

INVISIBLE
WATER
GROUP
PRESENTATION
NCSU
08

INVISIBLE
WATER
GROUP
POSITION
NCSU
08
A DAY IN
THE LIFE
WITH WATER



Water Project: Brainstorm: Initial Timeline 10/27/08

it's raining outside

brushes teeth

showers

shaves

goes to bathroom

puts on cloth

drinks water

preps fresh food

eats processed food

makes coffee

washes dishes
by hand

feeds & water
dog and cat

drives to work

replaces radiator
fluid

uses wet naps

takes medication
with water

uses wiper fluid

gets gas

stops for Starbucks

turns on heat
at work

uses computer

work facility uses
energy

landscaping at
office park

bathroom br

goes out for lunch
(sit-down)

eats food that's
been prepped

restaurant dishes/
glassware

gets soup to go in
styrafoam container

gets a Locopop

makes tea at
studio

uses windex to
clean desk

prints 2000 copies
on printer

waters lucky
bamboo

bathroom break

orders books f
amazon.com

Water Project: Brainstorm: Category Organization 10/27/08

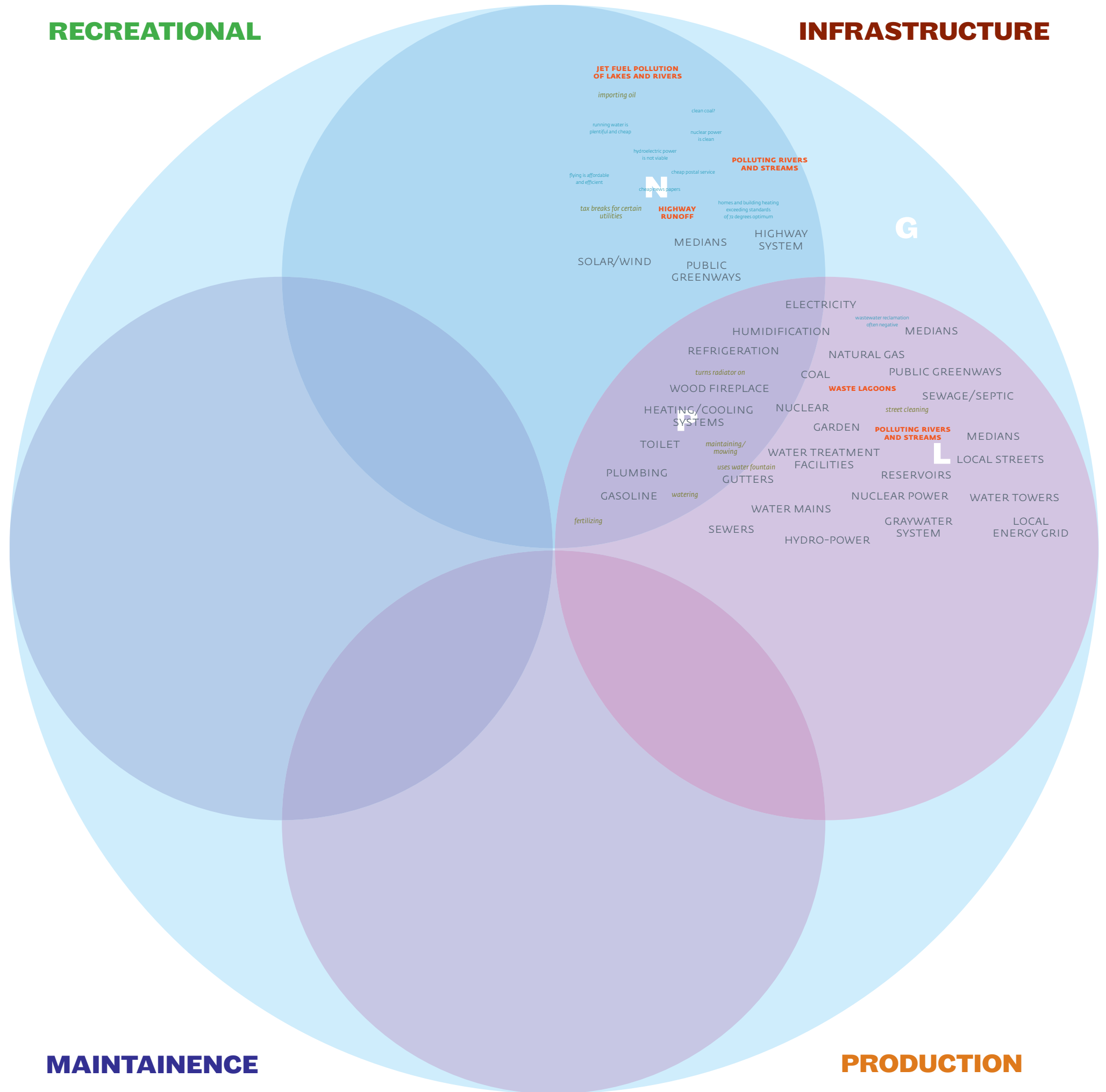
CLEANING (THINGS)	HYGIENE (BODY)	FOOD		PRODUCTS	NATURE/ NATURAL	TRANSPORTATION	RECREATION	INFRASTRUCTURE		INDUSTRY
washes dishes by hand	brushes teeth	drinks water	dinner at home	uses wet naps	it's raining outside	drives to work	volunteers at YMCA	turns on heat at work	custodial needs of store	gets soup to go in styrafoam container
uses windex to clean desk	showers	preps fresh food	steams veggies	takes medication with water	waters lucky bamboo	replaces radiator fluid	runs on treadmill at YMCA	work facility uses energy	store uses energy	prints 2000 copies on printer
runs through car wash	shaves	eats processed food	feeds & waters dog and cats	uses wiper fluid	pool is filled from local reservoir	drives home	takes dog for walk at local park	landscaping at office park	goes to pub for drink	throws away disposable coffee cups
does chores at home	goes to bathroom	makes coffee	buys bag of ice	uses computer	composts scraps	car gets oil leak	has sex at home	restaurant dishes/ glassware	glassware at pub	recycles plastic bottles
uses cleaning products	bathroom break	stops for Starbucks	has stout from micro-brewery	puts on jammies	checks gray water collection system	buys emergency water for car	works out	chemicals used to clean the pool	towels at YMCA are cleaned	picks up dog poo with plastic bag
uses laundry machines	showers before teaching pool class	goes out for lunch (sit-down)	buys bottled water	puts on clothing	waters plants/ lawn	car maintenance	stops for pedicure on way home	goes to grocery store	turns heat on	reads newspaper
uses dishwasher	uses wash rag	eats food that's been prepped	uses water fountain	uses make-up/ hygiene products	local/organic agriculture	transportation of food to store		veggies are given periodic shower	refridgeration system in store	gets gas
takes out contacts	brushes teeth	gets a Locopop	buys beer	changes sheets on bed				food areas (butcher/ bakery/etc.)		orders books from amazon.com
mops floors	washes face	makes tea at studio	drinks gatorade	uses personal lubrication product						mails a letter to mom
uses steamer to clean bathroom	bathroom break	feeds & waters pets								fertilizes/waters garden
uses iron/vacuum/ (small appliances)	takes shower after working out									packaging of food and products
	brushes teeth									paper/plastic bags
	bubble foot bath									industrial agriculture
	showers with partner									

INVISIBLE
WATER
GROUP
PROCESS
NCSU
08
BUILDING
CONNECTIONS

CLEANING (THINGS)	HYGIENE (BODY)	FOOD		PRODUCTS	NATURE/ NATURAL	TRANSPORTATION
washes dishes by hand	brushes teeth	drinks water	dinner at home	uses wet naps	it's raining outside	drives to work
uses windex to clean desk	showers	preps fresh food	steams veggies	takes medication with water	waters lucky bamboo	replaces radiator fluid
drives through car wash	shaves	eats processed food	feeds & waters dog and cats	uses wiper fluid	pool is filled from local reservoir	drives home
does chores at home	goes to bathroom	makes coffee	buys bag of ice	uses computer	composts scraps	car gets oil
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uses laundry machines	showers before teaching pool class	goes out for lunch (sit-down)	buys bottled water	puts on clothing	waters plants/ lawn	car maintenance
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changes out contacts	brushes teeth	gets a Locopop	buys beer	changes sheets on bed		
mops floors	washes face	makes tea at	drinks 7-11	uses personal		

RECREATIONAL

INFRASTRUCTURE



MAINTAINENCE

PRODUCTION

INFRASTRUCTURE

It takes a great amount of water to produce enough electricity to meet our society's needs.

Shearon Harris uses 33 million gallons of water a day. The entire City of Durham uses about 28 million gallons a day.

Leaving a 60w bulb on for 12 hours uses as much as 60 liters of water.

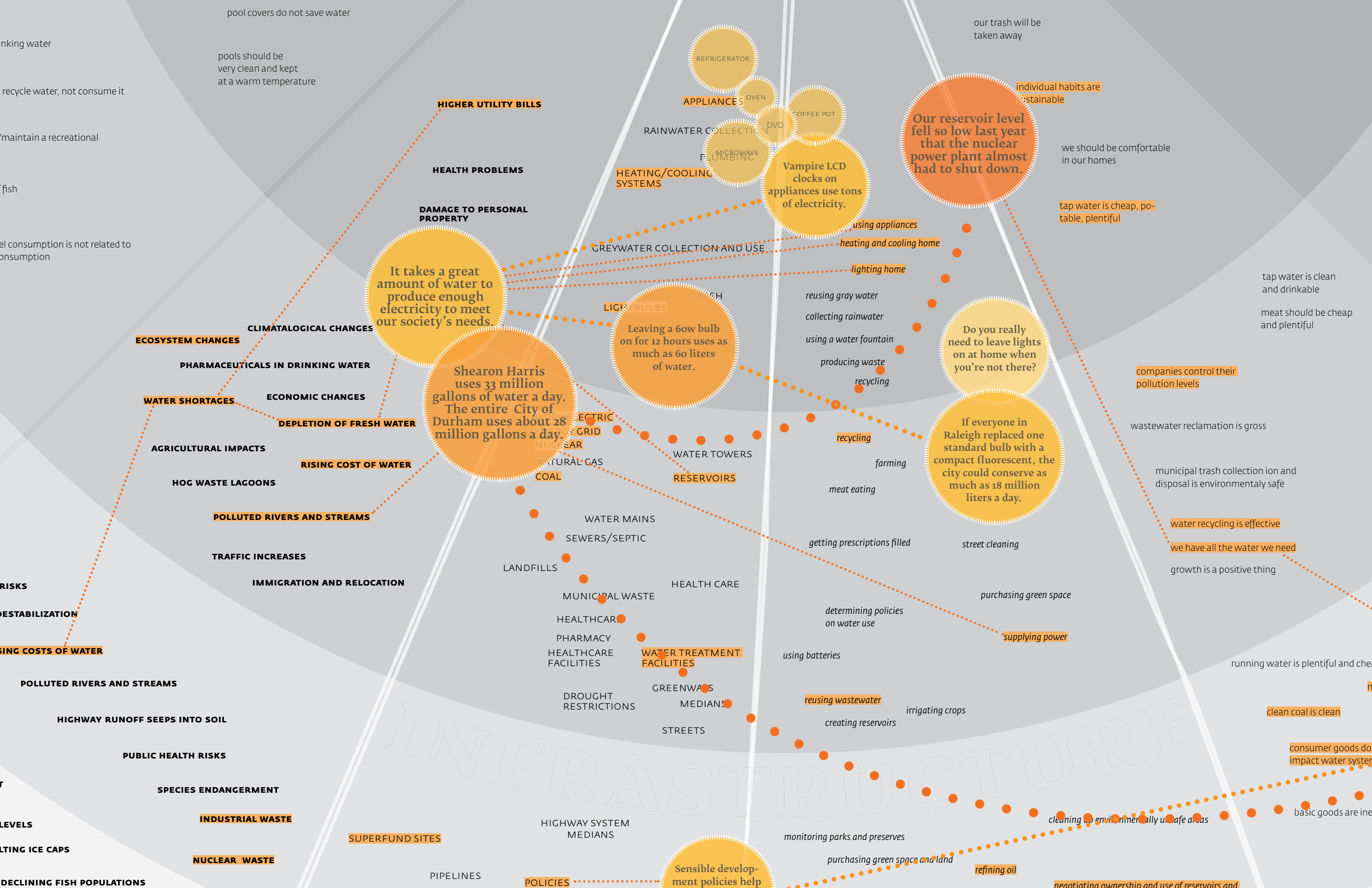
Vampire LCD clocks on appliances use tons of electricity.

