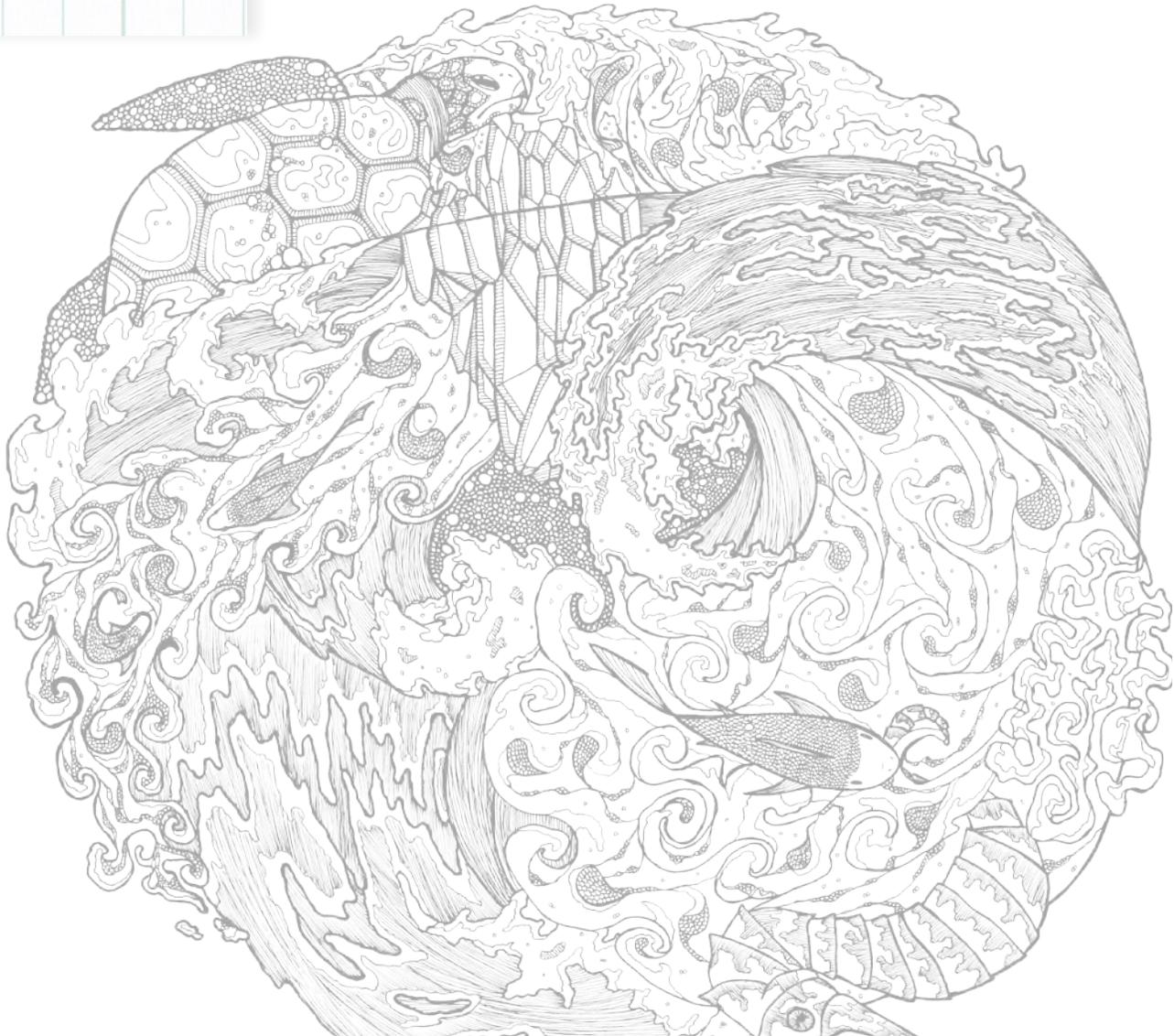
Next Step: Investigation, the first stage of service-learning, gives you the essential information you need to construct a plan of action. Investigation also raises more questions and leads you to the second stage of service-learning: preparation. All of this will lead you to action.

HOT TOPIC!

Since personal hygiene, beauty, and cosmetic products are so prevalent (teen girls use an average of 12 beauty/personal care products each day, while teen guys use six), they get their own section of the *Defend Your Drain* audit. A special opportunity to learn more about these items is part of the audit assessment.

A Pause for Reflection—Discuss in pairs or small groups:

- What did you like best about investigation?
- Did you uncover a new fact or idea that you think would be important to share with others?
- Identify a skill or ability you have that will be helpful as you move forward in preparing and taking action.
- What about this investigation method can help you with reaseach in other classes and activites?



Stage 2: Get Ready → PREPARE

What puts our water quality at risk today?
Let's examine several current hot water topics.

Beauty and Personal Care

Think of how many products we use every day to keep our skin moist, our teeth clean, our hair manageable and stylish, and our skin looking tan. Knowing that the personal care product industry is an \$18 billion dollar-a-year business attests to daily expenditures. Simply consider how \$18 billion dollars worth of products eventually going down our drains affects our water systems. What chemicals are in the lotions you slather on or the cover up you use? Remember: whatever you put on you will, at some point, be washed off and end up—you got it—down the drain and in our water system. Do fish really need to be swimming in lipstick?

We Want to Know ...

Can five teen girls take on the cosmetics industry and demand to know *what's in these products*? Can they influence politicians to pass legislation even before they are of voting age? Visit www.teensturninggreen.org to learn how they already have. Be sure to visit the *Dirty Thirty* link to find information on ubiquitous chemicals investigated for their potential harm to our health. And on pages 11-12, hear from Jessica Assaf, one of the founders of Teens Turning Green, about her personal commitment and journey as a health and environmental advocate.

Also, visit the Environmental Working Group website at www.ewg.org, especially their link www.cosmeticsdatabase.com, for a breakdown of ingredients in their list of 65,000 products, including innumerable household items such as moisturizers and toothpastes.