Our reservoir level fell so low last year that the nuclear power plant almost had to shut down.

Do you really need to leave lights on at home when you're not there?

If everyone in Raleigh replaced one standard bulb with a compact fluorescent, the city could conserve as much as 18 million liters a day.

Sensible development policies help conserve both water and land.

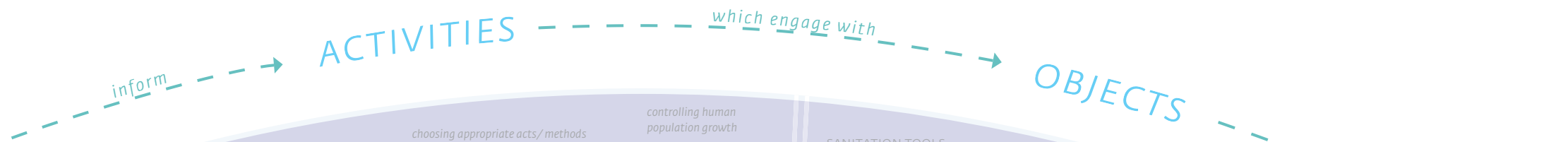


GLOBAL

NATIONAL

LOCAL

PERSONAL



global warming will not effect the current generation

there is an expectation of freedom to: use, enjoy, profit from, own and waste water

there is enough water for the entire human population

AND

SO WE FREELY USE WATER FOR THE

domestic maintenance of our home: washing, cleaning, upkeep of house plants, lawns and gardens, watering animals

PRODUCTS FOR THE MAINTENANCE OF LIFESTYLE HOME SIZE, TYPES OF-BOTTLED WATER, FOODS, HYGIENE PRODUCTS

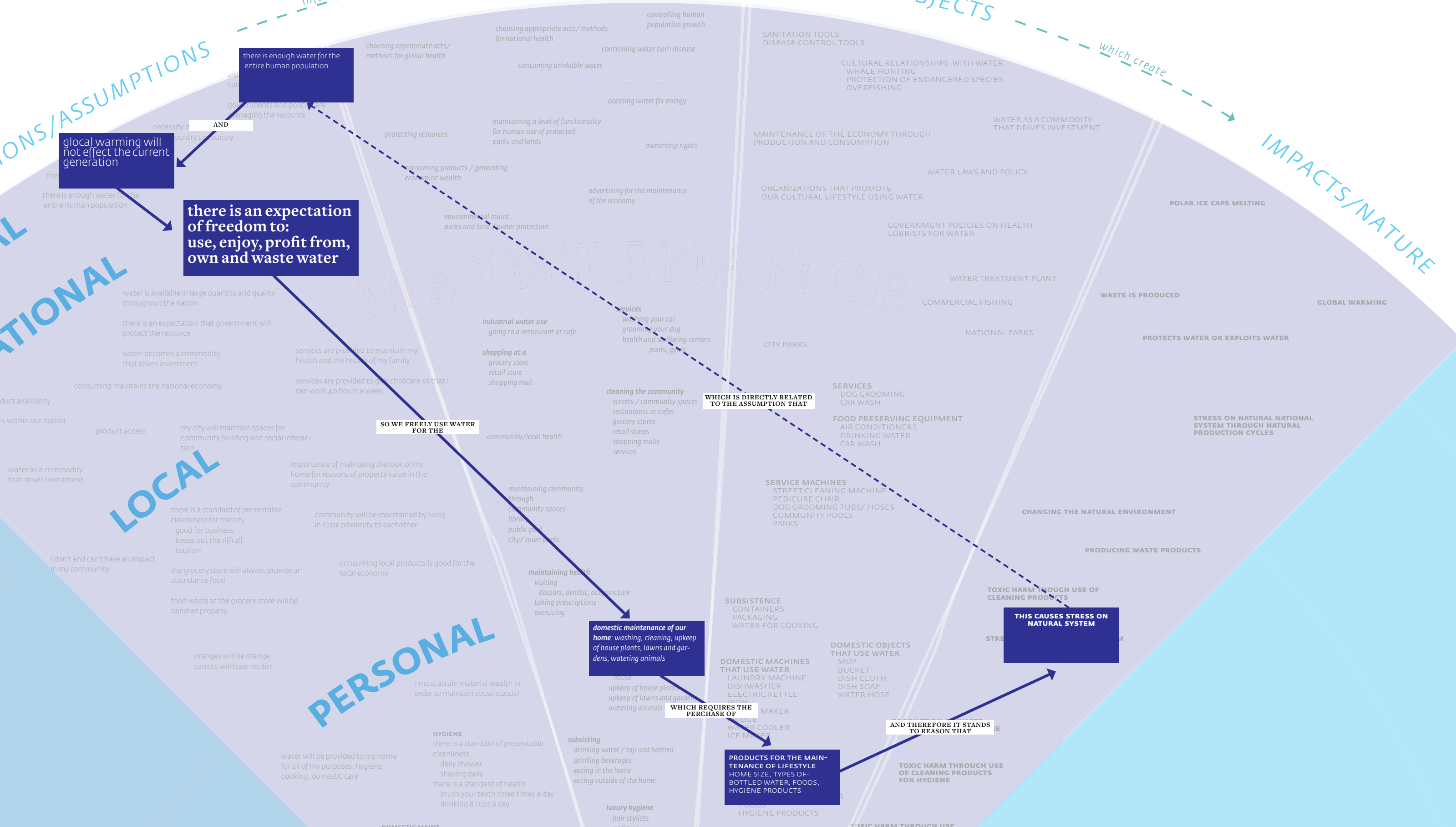
THIS CAUSES STRESS ON NATURAL SYSTEM

MAINTENANCE

WHICH IS DIRECTLY RELATED TO THE ASSUMPTION THAT

WHICH REQUIRES THE PURCHASE OF

AND THEREFORE IT STANDS TO REASON THAT



controlling human population growth
controlling water born disease
choosing appropriate acts/ methods for national health
consuming drinkable water
accessing water for energy
maintaining a level of functionality for human use of protected parks and lands
ownership rights
protecting resources
maintaining environmental maint. parks and land / water protection
consuming products / generating economic wealth
advertising for the maintenance of the economy
services washing your car grooming your dog health and wellbeing centers pools, gyms
industrial water use going to a restaurant or cafe
shopping at a grocery store retail store shopping mall
cleaning the community streets / community spaces restaurants or cafes grocery stores retail stores shopping malls services
community/local health
maintaining community through community spaces libraries public pool city/ town parks
maintaining health visiting doctors, dentist, acupuncture taking prescriptions exercising
HYGIENE there is a standard of presentable cleanliness daily shower shaving daily there is a standard of health brush your teeth three times a day drinking 8 cups a day
luxury hygiene hair stylists pedicure manicure
DOMESTIC MAINT. there is a standard of presentable cleanliness
water will be provided to my home for all of my purposes, hygiene, cooking, domestic care
substisting drinking water / tap and bottled drinking beverages eating in the home eating outside of the home
I must attain material wealth in order to maintain social status?
house upkeep of house plants upkeep of lawns and gardens watering animals
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HYGIENE OBJECTS
TOXIC HARM THROUGH USE OF CLEANING PRODUCTS

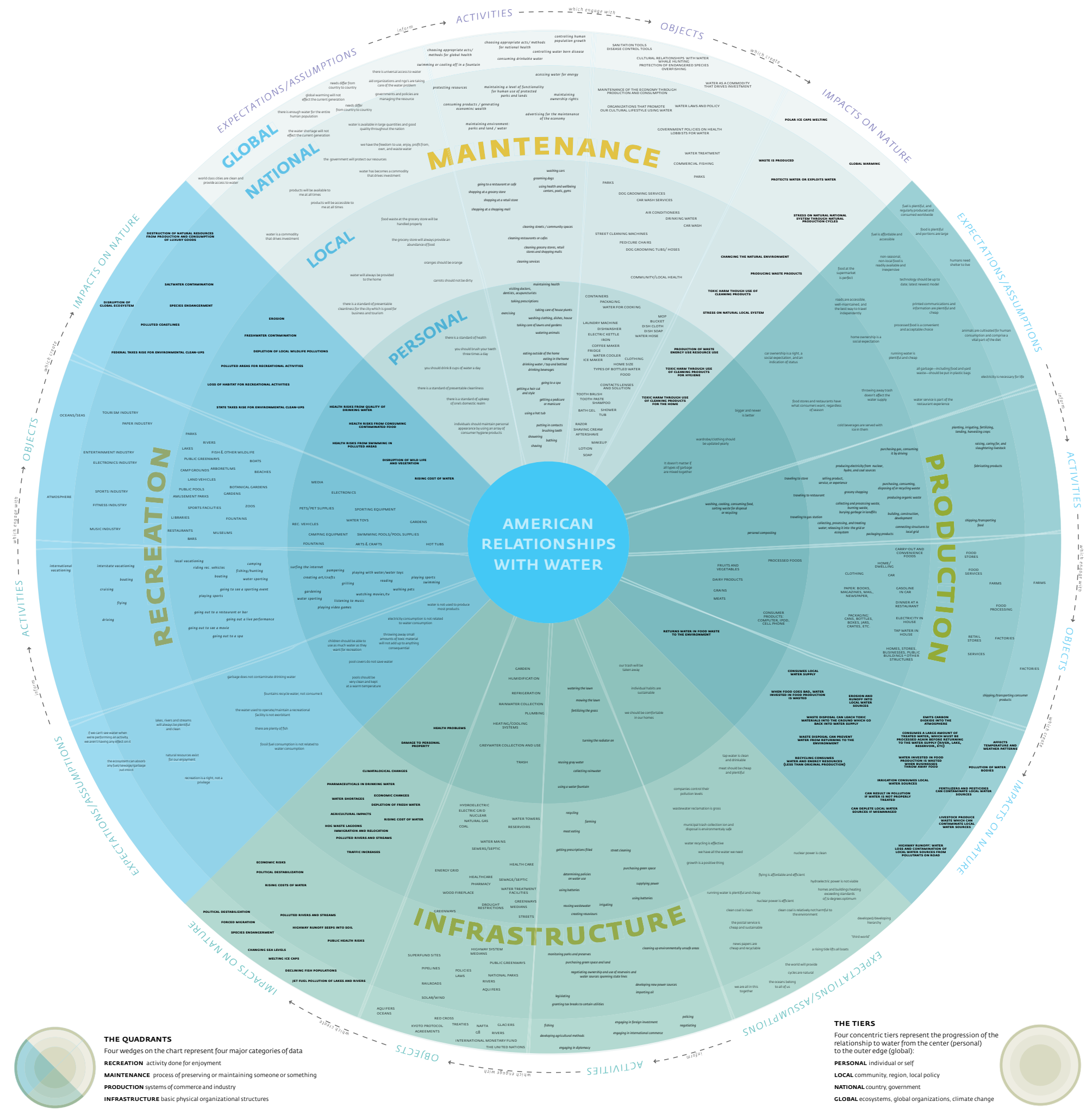
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SANITATION TOOLS DISEASE CONTROL TOOLS
CULTURAL RELATIONSHIPS WITH WATER WHALE HUNTING PROTECTION OF ENDANGERED SPECIES OVERFISHING
MAINTENANCE OF THE ECONOMY THROUGH PRODUCTION AND CONSUMPTION
WATER AS A COMMODITY THAT DRIVES INVESTMENT
ORGANIZATIONS THAT PROMOTE OUR CULTURAL LIFESTYLE USING WATER
WATER LAWS AND POLICY
GOVERNMENT POLICIES ON HEALTH LOBBISTS FOR WATER
WATER TREATMENT PLANT
COMMERCIAL FISHING
NATIONAL PARKS
CITY PARKS
SERVICE MACHINES STREET CLEANING MACHINE PEDICURE CHAIR DOG GROOMING TUBS/ HOSES COMMUNITY POOLS PARKS
SUBSISTENCE CONTAINERS PACKAGING WATER FOR COOKING
DOMESTIC MACHINES THAT USE WATER LAUNDRY MACHINE DISHWASHER ELECTRIC KETTLE TOASTER TOASTRIDGE WATER COOLER ICE MAKER
HYGIENE PRODUCTS
TOXIC HARM THROUGH USE OF CLEANING PRODUCTS

WASTE IS PRODUCED
GLOBAL WARMING
PROTECTS WATER OR EXPLOITS WATER
STRESS ON NATURAL NATIONAL SYSTEM THROUGH NATURAL PRODUCTION CYCLES
CHANGING THE NATURAL ENVIRONMENT
PRODUCING WASTE PRODUCTS
TOXIC HARM THROUGH USE OF CLEANING PRODUCTS
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TOXIC HARM THROUGH USE OF CLEANING PRODUCTS

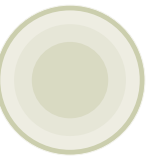
INVISIBLE WATER GROUP POSITION

NCSU 08 WATER MAP



THE QUADRANTS
 Four wedges on the chart represent four major categories of data
RECREATION activity done for enjoyment
MAINTENANCE process of preserving or maintaining someone or something
PRODUCTION systems of commerce and industry
INFRASTRUCTURE basic physical organizational structures

THE TIERS
 Four concentric tiers represent the progression of the relationship to water from the center (personal) to the outer edge (global):
PERSONAL individual or self
LOCAL community, region, local policy
NATIONAL country, government
GLOBAL ecosystems, global organizations, climate change



EXPECTATIONS/ASSUMPTIONS

GLOBAL

NATIONAL

LOCAL

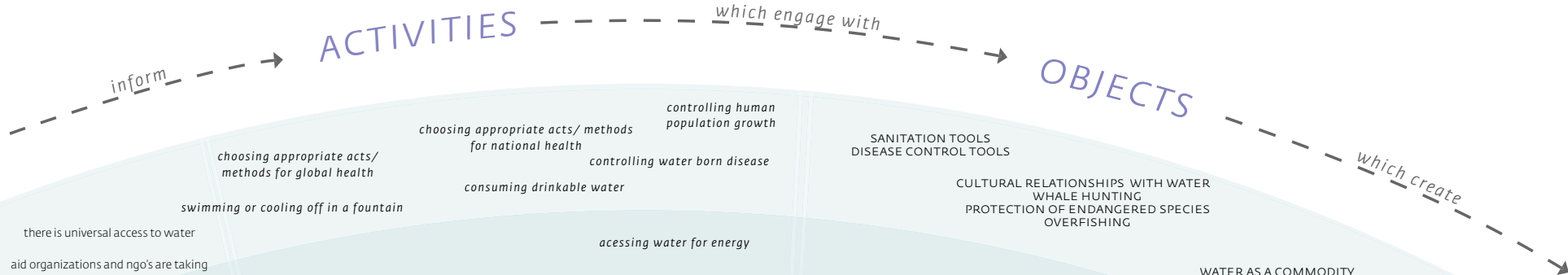
PERSONAL

MAINTENANCE

ACTIVITIES

OBJECTS

IMPACTS ON NATURE



DEPLETION OF NATURAL RESOURCES
OVERPRODUCTION AND CONSUMPTION
OF LUXURY GOODS

AIR AND WATER CONTAMINATION

SPECIES ENDANGERMENT

BOUNDARIES

ENVIRONMENTAL CLEAN-UPS

LOSS OF HABITAT FOR RECREATIONAL ACTIVITIES

STATE TAXES RISE FOR ENVIRONMENTAL CLEAN-UPS

PARKS
RIVERS
LAKES
FISH & OTHER WILDLIFE
PUBLIC GREENWAYS
BOATS

EROSION

FRESHWATER CONTAMINATION

DEPLETION OF LOCAL WILDLIFE POLLUTIONS

POLLUTED AREAS FOR RECREATIONAL ACTIVITIES

HEALTH RISKS FROM QUALITY OF DRINKING WATER

HEALTH RISKS FROM CONSUMING CONTAMINATED FOOD

HEALTH RISKS FROM SWIMMING IN POLLUTED AREAS

DISRUPTION OF WILD LIFE

controlling human population growth
controlling water born disease
choosing appropriate acts/ methods for national health
consuming drinkable water
swimming or cooling off in a fountain
there is universal access to water
aid organizations and ngo's are taking care of the water problem
governments and policies are managing the resource
needs differ from country to country
global warming will not effect the current generation
there is enough water for the entire human population
the water shortage will not effect the current generation
water is available in large quantities and good quality throughout the nation
we have the freedom to use, enjoy, profit from, own, and waste water
the government will protect our resources
water has become a commodity that drives investment
water is a commodity that drives investment
products will be available to me at all times
products will be accessible to me at all times
food waste at the grocery store will be handled properly
the grocery store will always provide an abundance of food
oranges should be orange
carrots should not be dirty
water will always be provided to the home
there is a standard of presentable cleanliness for the city which is good for business and tourism
there is a standard of health
you should brush your teeth three times a day
you should drink 8 cups of water a day
there is a standard of presentable cleanliness
there is a standard of upkeep of one's domestic realm
individuals should maintain personal appearance by using an array of consumer hygiene products

protecting resources
maintaining a level of functionality for human use of protected parks and lands
maintaining ownership rights
consuming products / generating economic wealth
maintaining environment: parks and land / water
advertising for the maintenance of the economy
washing cars
grooming dogs
using health and wellbeing centers, pools, gyms
going to a restaurant or cafe
shopping at a grocery store
shopping at a retail store
shopping at a shopping mall
cleaning streets / community spaces
cleaning restaurants or cafes
cleaning grocery stores, retail stores and shopping malls
cleaning services
maintaining health
visiting doctors, dentists, acupuncturists
taking prescriptions
exercising
taking care of house plants
washing clothing, dishes, house
taking care of lawns and gardens
watering animals
eating outside of the home
eating in the home
drinking water / tap and bottled drinking beverages
going to a spa
getting a hair cut and style
getting a pedicure or manicure
using a hot tub
putting in contacts
brushing teeth
showering
bathing
shaving

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SANITATION TOOLS
DISEASE CONTROL TOOLS
CULTURAL RELATIONSHIPS WITH WATER
WHALE HUNTING
PROTECTION OF ENDANGERED SPECIES
OVERFISHING
WATER AS A COMMODITY THAT DRIVES INVESTMENT
MAINTENANCE OF THE ECONOMY THROUGH PRODUCTION AND CONSUMPTION
ORGANIZATIONS THAT PROMOTE OUR CULTURAL LIFESTYLE USING WATER
WATER LAWS AND POLICY
GOVERNMENT POLICIES ON HEALTH LOBBISTS FOR WATER
WATER TREATMENT
COMMERCIAL FISHING
PARKS
DOG GROOMING SERVICES
CAR WASH SERVICES
AIR CONDITIONERS
DRINKING WATER
CAR WASH
STREET CLEANING MACHINES
PEDICURE CHAIRS
DOG GROOMING TUBS/ HOSES
COMMUNITY/LOCAL HEALTH

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CONTAINERS
PACKAGING
WATER FOR COOKING
LAUNDRY MACHINE
DISHWASHER
ELECTRIC KETTLE
IRON
COFFEE MAKER
FRIDGE
WATER COOLER
ICE MAKER
CLOTHING
HOME SIZE
TYPES OF BOTTLED WATER
FOOD
MOP
BUCKET
DISH CLOTH
DISH SOAP
WATER HOSE
CONTACTS LENSES AND SOLUTION
TOOTH BRUSH
TOOTH PASTE
SHAMPOO
BATH GEL
SHOWER TUB
RAZOR
SHAVING CREAM
AFTERSHAVE
MAKEUP
LOTION
SOAP