What We Ingest

Things we eat and drink end up in the oceans. Because we use a water-based system to remove human waste from homes, schools, and all places in our community, what we ingest travels from our toilets, through our watershed, and into our oceans. This includes caffeine in the beverages we drink, vitamins, antibiotics (and other medications), hormone-filled meats, and food dyes. How? Many water processing plants aren't thorough enough in removing these substances from the water they "clean" before it is returned to the natural system. One result is that hormones and hormone mimicking substances from pharmaceuticals, estrogens in leeching plastics (from single-use water bottles), and animal products that have passed through our own bodies are turning male fish, frogs, and other aquatic life forms into females. Creepy. If these products are harming our waters, could they also be harming us?

FOR YOU TO DO:

In the U.S., the average teenage female uses twelve personal care products per day; males use six. Many of the products have ingredients identified as toxic. In the video *The Story of Cosmetics*, Annie Leonard states, "We are using all these mystery chemicals and just waiting to see what happens. One thing we do know is they are getting inside us. I had my body's toxicity level tested and I am loaded with things like mercury, flame retardants, triclocen, and lead. We all are. Even babies are being born pre-polluted. I know we can't live in a lead-free world. But do we have to put lead in our lipstick?" View this short informative video at www.storyofstuff.org/cosmetics. Look back at your *Defend Your Drain* audit documents. What information in this video relates to what you found out about any of the personal care products? Add notes and begin to consider what *you* want to do for action.

Is there an organization assisting the public with consumer safety?

The mission of the Environmental Working Group (EWG) is to use the power of public information to protect public health and the environment. Founded in 1993, this nonprofit organization specializes in providing useful resources (such as Skin Deep and the EWG's Shopper's Guide to Pesticides™) to consumers while simultaneously pushing for national policy change.

Interviews with Two Experts: David Andrews and Jessica Assaf

As discussed in the investigate section, interviews are an excellent way to gain personal knowledge from an individual with expertise in the topic you are investigating. Here is an opportunity to read two interviews with experts who work each and every day on the water quality issues that have been highlighted throughout this Action Guide.

An Interview with David Andrews, Senior Scientist, Environmental Working Group

What is your background and how does that relate to your job at Environmental Working Group? I have a PhD in chemistry from Northwestern University. I do a lot of work regarding chemistry and how it relates to consumer and cosmetic products. I also focus on chemical regulatory issues—broad-scale issues such as the Toxic Chemicals Control act, which is the policy

in the United States that governs what the Environmental Protection Agency (EPA) actually does and what we know and don't know about products with chemicals. We are pushing for change that ensures we receive at least some safety information about chemicals we are exposed to.

What do we put down the drain that is of concern regarding water quality? You may be surprised to learn how many everyday products have chemicals that cause problems to our water supply. Of particular concern are chemicals in cosmetics, such as triclosan. While this is seen as antibacterial, it's really quite damaging to the environment, is detrimental to human health, and can build up bacterial resistance with over use. Triclosan is also in toothpaste—using toothpaste increases the triclosan in our bodies and in the water supply. Triclosan reaches across regulatory agencies: the EPA can't reduce the amount released in the environment because the Food and Drug Administration (FDA) regulates these types of hand washes and personal care products. Take a look at what you use—triclosan is listed on labels in personal care ingredients and is easily avoidable.

We have to develop the mindset that everything we use does end up in the environment. A significant amount of chemicals enter the environment through our bodies. In 2008, EWG did a study and report on chemicals by taking blood and urine samples from teen girls ages 14-19, because teens typically use more personal care products than adults. We tested these samples for 16 specific chemicals associated with health effects, primarily hormone disruptors (chemicals that affect our hormones and reproduction systems) and potential cancer-causing agents. We found evidence of triclosans and parabens in every sample. We also have concerns about phthalates and musks used in scents and fragrances often found in cosmetics. The problem is these are not labeled as such—they are hidden in the term fragrance. These are quite persistent and do build up in our bodies. We recommend always opting for fragrance free products. Finally, most perfumes have the "fragrance loop hole." Even if you call the company and ask, "What's in this perfume?" it's highly unlikely that they will tell you; in fact, they may not fully know because of the supply chain.

How do we find out more about product ingredients? Visit our website at www.ewg.org. At www.CosmeticsDatabase.com we have catalogued 65,000 products in a consumer-

friendly format, and provided all the information and ingredients with a toxic scoring system from 0-10 based on the ingredients and associated hazards. A "10" gets a RED light—definitely stay away from those. You will clearly see what products to avoid. Also take a look at the information about sunscreens. Here, again, the product is washed off when you go swimming, so you want to choose products without the hormone disruptors, which are a cause for concern.

The bigger issue here is this: our government should have the authority to protect our health from unknown or unavoidable hazards. For cosmetics and chemicals in general, there is an assumption that the FDA has verified it is safe and the ingredients are safe. This applies across all consumer categories. Many products are available with little to no safety testing. Often times we become the guinea pigs in the experiment. This is worth thinking about.

Raise awareness! This can lead to action. We can request information from product manufacturers about ingredients and what's really known about the safety. We can push for more accountability on the company end.

An interview with Jessica Assaf, founding member, Teens Turning Green, and public health and environmental advocate

How did Teens Turning Green get started? In 2005, at the age of 15, I was one of Teens Turning Green's five founding members. When I learned that the FDA was not regulating the cosmetics and personal care products I was using every day, I felt an immediate desire to take action against this injustice and mobilize young people to demand regulation and reformulation. Teens Turning Green, a teen-led organization that started in Marin County, California, with five passionate young girls sitting around a kitchen table brainstorming about how to take on the billion-dollar cosmetic industry, now has a presence at elementary, middle, and high schools, universities, and student organizations across the country, as well as a strong virtual platform and media presence. After over six years of participation, I have learned about my potential to impact consumer behavior and perhaps more importantly, to *impact legislation*.