POLAR ICE CAPS MELTING

WASTE IS PRODUCED

GLOBAL WARMING

PROTECTS WATER OR EXPLOITS WATER

STRESS ON NATURAL NATIONAL SYSTEM THROUGH NATURAL PRODUCTION CYCLES

CHANGING THE NATURAL ENVIRONMENT

PRODUCING WASTE PRODUCTS

TOXIC HARM THROUGH USE OF CLEANING PRODUCTS

STRESS ON NATURAL LOCAL SYSTEM

PRODUCTION OF WASTE ENERGY USE RESOURCE USE

TOXIC HARM THROUGH USE OF CLEANING PRODUCTS FOR HYGIENE

TOXIC HARM THROUGH USE OF CLEANING PRODUCTS FOR THE HOME

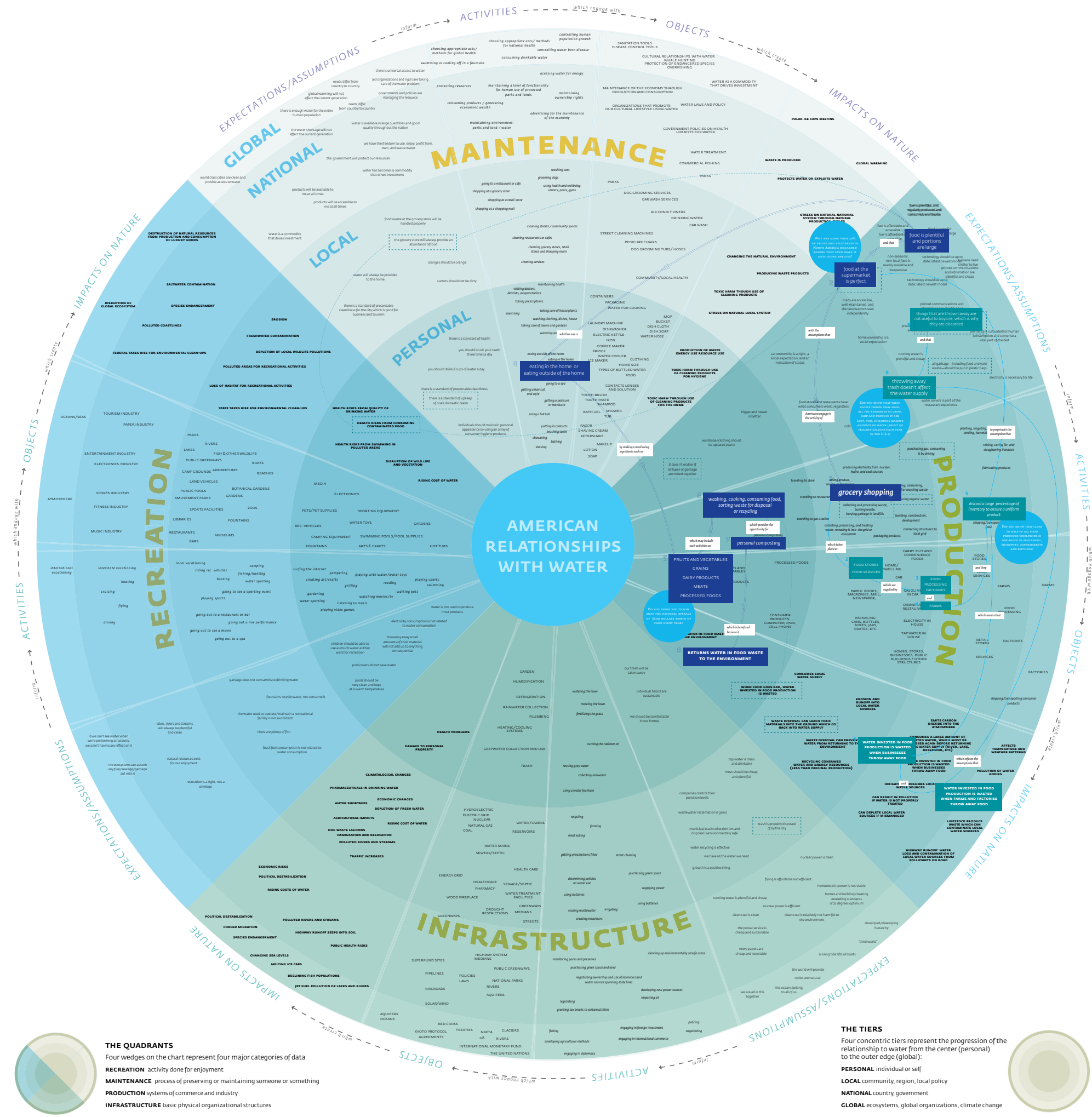
bigger and newer is better

wardrobe/clothing should be updated yearly

purchasing gas, consuming it by driving

INVISIBLE WATER GROUP POSITION

NCSU
08
LAYERS IDENTIFYING A FOCUS



THE QUADRANTS
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Most westernized cultures take water for granted, especially the water they cannot see. “Virtual Water” is the water invested in the production of goods and services; invisible water is the water we unknowingly consume. We can improve some of the systemic problems of our water supply by intervening in direct water relationships. However, we must also acknowledge that many activities which may not appear to impact our water system profoundly shape the quantity and quality of water available to us. Habits and systems of individual consumption, recreational activities, energy use and food production dramatically impact local, national, and global water systems. As designers, our task is to illuminate these hidden connections so that people become aware of their comprehensive water footprint, to raise consciousness of the true cost and value of water, and to ultimately reshape our relationships with our most vital resource.

Water resources are limited.

Many human activities require direct use of water.

Many more human activities require water indirectly.

Indirect water consumption often is invisible to us.

Therefore, many human activities require more water than we think.

By bringing indirect (or “invisible”) uses of water to light, we equip others to make more informed choices regarding water use.

Making more informed choices can help us conserve water.

Maintenance Quadrant

Shared Values for Shared Water

A look at how shared community spaces and resources can help conserve water.

Production Quadrant

Wasted Food is Wasted Water

A look at how the water used in the creation of food is wasted when food is wasted and disposed of improperly.

Infrastructure Quadrant

Using Energy Uses Water/Using Water Uses Energy

A look at how water is wasted when energy is wasted, and how conserving one can conserve the other.

Recreation Quadrant

See Our World, Save Our Water

A look at how travel and other recreational activities use water and ways to use less.

INVISIBLE
WATER
**WASTED
FOOD
IS
WASTED
WATER**

KIM
MURDOCH-KITT
NCSU
08

A huge percentage of the United States' water supply is consumed by the various levels of the agriculture industry, from the field to the fork. The amount of water it takes to make a product or food is called its 'virtual water' content.

Consumers are unaware of the connection between the foods and beverages they consume and the resources invested in them—including water. Changing our conventions of food consumption and food waste will have a great impact on water. “It is clear that moderating our diets especially in the developed world could make much water available for other purposes” (World Water Council).

Our goal is to change the experiential processes of purchasing food by introducing messages about the connection between food and water use and strategies to cultivate more conscientious consumers.

Virtual water is a concept that describes the amount of water invested in the production of consumer goods and services.

Agriculture accounts for the largest percentage of water use in America (and worldwide).

The food we eat (and discard) has a great deal of virtual water invested in it.

Making comparisons and choosing certain foods or brands with lower water investment reduces water waste.

Learning how to properly store food reduces food waste, which reduces water waste.

Learning how to plan meals reduces food waste, which reduces water waste.

	NOT READY TO KNOW	READY TO KNOW	READY TO HOLD AN OPINION	READY TO ACT	READY TO ADVOCATE	
CLARITY						
FOCUSING ON A QUESTION	When you throw away food, you not only waste the water contained in the food, but all of the water used to grow and transport it.				Talk to others about how far their food has traveled.	
ANALYZING ARGUMENTS	<p>Ready to Know</p> <p>How much virtual water am I consuming or wasting?</p>			Choosing wisely among competing products can help save water, because of the climates and farming methods where they are produced and distribution paths from field to store.		
ASKING QUESTIONS						How do you know how to store certain foods?
JUDGING CREDIBILITY						
OBSERVING				How does access to water affect a country's food supply? Do you think every country has the same access to water?	Americans use more water per capita than any other country in the world, and most of the water we use is invested in food production.	
INFERENCE						
DEDUCING AND JUDGING DEDUCTIONS			Do you know how much water it takes			
INDUCING			<p>Ready to Act</p> <p>How do I waste fewer food and water resources?</p>		Promote buying local foods as a way to conserve water resources.	
MAKING VALUE JUDGEMENTS						
ADVANCED CLARIFICATION						
DEFINING TERMS		There is a huge amount of water invested in all food production, and the amount associated with a given food item is called 'virtual water.'		Seasonal and regional differences affect water use. Do you know how much water farming consumes in your region compared to other places in the world?	Grocery stores waste water by discarding more than 30% of fruits and vegetables in North America before they even make it onto store shelves.	
IDENTIFYING ASSUMPTIONS					Do you know how long it takes for certain foods to spoil? What are acceptable ways to dispose of food waste?	
DECIDING ON ACTION				How can you conserve resources, including water, by buying only the food you need?	In order to save water, could you talk to the manager of your grocery store about considering ways to use products they would otherwise throw away?	
INTERACTING WITH OTHERS						
EMPLOYING FALLACY LABELS						

INVISIBLE
WATER
**WASTED
FOOD
IS
WASTED
WATER**
KIM
MURDOCH-KITT
NCSU
08
PROJECT
DIAGRAM

	STORE	(BOTH)	HOME
Virtual water is a concept that describes the amount of water invested in the production of consumer goods and services.	In-store signage: explaining virtual water and the new label and cart system	Brochure: the relationship between food and our water supply	Web site: more information to learn about virtual water and food.
Agriculture accounts for the largest percentage of water use in America (and worldwide).		Disposable grocery bags with a message about virtual water Reusable canvas grocery carrier bag: suggests actions	
The food we eat (and discard) has a great deal of virtual water invested in it. Making comparisons and choosing certain foods or brands with lower water investment reduces water waste.	Signage on shelves: reveals products' virtual water content Interactive shopping cart: tracks total cost and virtual water for the grocery order	Product label system	
Learning how to properly store food reduces food waste, which reduces water waste. Learning how to plan meals reduces food waste, which reduces water waste.	Establish customer service counter as a place to: - get more storage tips, - obtain advice about meal planning, recipes, and composting. - recycle food (grocery store as collection center for food banks)	Produce storage bags	Web site: a learning resource for how to use and store food.

INVISIBLE
WATER
**WASTED
FOOD
IS
WASTED
WATER**
KIM
MURDOCH-KITT
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08
GROCERY
SHOPPING
INTERVENTIONS



YOUR KITCHEN
IS LEAKING

WE'VE MADE SOME
CHANGES TO HELP
YOU SAVE \$600

SAVEFOODSAVEWATER.COM

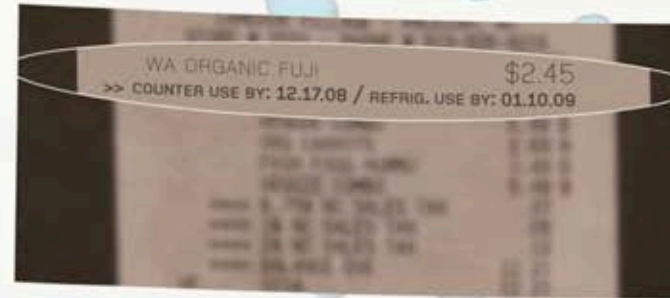


VIRTUAL WATER AND YOUR FOOD

We want to help you save money—and resources. We're introducing the first phase of a program to help you learn more about storing, preparing and using food, and the impact of your food choices. Here, you can read about the first changes we've made to help your money go further and your groceries last longer.

From produce to baked goods to beef, all foods require extensive amounts of water for their production. This is called its virtual water content. (There's a chart on the back panel to give you an idea of how much water it takes to produce certain foods.)

We need to consume food to live, but a large percentage of food is wasted between the places that produce it to the people who ultimately consume it. Throwing food away also wastes all of the resources invested in that food, including massive amounts of water.



INTERACTIVE GROCERY CART

SCAN YOUR GROCERIES AS YOU SHOP. KEEP TRACK OF YOUR RUNNING TOTAL. SPEED UP THE CHECKOUT PROCESS. PROVIDES DETAILED INFORMATION ABOUT FOOD PREPARATION AND STORAGE. IF YOU HAVE ANY QUESTIONS ABOUT USING THE NEW CART, PLEASE ASK A STORE EMPLOYEE FOR ASSISTANCE.

COMPREHENSIVE RECEIPTS

LISTS "FRESHNESS ESTIMATE" FOR PRODUCE PURCHASES. GIVE YOU AN IDEA OF HOW TO PLAN YOUR MEALS AND HOW LONG IT MIGHT LAST IF STORED WELL. POST IT ON YOUR FRIDGE TO REMEMBER WHAT YOU HAVE ON HAND AND WHEN YOU NEED TO USE IT; CHECK OFF ITEMS AS YOU USE THEM. YOU'LL ALSO SEE A TOTAL FOR THE GALLONS OF VIRTUAL WATER REPRESENTED IN YOUR GROCERY ORDER. WE'LL INTRODUCE INCENTIVES TO LOWER YOUR VIRTUAL WATER BILLS IN THE NEAR FUTURE.

PRODUCE STORAGE BAGS

NEW LABELING STANDARD FOR PRODUCE: COLORS OF THE FOOD LABELS COORDINATE WITH THE BAGS THAT ARE INTENDED TO BEST STORE THEM. NEW SYSTEM OF STORAGE BAGS IN THREE TYPES OF MATERIALS: AIRTIGHT PLASTIC, VENTILATED PLASTIC AND PAPER. THE PLASTIC BAGS ARE 100% COMPOSTABLE BIOPLASTIC. BAGS INCLUDE SOME STORAGE TIPS. SIGNS IN THE PRODUCE SECTION WITH MORE INFORMATION ON STORING PRODUCE.

NEW WAYS
TO HELP YOU

SAVE FOOD
SAVE MONEY
SAVE WATER

EVERY YEAR, THE AVERAGE AMERICAN HOUSEHOLD THROWS AWAY ABOUT \$600 WORTH OF FOOD. NATIONALLY, THIS ADDS UP TO OVER 150 TRILLION GALLONS OF WASTED WATER.

HOW MUCH WATER IS INVESTED IN DIFFERENT FOODS?

The examples below are global averages for the number of gallons of virtual water per single serving of the items below. (This varies depending on imports, local products, farming & production practices, etc.)

GALLONS OF VIRTUAL WATER	TO MAKE ONE
3	TOMATO
7	POTATO
9	TEA
10	SLICE OF BREAD
13	ORANGE
18	APPLE
20	GLASS OF BEER (8 OZ)
36	1 EGG
36	CHEESE (1 OZ.)
49	POTATO CHIPS (SINGLE SERVING BAG)
51	GLASS ORANGE JUICE (8 OZ)
57	GLASS OF APPLE JUICE (8 OZ)
60	MILK (8 OZ)
64	WINE (8 OZ)
74	COFFEE (8OZ.)
475	HAMBURGER PATTY (1/4 LB.)

REDEFINING OUR ROLE AS A GROCERY STORE

We're trying to do our part, too. Our Customer Service center is now your resource for meal planning, food storage, expiration dates, and recipe advice.

Most supermarkets discard about 30% of the produce in North America before it even reaches the shelf. We're making an effort to waste less by working with local schools, food banks, and shelters to put more of our food to good use. If you have sealed, packaged food you don't want or can't use (or are not sure if it is expired), bring it to your store's donation center.

GLOBAL IMPACT OF OUR FOOD USE

Our company is committed to making a difference because we realize that our choices have a major impact on the amount of water we consume as a country, and on global resources as well. The World Water Council's report on virtual water says "moderating our diets especially in the developed world could make much water available for other purposes."

Additionally, many water-scarce countries use their limited resources to create products they export for us to consume. You can learn more about the global water trade and how to reduce your use.

YOUR KITCHEN IS LEAKING

WE'VE MADE SOME CHANGES TO HELP YOU SAVE \$600

FRUITS AND VEGETABLES ARE THE MOST WATER-EFFICIENT FOODS; CONSUMING THEM IS GOOD FOR OUR PLANET AND RESOURCES. EFFECTIVE STORAGE MEANS EFFICIENT FOOD USE AND LESS WASTE. WHEN STORED EFFECTIVELY, PRODUCE STAYS FRESH LONGER, YOU HAVE MORE OPPORTUNITY TO EAT IT.

SAVEFOODSAVEWATER.COM



SCAN ITEM HERE





WA. ORGANIC FUJI APPLE

HOW MANY DO YOU NEED?
HIGH 1 2 3 4 5
MID 6 7
LOW

CART TOTAL
\$2.49
PER POUND



WA: ORGANIC FUJI (3)

HIGH
MID
LOW

COMPARE
VARIETIES

CART TOTAL
\$2.40
PER POUND

FOR THE CRISPER DRAWER OF YOUR REFRIGERATOR:
 Cucumbers
 Cabbage
 Creen beans
 Cauliflower
 Carrots
 Brussels sprouts
 Celery
 Root veggies (like beets)
 Yellow squash
 Zucchini squash

THEY WILL STAY FRESH LONGER IF STORED AWAY FROM:
 Apples
 Apricots
 Cantaloupes
 figs
 Honeydews
 Mushrooms

AIRTIGHT STORAGE
 SAVE FOOD, SAVE MONEY, SAVE WATER

SAVEFOODSAVEWATER.COM
 INVISIBLE WATER

FOR THE CRISPER DRAWER OF YOUR REFRIGERATOR:
 Apples
 Asparagus
 Broccoli
 Cauliflower
 Corn
 Fresh herbs
 Grapes
 Kiwi
 Greens (& lettuces)
 Peppers

THEY WILL STAY FRESH LONGER IF STORED AWAY FROM:
 Apricots
 Cantaloupes
 Figs
 Honeydews
 Mushrooms

VENTILATED STORAGE
 SAVE FOOD, SAVE MONEY, SAVE WATER

SAVEFOODSAVEWATER.COM
 INVISIBLE WATER

PAPER STORAGE
 SAVE FOOD, SAVE MONEY, SAVE WATER

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 INVISIBLE WATER

WRITE PLU # _____
 MARK WHAT'S INSIDE SO YOU REMEMBER AT HOME!

ROOM TEMP.	COUNTER TOP	REFRIGERATOR OR COUNTER TOP
<input type="checkbox"/> APPLES (check for water seal)	<input type="checkbox"/> HONEYDEWS	<input type="checkbox"/> PEACHES*
<input type="checkbox"/> APRICOTS*	<input type="checkbox"/> KIWI*	<input type="checkbox"/> PEARLS*
<input type="checkbox"/> CANTALOUPE	<input type="checkbox"/> EGGPLANT	<input type="checkbox"/> PLUMS*
<input type="checkbox"/> FIGS	<input type="checkbox"/> SWEET POTATOES	<input type="checkbox"/> TOMATOES
		<input type="checkbox"/> MUSHROOMS

COLD **REFRIGERATOR**

* See the instructions on the produce label for more information.
 * See the instructions on the produce label for more information.



**FOR THE CRISPER DRAWER
OF YOUR REFRIGERATOR:**

Cucumbers
Cabbage
Green beans
Cauliflower
Carrots
Brussels sprouts
Celery
Root veggies (like beets)
Yellow squash
Zucchini squash

**THEY WILL STAY FRESH
LONGER IF STORED AWAY FROM:**

Apples
Apricots
Cantaloupes
figs
Honeydews
Mushrooms

AIRTIGHT STORAGE

SAVE FOOD, SAVE MONEY, SAVE WATER

SAVEFOODSAVEWATER.COM

INVISIBLE
WATER

**FOR THE CRISPER DRAWER
OF YOUR REFRIGERATOR:**

Apples
Asparagus
Broccoli
Cauliflower
Corn
Fresh herbs
Grapes
Kiwi
Greens (& lettuces)
Peppers

**THEY WILL STAY FRESH
LONGER IF STORED**

AWAY FROM:

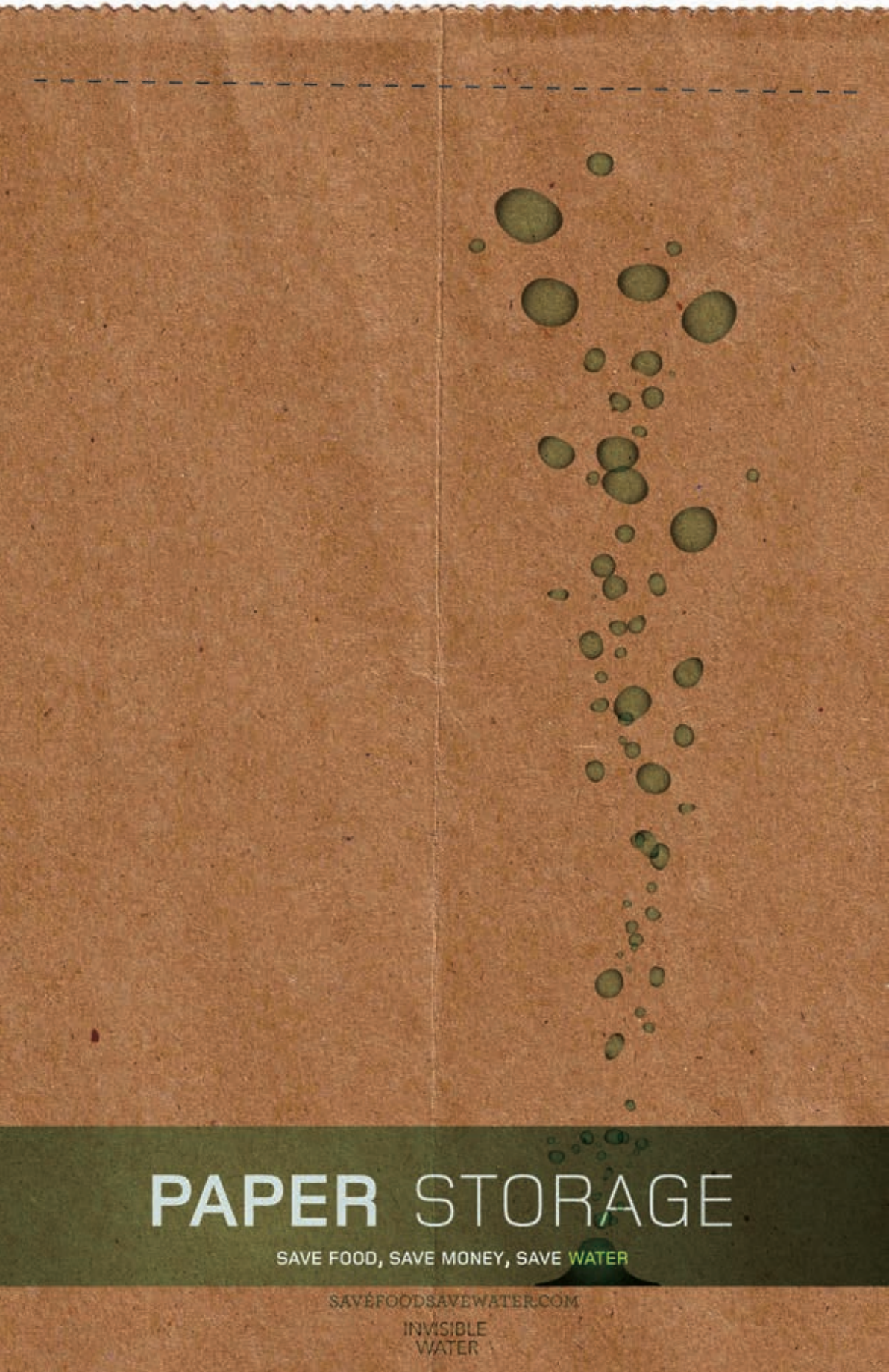
Apricots
Cantaloupes
Figs
Honeydews
Mushrooms