What stands out as your greatest accomplishment? Teens Turning Green was instrumental in the passage of SB 484, the Safe Cosmetics Act of 2005 in California. This is the only piece of state legislation regulating cosmetics; this bill requires that manufacturers disclose carcinogens in their products to the California Department of Public Health. Did you know that companies can use cancer-causing products with no labeling? Our bill requires that companies disclose cancer-causing ingredients in their products to the public in the state of California. It is the first step to regulating the industry.

FOR YOU TO DO:

At www.TeensTurningGreen.org, check out "Fragrance 101," which let's you know what to be wary about when a product includes the word fragrance. Consider that:

- Synthetic fragrances contain many, many toxic chemicals.
- More than 4,000 chemicals are used in fragrances. Of these, 95% are made from petroleum.
- Products listed as "unscented" may still contain chemicals used as "fragrance maskers." So search for products that do not contain the word "fragrance" in their ingredients lists, rather than those that claim to be "unscented."
- Labels that claim a product is "natural" or "biodegradable" may not necessarily be free of synthetic fragrances or other chemicals.
- Most products that list "essential oils" or "botanical essential oils" are acceptable.
- Fragrances are volatile compounds that add to both indoor and outdoor air pollution. Synthetic musk compounds are persistent in the environment and contaminate waterways and aquatic wildlife.
- The chemicals in fragrances go directly into the bloodstream when applied to skin and are also absorbed into the skin from clothing.

Here's what I want you to know. Teens can and *should* play a role in the legislative process. With dedication and passion, we can impact the passage of laws. When I lobbied for the passage of SB484, I learned that Senators want to hear from young people; they want to support our work because they believe in us.

What makes your organization unique? A lot of organizations promote environmental sustainability. For us, public health is a driving force. We believe that consumers should not have to choose beauty over health. After participating in the EWG's "Teen Body Burden Study," (referenced by David Andrews in his interview) I now know the levels of toxic chemicals present in my own body. While this information is extremely scary, it is also empowering. These do not belong anywhere near our bodies, let alone in the products we slather on our skin daily. And they also do not belong in the environment. I hope to use my knowledge to force change and demand that these chemicals are banned from use. As you consider how intertwined our personal health is with the health of our planet, you will understand our motive and hopefully come on board!

TIME FOR DISCUSSION

Use the *Discussion Circle* documents on pages 27-28 for a sit-down conversation of the interviews with David Andrews and Jessica Assaf and other information found throughout this guide, or from recommended resources such as *The Story of Cosmetics* video. Follow the directions from the *Discussion Circle Roles* document and use the Discussion Circle to take notes.

Investigation and preparation get you ready to begin shaping a plan for action..

Before you turn the page and continue, take time to review the research and information you have collected. What did you find out during the *Down the Drain* audit that seems important to address in an action plan? What compelling facts did you find out through the interviews or by examining websites and watching videos that seem most urgent? Take a pen and mark the pages, circle what you want to stand out as a visual reminder that you are learning—and now you are moving toward service through action!

However one more p a u s e for *reflection*!

Reflect—Occasionally during preparation, generate different ways to reflect.

A few ideas:

- Consider this West African proverb:

"Filthy water cannot be washed."

How does this relate to water quality? Can you think of other quotes or proverbs that represent how you think or feel about how we are depleting or protecting our natural resources?

- Work with your classmates to maintain a list of the progress being made. Look at the list compiled during the Personal Inventory. What skills and abilities are developing that could be added to your list?
- Brainstorm the list of emotions you have felt as you have been preparing. What did you feel when you read about the environmental and personal health impacts of chemicals we commonly use? How does this change what you are thinking about regarding everyday products that may have seemed harmless before? How do our emotions matter as you are learning and coming up with ideas for action?

STAGE 3: Do → ACT

What kind of action will you take? Consider there are four types of service-learning action. Within each type, you can think about ways to protect and improve water quality for you and others, both near and far.

Research

While you have already completed various kinds of research, consider if there is more to be done in this action stage. Continued action can either inform ways you can educate others, or may produce needed information or data for decision makers in your school or community. Doing research as part of your action plan will equip you to be informative and persuasive, all helpful in making change happen.

Return to your *Defend Your Drain* audit documents. What products need replacing with nontoxic alternatives? Can you substantiate your information with research from EWG's website or other informative sources?

Direct Action

Identify nontoxic commercial substitutes for products that need to be replaced in your home, school, or any other place where you spend a significant amount of time. Can you find recipes made from common household ingredients? How about being part of a business that makes these available?

Teens in Action: Hazardous Chemicals? Not in My Water! Location: Minneapolis, Minnesota

How can families and communities learn about how the products they purchase affect their health and environment? Students at The Blake School in Minneapolis, Minnesota, decided to teach them. They made an inventory of products in their homes, researched how hazardous the products were depending on their chemical content and their environmental effects if disposed of improperly, and then learned proper disposal methods. Students labeled these products in their homes and presented their research to families and other

Who are the stakeholders?

These are people invested in water quality in the community—this should be *everybody*. You can target your message to different stakeholders as you plan your action.