VENTILATED STORAGE

SAVE FOOD, SAVE MONEY, SAVE WATER

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INVISIBLE
WATER

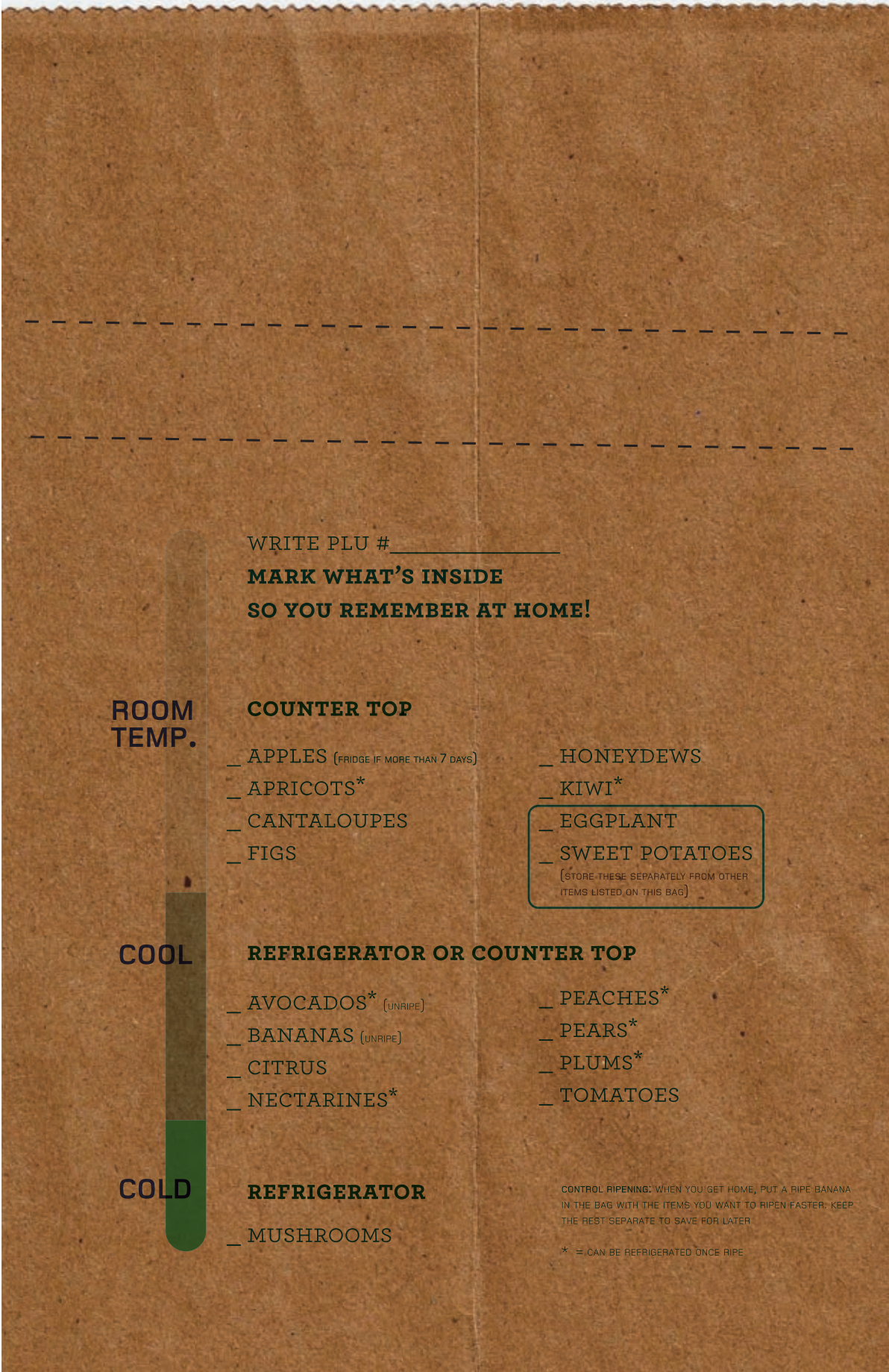


PAPER STORAGE

SAVE FOOD, SAVE MONEY, SAVE WATER

SAVEFOODSAVEWATER.COM

INVISIBLE WATER



WRITE PLU # _____

**MARK WHAT'S INSIDE
SO YOU REMEMBER AT HOME!**

**ROOM
TEMP.**

COUNTER TOP

- APPLES (FRIDGE IF MORE THAN 7 DAYS)
- APRICOTS*
- CANTALOUPE
- FIGS

- HONEYDEWS
- KIWI*

- EGGPLANT
- SWEET POTATOES
(STORE THESE SEPARATELY FROM OTHER
ITEMS LISTED ON THIS BAG)

COOL

REFRIGERATOR OR COUNTER TOP

- AVOCADOS* (UNRIPE)
- BANANAS (UNRIPE)
- CITRUS
- NECTARINES*

- PEACHES*
- PEARS*
- PLUMS*
- TOMATOES

COLD

REFRIGERATOR

- MUSHROOMS

CONTROL RIPENING: WHEN YOU GET HOME, PUT A RIPE BANANA
IN THE BAG WITH THE ITEMS YOU WANT TO RIPEN FASTER. KEEP
THE REST SEPARATE TO SAVE FOR LATER.

* = CAN BE REFRIGERATED ONCE RIPE



WHAT YOU CAN DO TO SAVE WATER:

COOK AT HOME WITH FRESH INGREDIENTS: it's the most water-efficient way to eat

PLAN YOUR MEALS: buy only what you need, when you need it

LEARN HOW TO STORE FOOD: it will last longer and stay fresher

BUY LOCAL AND NATIVE PRODUCTS: they consume fewer resources

EAT MORE FRUITS AND VEGETABLES: they have the lowest virtual water content

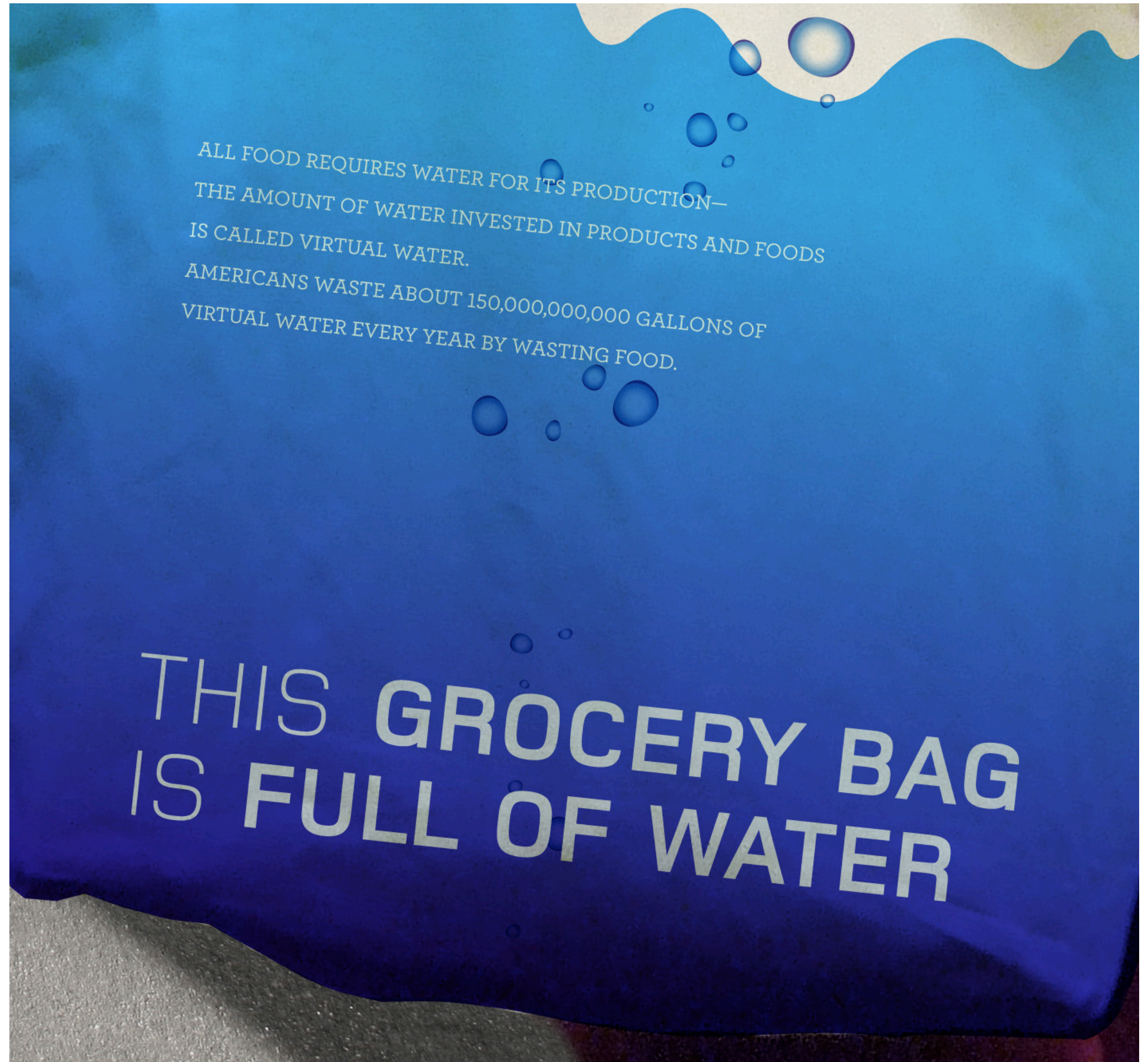
EAT LESS MEAT, DAIRY, AND PROCESSED FOODS: they have the highest virtual water content

CUT DOWN ON COFFEE: it's the most water-intensive crop

GO ORGANIC: reduce the amount of pesticides entering our water supply

COMPOST PRODUCE WASTE: return water and nutrients to the environment, not the landfill

SAVE FOOD, SAVE MONEY, SAVE WATER



INVISIBLE
WATER
**SEE
OUR
WORLD
SAVE
OUR
WATER**
FUGOLO
ZAHABI
NCSU
08

Recreation and travel have an invisible impact on water consumption and quality. Because of the invisible nature of this impact, people engage in these activities without ever thinking about how they are effecting this important natural resource.

INVISIBLE
WATER
**SEE
OUR
WORLD
SAVE
OUR
WATER**
FUGOLO
ZAHABI
NCSU
08
PAIR
TOPIC
STATEMENT

INVISIBLE
WATER
**SEE
OUR
WORLD
SAVE
OUR
WATER**
FUGOLO
ZAHABI
NCSU
08
PAIR
ARGUMENT

Water is the most important natural resource on Earth.

Recreation (including travel) is an important human activity.

Many recreation and travel activities use resources that are linked to water.

The excessive use of resources is often invisible.

People need to know how their choices impact water use and quality.

	NOT READY TO KNOW	READY TO KNOW	READY TO HOLD AN OPINION	READY TO ACT	READY TO ADVOCATE
CLARITY					
FOCUSING ON A QUESTION	<p>What do travel and recreation have to do with water?</p> <p>Reusing your hotel sheets and towels for more than one night could reduce your bill at the end of your stay.</p>	<p>How am I contributing to the water problem?</p> <p>A round of golf consumes 2200–3500 gallons of water to support the game in some locations.</p>	<p>What can be done to improve the situation?</p> <p>On a per capita basis, tourists demand more water than the local residents of their chosen destination. For example, it has been estimated that tourists on Barbados use 6–10 times more water than locals.</p> <p>There are many changes hotels can make to conserve water. The use of low-flow shower heads, faucets and toilets, along with encouraging guests to reuse their linens can save gallons of water per room, per day.</p> <p>Attempting to mirror the idea of the AAA star and diamond ratings, the ECOTEL Certification was created in 1993 to recognize hotels and resorts that engage in environmental responsibility. More than 50 hotels have earned the award.</p>	<p>What am I willing to do to help the situation?</p> <p>Wanting to capitalize on rich natural and cultural attractions, many developing countries have rushed to create artificial tourism environments (i.e., western style hotels and restaurants). This has a very positive impact on the local economy, but a very negative impact on the environment and water supply.</p>	
ANALYZING ARGUMENTS					
ASKING QUESTIONS					
JUDGING CREDIBILITY					
OBSERVING					
INFERENCE					
DEDUCING AND JUDGING DEDUCTIONS		<p>Each year, up to 5,000 hectares of the Earth's land surface—an area half the size of Paris—are cleared for golf courses. One 18-hole course can consume more than 608,000 gallons of water daily. One popular course on an island in Malaysia uses as much water annually as a local village of 20,000.</p>		<p>Once tourists arrive at their destinations, their choices of where to sleep, eat, shop and be entertained increasingly come at the expense of the environment and the water supply. And tourists who travel to destinations already at risk for severe water shortages and with water quality issues are exacerbating the problem.</p>	
INDUCING					
MAKING VALUE JUDGEMENTS					
ADVANCED CLARIFICATION					
DEFINING TERMS				<p>There are several certification programs on the internet that rate hotels and resorts around the world according to how responsible their water practices are. Choosing to stay at one of these certified accommodations can greatly reduce your impact on water.</p> <p>Researching your chosen destination before you book is crucial to finding out whether the locality has water problems, and what steps you can take to minimize your impact.</p>	
IDENTIFYING ASSUMPTIONS					
DECIDING ON ACTION					
INTERACTING WITH OTHERS					
EMPLOYING FALLACY LABELS					

OUR CAMPAIGN

Not Ready To Know

- Website and TV ads on travel and recreation channels
- Print ads in travel and recreation magazines

Ready To Know

- Website quiz
- Links to “Hydro-friendly Program”

Ready To Hold An Opinion

- “Hydro-friendly Program” website

Ready To Act On An Opinion

- Reviews on the “Hydro-friendly Program” website
- Blog guides on the “Hydro-friendly Program” website

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WATER
SEE
OUR
WORLD
SAVE
OUR
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 Flight + Car
 Flight + Hotel + Car
 Hotel + Car

Trip Information:
 Roundtrip One way Multiple destinations
 My dates are flexible (popular US routes only)

Leaving from: Going to:

Departing: Time: Returning: Time:

Adults (19-64): Seniors (65+): Children (0-18):

Additional options:
[Airline, first or business class, nonstop only](#)

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what impact will your trip have on water?
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WORLD
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ONLINE
QUIZ

see our world **travelight** save our water

Travelight is a tool that gauges your impact on local and global water systems. To use it, just enter your city and answer Travelight's questions. With each answer, it will calculate your water impact score. A low score (1-100) signifies that you have made water responsible traveling decisions. A high score (200-300+) signifies that there are opportunities to improve your travel habits.