"Shopping is politics"

—Bono, musician

2x Ultra Tide Detergent

Ingestion: transient gastrointestinal irritation, diarrhea, nausea, vomiting
Eye contact: Slightly corrosive - mild, transient irritation
Inhalation (dust/products): transient respiratory tract irritation, respiratory sensitization

Chemicals: unspecified enzymes & surfactants, sodium carbonate, subtilisin, sulfuric acid, mono-C14-18 alkyl esters, sodium salts

Use all of the detergent and dispose of container at:
Brooklyn Park Recycling Center & Dropoff Station
8100 Jefferson Highway
Brooklyn Park, Mn 55445

Greener Alternatives: Life Tree & Seventh Generation detergents



Spray 'n Wash Stain Remover

Inhalation: may cause mucous membrane irritation with cough and rhinitis and/or asphyxia
Skin: transient irritation (slightly corrosive)
Eye: slight irritation

Chemicals: fragrances, perfumes and dyes, sodium alkylaryl sulfonates, water, alcohols, C12-14 ethoxylated, C14-15 Pareth-7, preservatives

Use all and dispose of container at the Brooklyn Park Recycling Center & Dropoff Station

Greener Alternatives: Natural stain remover recipe:
1 part glycerin
1 part liquid dish washing detergent
8 parts water
Store in plastic squeeze bottle
Shake well before use



FOR YOU TO DO:

Visit www.WaterPlanetChallenge.org for recommended recipes of household cleaners using safe, everyday items that REALLY work!



Kids With a Kause—KWAK's Global Youth Service Day Project

Global Youth Service Day

is an annual campaign that celebrates and mobilizes the millions of children and youth who improve their communities each day of the year through service and service-learning. To find out more and learn about grant opportunities, visit www.GYSD.org.

students in the community. Parents expressed amazement to learn they were using potentially toxic chemicals in their households, even in common cleaning products, and what their effects are on humans and other organisms in the surrounding environment.

The results of the Blake students' efforts? A community of smarter shoppers who know how to make informed decisions when purchasing household items and also when disposing of them. In the long run, these actions will increase the health of local waterways and send a message to manufacturers that consumers want environmentally-friendly products.

Teens in Action: Meet the KWAKERS with a KAUSE

Location: Des Moines, Iowa

In the spring of 2010, a neighborhood group of teens decided to come together with a common cause and make a change in their community. As KWAK—Kids With a Kause—they decided to replace a common household cleaner that can pollute our waters when it goes down the drain with a kinder product without harmful environmental impacts. These young people wrote a grant and, as part of Global Youth Service Day, received \$250 to turn their idea into KWAKER KLEANER.

With their grant money they purchased 150 spray bottles. Then they followed a recipe to make their product, filled the bottles, and designed a label. Finally, they placed the bottles in wagons and delivered them to the front doors of 150 households with a note explaining their idea, their product, and what KAUSE is all about. The big idea: to change everyday habits. The bigger idea: protect the planet.

For more information on the KWAKERS and their KLEANER, visit www.RandomKid.org, and click on Make it Happen.

Indirect Action

Work with local merchants to create and distribute a brochure about water quality safe products. Design a *Safe for the Drain and for You* symbol that can appear on shelves by water safe products.

Educating children is an important way to educate your community. Find an elementary class studying about water and work with their teacher to prepare a lesson that meets their academic needs and informs them about ways to get involved. Make an informative booklet for younger children about water quality. Use The *ABCs of Water Quality* template found on www.WaterPlanetChallenge.org (with easy to follow directions) to get yours started. It's as easy as ABC!

Advocacy

Be loud about what you know! Launch a media campaign. Come up with catchy slogans like *Don't Be a Drain!* Be the voice of water quality! Collaborate with a local popular radio station. Prepare informative inserts for the water bills that are mailed out or are posted on water management company websites. See an outstanding example of Every Drop Counts,

water saving tips prepared by second graders on the www.WaterPlanetChallenge.org website.

Be certain to learn about the water quality hot topics in your community. Do research to understand what this information means from all sides and all angles. Inform others and, if action is required, tell your politicians.

Move your Plan Forward

Now that you've read about four ways to take action, use the *Plan for Water Quality* document on page 29 to determine:

- Which kind of action will you take?
- Who will do what?
- What's your timeline?
- Are you able to design a banner that gets your message across?

Brainstorm with the group. Consider every idea. Reference examples from other teens found throughout this Action Guide. Spending time on planning is often the secret to success.

We Propose . . . We Progress

Once you have generated ideas with your *Plan for Water Quality* and started to clarify roles and responsibilities, now you can move toward implementation. Organize into committees that specialize in different aspects of water quality. Refer back to the Personal Inventory to draw upon the resources that you have. Activate adult and community partners to assist with your ideas. Use the *Service Learning Proposal* document on page 30 to write up your plan to submit for approval to your school administration. Include a strategy to communicate to others what is being planned. Will you be part of a school assembly or offer daily announcements of water facts—even some from this Action Guide—on the PA system? Can you schedule time at a faculty meeting to sell the idea to the teachers and even suggest ways they can make water quality a part of their academic agendas? On page 34 you will find a list of resources that may help you promote water quality at school, home, and throughout the community.

The *Progress Monitoring* document on page 31 helps you set your baseline and timeline to note what has changed. This is helpful for evaluating what is going well and what you can change as you move forward.

This is what you have been working towards throughout investigation and preparation—moving into action. Be prepared for the unexpected. Keep encouraging members of your team. Remember: quality matters—and water quality matters big time!

Even During Action, Pause for Reflection

As you implement your ideas to improve water quality at home, school, and throughout your community, ask yourself:

- What is your favorite part of your plan?
- What is most surprising about the response to your plans to improve water quality?
- What will you remember about what you have done in five years? How will you have contributed?

STAGE 4: Think Back → REFLECT

Yes, you have been reflecting all along. This stage of service-learning, however, encourages you to make the time to bring together all of your thoughts, ideas, feelings, and questions and combine them using the *Four Square Reflection Tool* on page 32.

STAGE 5: Tell the Story → DEMONSTRATE

What a story! Think of all you have done and all you have learned! You have put your plan into action and seen the results. Now it's time for demonstration—the stage when you show others what you've learned about advocacy for improved water, the impact of products used every day on our health and the water systems, eliminating single-use water bottles, and making changes small and large through carrying out collective ideas. This demonstration of your service-learning can take any form you like: letters, articles, pamphlets, artistic displays, performances, or media presentations.



Check out EarthEcho International's STREAM website—STudents Reporting Environmental Action through Media. Here you will find ideas and resources to create and post your news story or video about water quality in your school. Go to www.EarthEcho.org/STREAM.