Water is the most important natural resource we have, and together we can make sure that it will be enjoyed for generations to come!

You can learn more about water and the global water crisis at globalwatercrisis.com

INVISIBLE
WATER
**USING
ENERGY
USES
WATER**

/

**USING
WATER
USES
ENERGY**

HANCOCK
RUEHLMAN
NCSU
08

Water resources are limited.

It takes water to produce energy.

It takes energy to source, treat, distribute and heat water.

Our needs for energy and water are related.

Conserving energy conserves water.

Conserving water conserves energy.

We should view conservation habits as complementary.

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PAIR
ARGUMENT

	NOT READY TO KNOW	READY TO KNOW	READY TO HOLD AN OPINION	READY TO ACT	READY TO ADVOCATE
CLARITY					
FOCUSING ON A QUESTION		Did you know that leaving a 60W bulb on for twelve hours uses as much as 60 liters of water?			We can each do simple things that conserve energy and water.
ANALYZING ARGUMENTS	We need both water and energy, and the systems that provide these resources are related.				
ASKING QUESTIONS			Did you know our nuclear reactor was almost forced to shut down during last year's drought?	What spaces and objects do you share in your community? Through sharing you can conserve water.	
JUDGING CREDIBILITY					
OBSERVING					
INFERENCE					
DEDUCING AND JUDGING DEDUCTIONS		If we continue to use so much electricity we may run out of water.		By conserving energy, you can help conserve water. By conserving water, you can help conserve energy.	If each person in Raleigh changed a standard bulb to a compact fluorescent, the city could save 18 million liters of water a day.
INDUCING			Suburban development places additional burdens on water and energy systems.		
MAKING VALUE JUDGEMENTS					Local government policies can help guide sensible development and smart energy and water use.
ADVANCED CLARIFICATION					
DEFINING TERMS				I should alter my habits to ensure I am not wasting energy or water.	
IDENTIFYING ASSUMPTIONS				Encouraging conservation and sensible development go hand in hand.	
DECIDING ON ACTION					I can let people know there are better ways to do things.
INTERACTING WITH OTHERS					
PRESENTING A POSITION					I will write a letter to the editor and a letter to my congressperson.

Ready to Hold an Opinion

We need both water and energy, and the systems that provide these resources are related.

Ready to Act

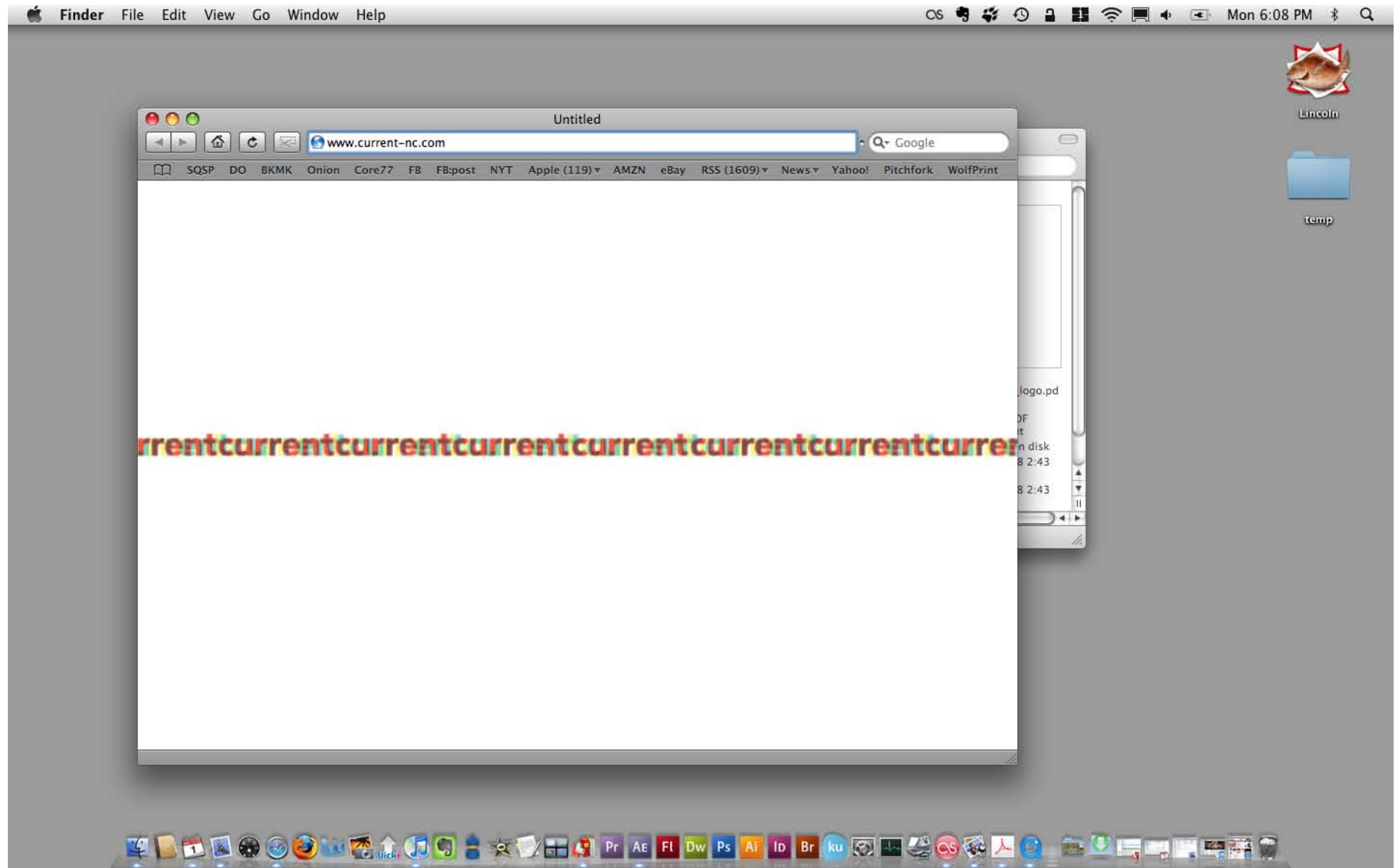
By conserving energy, you can help conserve water. By conserving water, you can help conserve energy.

Americans use more energy than anyone else on the planet. We require billions of gallons of water every day to produce the energy we need. A great deal of the energy we consume, in turn, is used to pump, treat, move and heat water. A reciprocal relationship, therefore, exists between energy and water. If using energy uses water and using water uses energy, then conserving energy conserves water, and conserving water conserves energy.

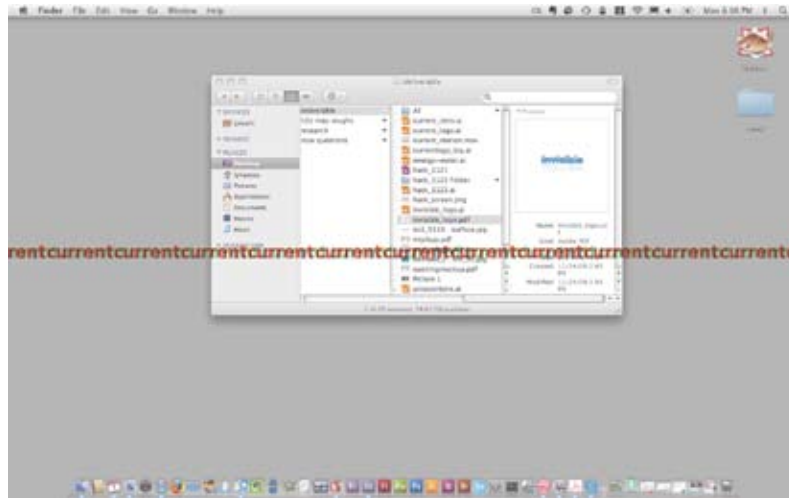
We believe it is not apparent to many Americans that our water and energy systems are so profoundly connected. Principally, this is because the water consumed in energy production—and the energy used in water treatment, distribution and end use—is invisible.

Current is an application that aims to bring to light the relationship between energy use and water consumption, and water use and energy consumption. The application is an online tool that obtains data on your usage patterns from your utility companies. The **current** widget and aquarium screensaver provides visual feedback on your conservation successes, responding organically to your **current** rating. An incentive to conserve is generated through a social networking component, as **current** users compete to maintain the unique beauty of their aquariums through continued conservation success.

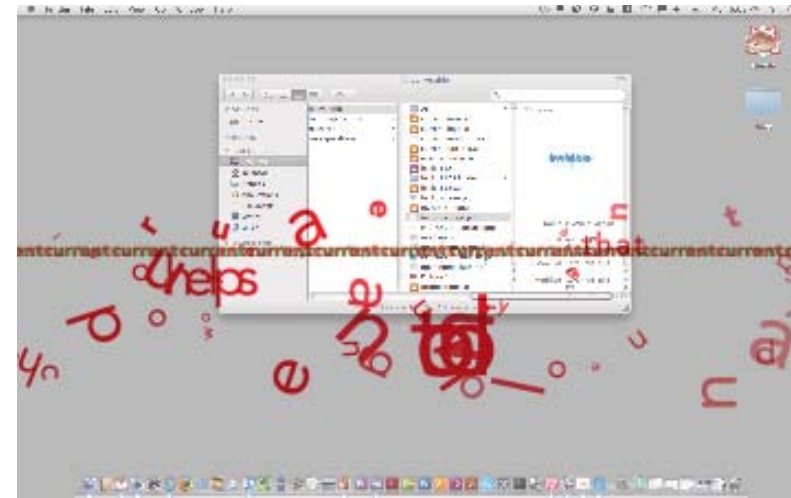
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DESIGN
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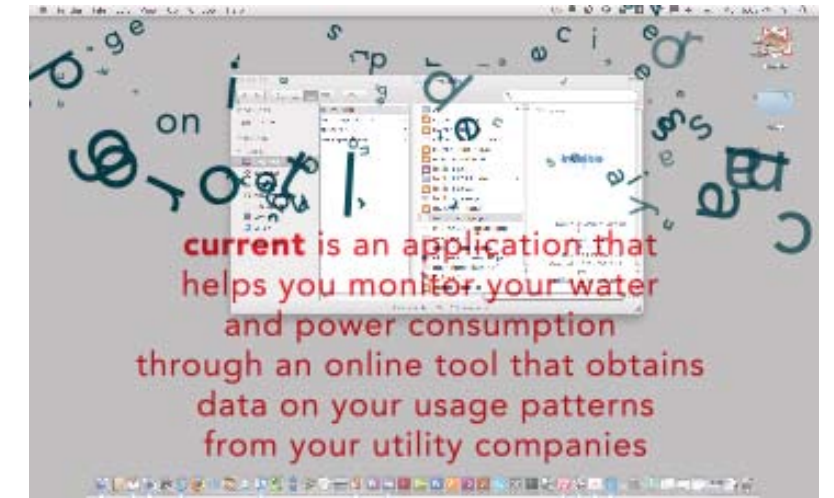
User arrives at current website and clicks streaming logo to begin download of application.



Application begins install process.