To help you make the most of your demonstration, answer these questions:

- Who is your audience?
- What do you most want to tell them about what you learned and how you learned it?
- What do you most want to tell them about how you provided service?
- Are there any community partners who you might like to invite to participate in the demonstration?
- What form of demonstration would you like to use?

Consider all of the skills and talents of your group and use as many as possible as you come up with ways to demonstrate. Be sure to incorporate information and the processes you used during all the different stages. Include images—a picture is worth a thousand words. Sharing what you have learned and accomplished is a way to inform and inspire others. Sometimes students have done school

or community presentations or made videos they have made available to others. Students have written newspaper articles or press releases, or created websites. Be sure to look at the *Creating Your Message, Telling Your Story* document on page 33. This will also give you ideas about making an elevator speech, which is a short, bulleted talk about key ideas that you most want to communicate.

WHAT'S NEXT?

Congratulations! You have completed the Water Planet Challenge Action Guide *Down the Drain: An Action Guide for Water Quality*. However, this is only the beginning. You may want to apply these same ideas to continue helping your community and continue to apply your talents, skills, and knowledge to creating a healthier planet. Here are a few ideas:

Is Your City Ready to Get Involved?

Where in your community can you spread the ideas you have learned and get more people on board for improved and protected water quality? Learn about local policies and practices. What kind of cleaning materials are used in Town Hall? Find a place to tell your story—a city newspaper or blog, a display in a popular public venue, a billboard.

Spread Water Quality throughout the Community

Now that you have experience with the *Defend Your Drain* audit, consider what an excellent resource you can be within your community! Write articles. Put on workshops. Teach others. Be leaders for widespread water protection!

Stay on the Lookout for School Water Quality Projects

Plans for construction or major purchases at school? Create a team of water quality consultants to raise questions and look at what is being advanced from the lens of water droplets!

Check out Out the Spout: An Action Guide for Water Quality

Down the Drain is one half of the story. By investigating and taking action on what comes *Out the Spout* you will get the BIG picture of water quality and see how these two parts fit together. Are you ready for the challenge? www.WaterPlanetChallenge.org

Your ideas have can make Big Waves!

Your group may want to consider any of these examples as you expand your ideas for improving and protecting water quality. Most important of all: teach by example. What YOU do will spread the word. Make good choices. Use less. Reduce. Watch what you purchase. Stay aware of how our actions impact water in all the diverse ways described in this Action Guide. Be water wise! Spread the word.

DOWN THE DRAIN Resources

Here are the documents that have been mentioned while reading this Action Guide. These next pages provide tools that will help you during the different stages as you investigate, prepare, act, reflect on what you did, and tell your story during demonstration. And remember, additional resources may be found at www.WaterPlanetChallenge.org.

1. Personal Inventory
2. Gathering Information About a Community Need – 2 pages
3. Preparing for an Interview
4. An Interview with...
5. Defend Your Drain...part 1, Down the Drain Inventory: *What is going down your drain?*
6. Defend Your Drain...part 2, Ingredient Investigation 1 of 2: *What's in it?*
7. Defend Your Drain...part 2, Ingredient Investigation 2 of 2: *What's on you?*
8. Discussion Circle Roles and Discussion Circle – 2 pages
9. Plan for Water Quality
10. Service Learning Proposal
11. Progress Monitoring
12. Four Square Reflection Tool
13. Creating Your Message, Telling Your Story

Interests, skills, and talents—we all have them. What are they?

Interests are what you think about and what you would like to know more about—for example, outer space, popular music, or a historical event like a world war. Are you interested in animals, movies, mysteries, or visiting faraway places? Do you collect anything?

Skills and talents have to do with things you like to do or that you do easily or well. Do you have an activity you especially like? Do you have a favorite subject in school? Do you sing, play the saxophone, or study ballet? Do you know more than one language? Can you cook? Do you have a garden? Do you prefer to paint pictures or play soccer? Do you have any special computer abilities?

Work with a partner and take turns interviewing each other to identify your interests, skills, and talents and to find out how you have helped and been helped by others. Then, compile a class chart of your findings. This will come in handy on your service learning journey.

Interests: I like to learn and think about . . .

Skills and talents: I can . . .

Being helpful: Describe a time when you helped someone.

Receiving help: Describe a time when someone helped you.



Gathering Information About a Community Need

INVESTIGATE

What does your community need?

Use the questions in the following four categories as guides for finding out. As a class, you might agree to explore one topic, for example, how kids get along at school, hunger and poverty, or an environmental concern. Or you might decide to learn about general needs at school or in the surrounding area. Form small groups, with each group focusing on one category and gathering information in a different way.

Finding out about:

Media

What media (newspapers—including school newspapers, TV stations, radio) in your community might have helpful information? List ways you can work with different media to learn about needs in your community.

Interviews

Think of a person who is knowledgeable about this topic in your area—perhaps someone at school or in a local organization or government office. Write four questions you would ask this person in an interview.

An interview with _____

Questions:

- 1.
- 2.
- 3.
- 4.



Gathering Information About a Community Need

INVESTIGATE

Survey

A survey can help you find out what people know or think about a topic and get ideas for helping. Who could you survey—students, family members, neighbors? How many surveys would you want completed? Write three survey questions.

Who to survey:

How many surveys:

Questions for the survey:

- 1.
- 2.
- 3.

Observation and Experience

How can you gather information through your own observation and experience? Where would you go? What would you do there? How would you keep track of what you find out?

Next Step: Share your ideas. Make a plan for gathering information using the four categories. If you are working in small groups, each group may want to involve people in other groups. For example, everyone could help conduct the survey and collect the results. Compile the information you learn into a list of community needs.

Interview with _____

In groups, develop questions based on the interviewee's resume and the information you hope to learn. Each group prepares a different category of questions; several categories are provided and others may be added as is relevant for this interviewee. Review questions with the class for feedback. Decide how the interview will be conducted.

Questions

- Career Path
- Education
- Everyday Work Responsibilities
-
-

Interview Procedure

Who will do what?

Greet guest

Introduce guest

Explain the purpose to the guest

Facilitate interview

Keep time

Thank the guest

Escort from class

Write thank you letter



An Interview with...

INVESTIGATE

Interview with _____

Write your category and questions for this interview.

Key words	Notes
Summary	

Most products we use to clean our homes and ourselves go down the drain and become graywater. Local water processing plants remove and safely dispose of some of these substances; others end up back in local water systems. Use this chart to identify the various products going down your drain and the following pages to identify and research the chemicals they contain.

What is going down your drain?

Identify three products in each of these areas of your home and complete the chart.

Location in Home	Product Type/Brand	Warnings on Label	Active Ingredients
kitchen			
bathroom			
laundry			

What's on you?

When you take a bath or shower, every personal care product you've used washes off and, you guessed it, goes down the drain. What exactly are you putting on your skin, hair, and nails? Pick one product from your daily routine. List the ingredients below, and consult the Environmental Working Group's Safe Cosmetics Database at www.cosmeticsdatabase.com for the scoop on any health concerns related to these ingredients. Take notes and decide whether you are comfortable continuing to use this product or, if applicable, if you will try a less toxic alternative.

Hotspot: Personal Care Product/Brand:

Ingredients	Notes
	soap shampoo conditioner hair gel/spray hair colorant acne cream deodorant makeup remover moisturizer sunblock bug spray nail polish nail polish remover lip balm exfoliant masque perfume lipstick eye shadow eyeliner mascara base blush shaving cream/ gel
<p>Do you plan to continue using this product? Are there any alternatives you would be willing to try? Why might you use these instead?</p>	

Form groups of four for your discussion of the interview with David Andrews, Jessica Assaf, and other information found throughout this guide, and from recommended resources such as *The Story of Cosmetics* video.

Assign each person in the group one of the four "connector" roles below. Each connector's job is to lead a portion of their group discussion about the content from a specific point of view. He or she asks the questions listed (along with others that come to mind) and encourages group members to respond. Each person leads his/her share of the conversation for four minutes, allowing approximately one minute for each person to answer, and one minute for the connector to answer as well. Write notes and ideas on the Discussion Circle on page 35.

To begin, review these tips for effective group discussions:

- Use active listening skills.
- Ask questions.
- Take turns speaking.
- Welcome all comments.

PERSONAL CONNECTOR

Ask questions that connect the content to group members' experiences, such as:

1. What does this information have to do with you or others you know?
2. Are you reminded of any information you knew already or ideas or situations you have heard about before?
3. How have you or people you know resolved similar situations?

WATER CONNECTOR

Ask questions that connect this content to other information you know about water quality, such as:

1. What new ideas did you learn about water quality?
2. What situations described are you familiar with from personal experience?
3. What additional questions do you now have about water quality?

SERVICE CONNECTOR

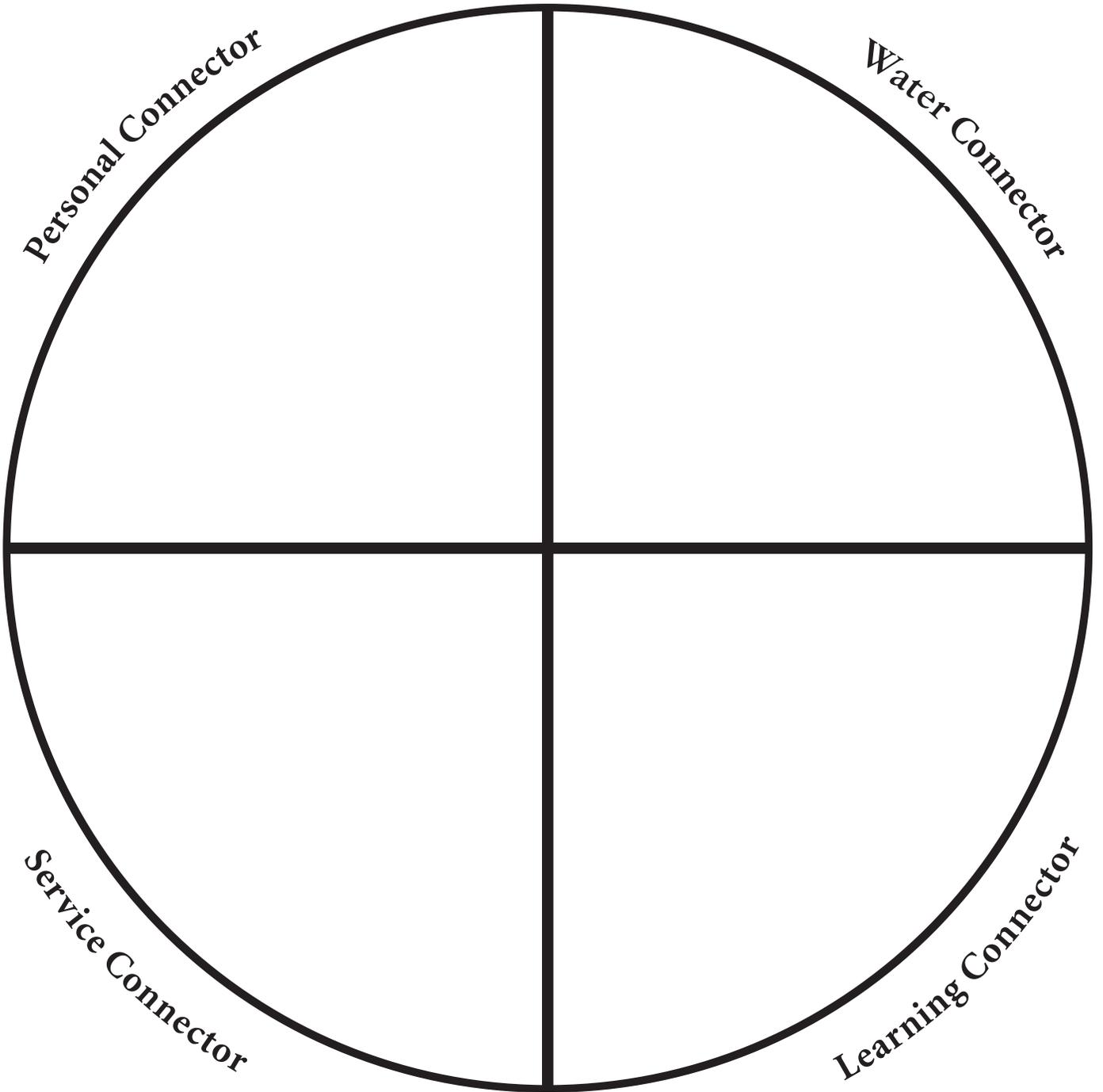
Ask questions that connect this content to ideas for service plans, such as:

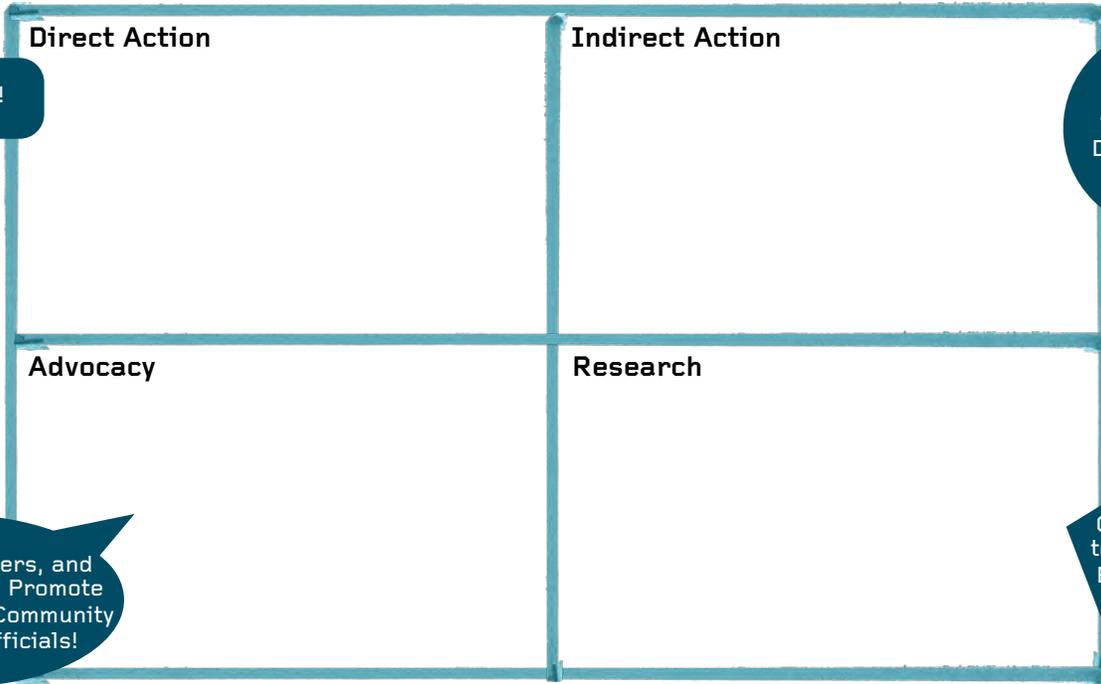
1. What needs to be fixed in the situations described?
2. Did any noteworthy, helpful action take place in what you have read?
3. What service ideas did you think of when you read this?

LEARNING CONNECTOR

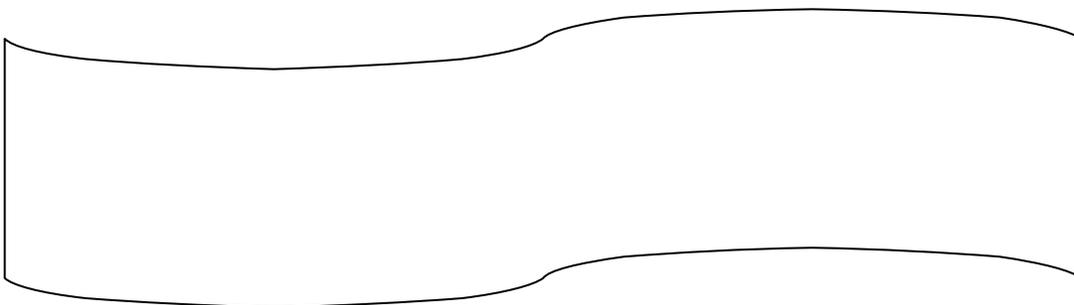
Ask questions that connect this content to learning opportunities, such as:

1. What would you like to learn more about as a result of this content?
2. What related topics have you learned about or experienced in school?
3. What do you think people your age would learn from reading this?





Who...	Will do what...	By when...	Supported by...



Create Your Main Message on this Banner that Sells Your Ideas. Be Memorable!



Service Learning Proposal

ACT

Students or class:

Teacher: _____

School: _____

Address: _____

Phone: _____ Fax: _____ Email: _____

Project name: _____

Need—Why this plan is needed:

Purpose—How this plan will help:

Participation—Who will help and what they will do:

Students:

Teachers:

Other adults:

Organizations or groups:

Outcomes—What we expect to happen as a result of our work:

How we will check outcomes—What evidence we will collect and how we will use it:

Resources—What we need to get the job done, such as supplies (itemize on back):

Signatures:



What progress monitoring methods will you use?

- Observation
- Data Collection
- Interviews
- Surveys

Other Methods:

-
-
-

Date _____

Step One: Establish your baseline—what is the need?

Date _____

Step Two: What noticeable changes have been made?

Date _____

Step Three: What other changes have taken place?

Date _____

Step Four: Describe evidence of your progress.

Date _____

Step Five: Provide a summary of your findings.



Four Square Reflection Tool

REFLECT

<p>What happened?</p>	<p>How do I feel?</p>
<p>Ideas?</p>	<p>Questions?</p>

Adapted from *The Complete Guide to Service Learning: Proven, Practical Ways to Engage Students in Civic Responsibility, Academic Curriculum, & Social Action (Revised & Updated Second Edition)* by Cathryn Berger Kaye, M.A., © 2010. Used with permission of Free Spirit Publishing Inc., Minneapolis, MN: 800-735-7323; www.freespirit.com. All rights reserved.

Create Your Message:

Imagine you step into an elevator and the president of your country is there and says, "What's on your mind?" At most you have a few elevator stops before the conversation is over. What will you say? That's your ELEVATOR SPEECH! Have your elevator speech ready.

- Know your key points—what you care about, what needs to happen, what you will do, and what others can do.
- Use short sentences that convey vivid images.
- Make solid eye contact.
- Mean what you say and say what you mean.

Philippe Cousteau's Water Quality Elevator Speech

1st floor: Did you know that water quality is an issue that presents itself through many of our everyday activities?

2nd floor: Keeping water clean needs to be a priority at home, at school, and at work technologies.

3rd floor: Youth are learning about water quality and developing strategies for their homes and schools.

4th floor: Our nonprofit, EarthEcho International, produced Action Guides: Out the Spout and Down the Drain.

5th floor: This is part of our Water Planet Challenge, empowering teens as environmental stewards.

6th floor: Youth are actively reducing the amount of pollutants that enter our water systems on a daily basis.

7th floor: Are you ready to help? Here's what you can do.

(Hint: Always have an idea about how the person you're talking to can get involved.)

Telling Your Story

If you want people to listen to what you have to say and remember the important points, tell a story.

Think of your water quality ideas and activities as a great story waiting to be told.

Here is a quick guide to telling memorable stories:

Opening: Paint a picture with words: *When most of the students had poured out the front door at the end of school, our Defend the Drain team met with the school faculty to discuss what was being poured down our school sinks!* Always remember to show the images you want them to remember.

Background: Provide the basic overview and context of the story you want to tell. Be sure to mention that what you have done is part of the Water Planet Challenge.

Create Interest: This is part of your story that holds your audience's attention. Compelling facts, human interest anecdotes (including comments), and surprising statistics capture the reader. These make your story compelling and memorable.

Resolution: Every story has a strong ending. Let people know what they can do and how they can become involved. Create relevance by moving the reader toward taking action.

Communicating important messages:

- Keep your story simple.
- Be authentic.
- Make the information relevant.
- Vary the length of your sentences.

Read your story aloud. Make sure this is your voice, your story, your message.

For More Information

The Bookshelf

Flush by Carl Hiaasen (Knopf, 2007). Noah's father was so sure the floating casino was dumping sewage into the open water that he sank the boat and landed in jail. Now, if Noah and his younger sister can prove this dumping is still going on, his dad will be vindicated and the casino will be put out of business. Hazardous waste, a mystery man, and food coloring all add up to a raucous adventure.

Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands

by Cathryn Berger Kaye with Philippe Cousteau and EarthEcho International (Free Spirit Publishing, 2010) engages readers in exploring the interconnectedness of all our natural resources.

Not a Drop to Drink: Water for a Thirsty World by Michael Burgan (National Geographic, 2008). With timelines, photographs, charts, and a glossary, this book presents the need for clean, accessible water. Includes science, history, global awareness, and innovative ideas.

Protecting Earth's Water Supply by Ron Fridell (Lerner Publications, 2008). Unless we are more cautious about our water supply, our planet is at risk. Read about innovative ideas, including one from a ten-year-old from Aluva, India, who developed her own rainwater harvesting system to help local farmers.

More Service-Learning Resources

Interested in more resources about service-learning? At www.WaterPlanetChallenge.org you can see a series of videos that reviews the Five Stages of Service-Learning. There are several books that can also be helpful, all written by Cathryn Berger Kaye and available through Free Spirit Publishing (www.freespirit.com), including:

- ***The Complete Guide to Service Learning: Proven, Practical Ways to Engage Students in Civic Responsibility, Academic Curriculum & Social Action***, Second Edition (Free Spirit Publishing, March 2010)
- ***Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands*** written with Philippe Cousteau and EarthEcho International (Free Spirit Publishing, July 2010)
- ***A Kids Guide to Climate Change and Global Warming: How to Take Action*** (Free Spirit Publishing, March 2009)

ABOUT THE PARTNERS

EarthEcho International

EarthEcho International is a nonprofit 501c3 organization founded by siblings Philippe and Alexandra Cousteau in honor of their father Philippe Cousteau Sr., famous son of the legendary explorer Jacques Yves Cousteau. EarthEcho International's mission is to empower youth to take action that protects and restores our water planet. EarthEcho's Water Planet Challenge is a national call-to-action that equips educators and students with interactive tools and resources to bring about positive environmental change in their communities through water-focused projects.

ABOUT THE AUTHOR

Cathryn Berger Kaye, M.A., a former classroom teacher, is president of CBK Associates, International Education Consultants. She is the author of *The Complete Guide to Service Learning* and an interactive workbook series with Free Spirit Publishing, *Service Learning for Kids: How to Take Action*. Her book *Going Blue: A Teen Guide to Saving Our Oceans, Lakes, Rivers, & Wetlands* written with Philippe Cousteau and EarthEcho International is a further commitment of her dedication to caring for our planet. Known for highly engaging workshops and keynote addresses, Cathryn promotes educational experiences which inspire student engagement, social and emotional development, and academic success through service-learning. She works within K-12 settings, and with university faculty and youth service organizations—both in the United States and abroad.