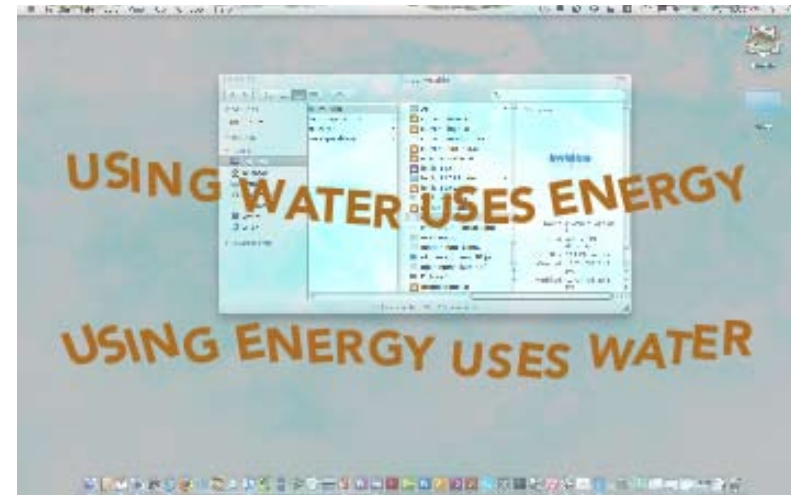
User has no control of system as the application is installed. The installation provides information on the application and gestalt impressions of water and energy's relationship.



Screen tints blue — display is filled with virtual water.

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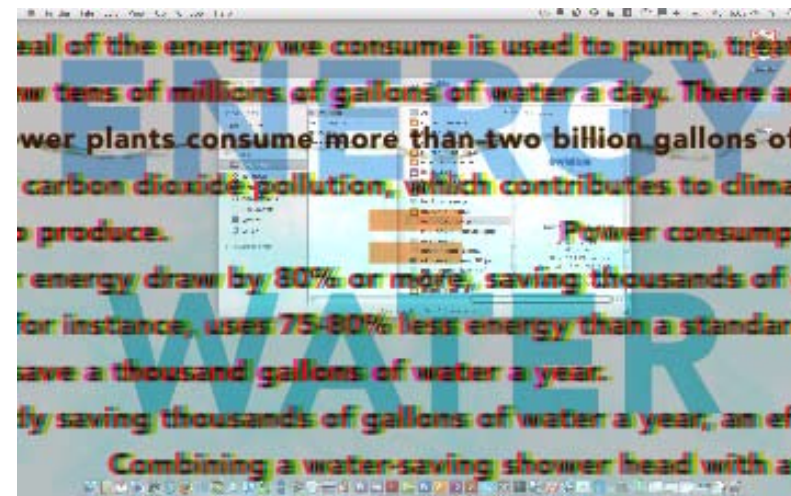


Data on water and energy's relationship begins streaming in quickly. Water level in display begins to lower.

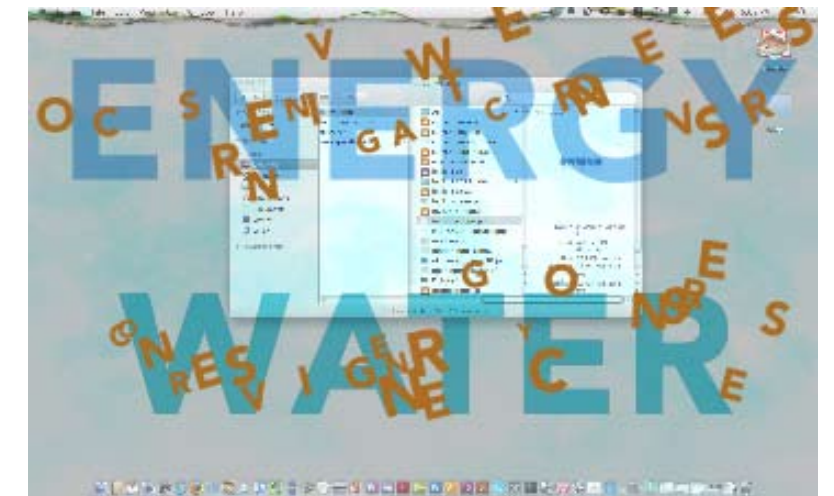
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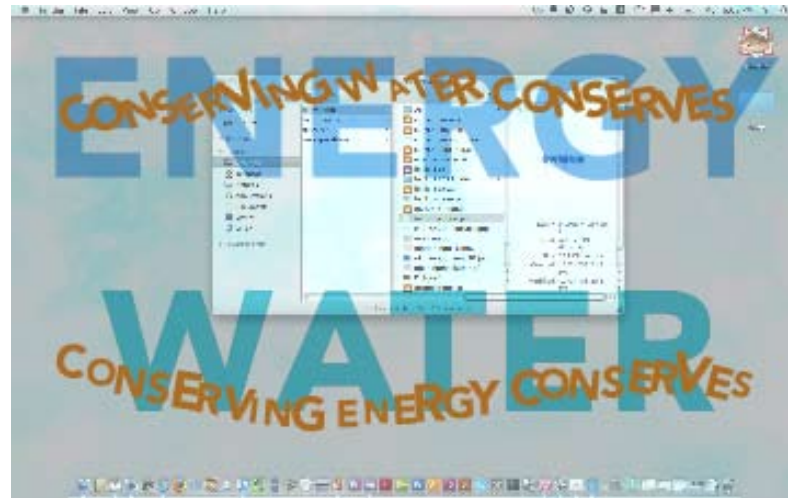


Water level reaches its lowest point before beginning to rise again as propositions on conservation stream in.

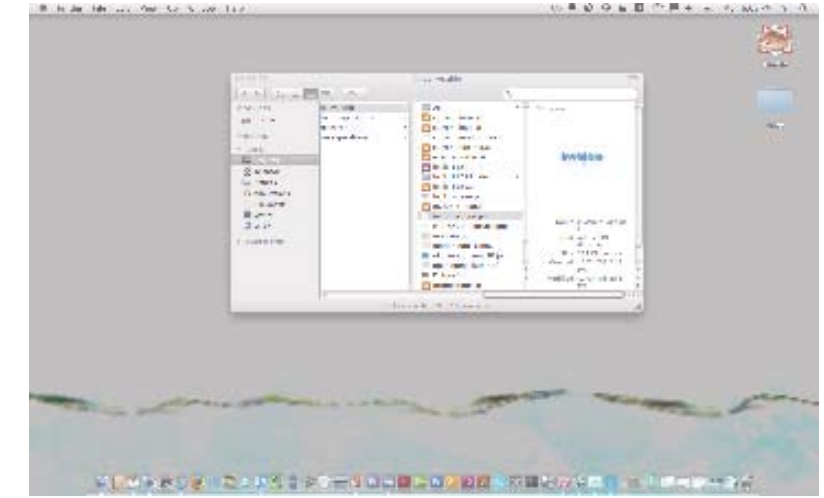
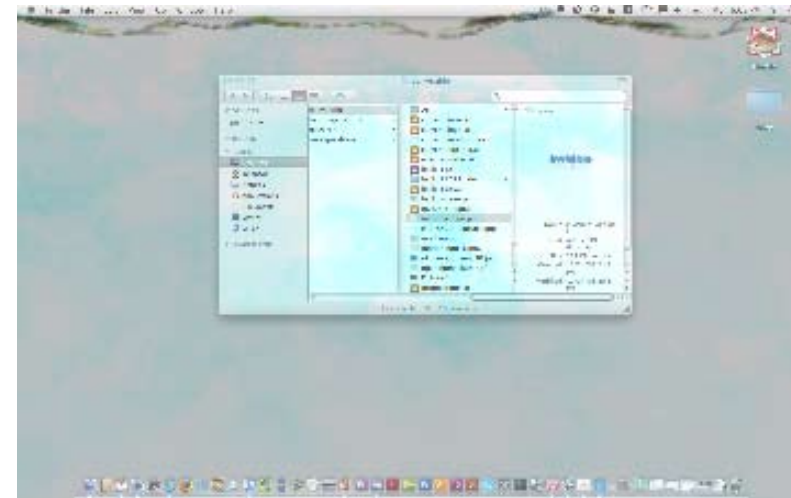


User hovers over moving text to slow the stream and align the layers.



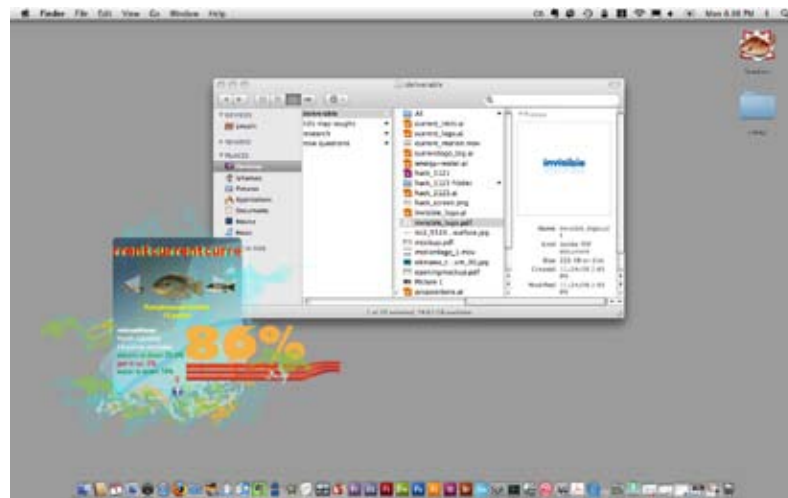


Introductory install process is complete.

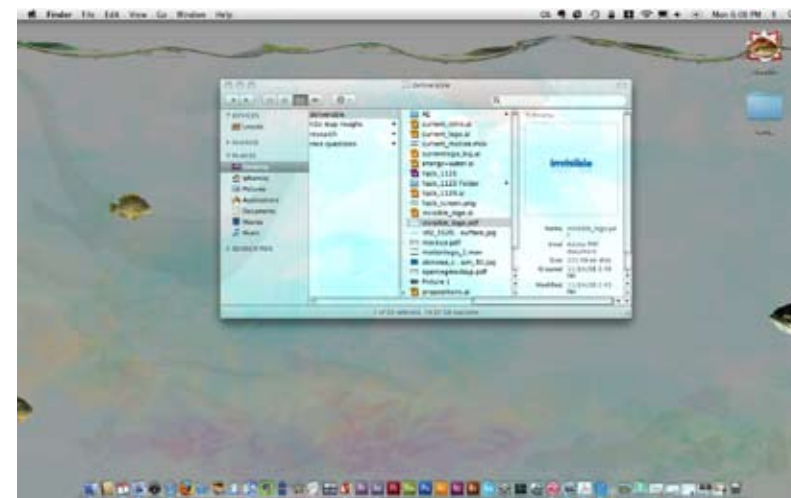


Water drains completely.

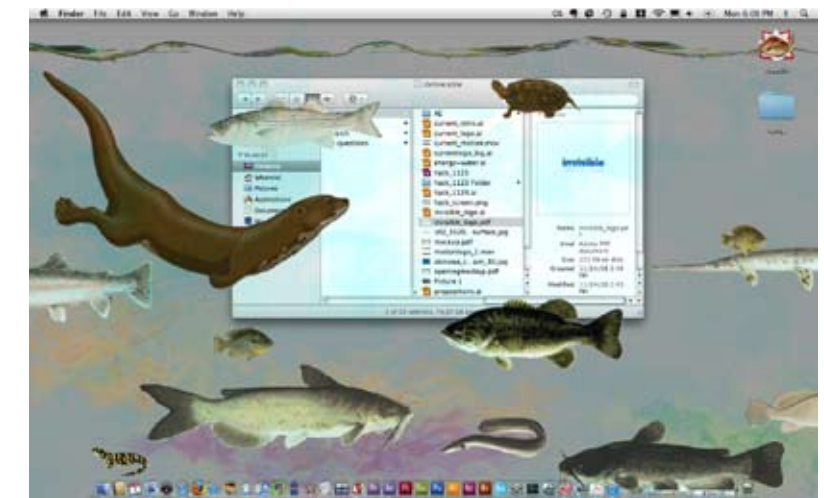
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 NCSU
 08
 DESIGN
 WORK



Desktop widget appears. Application ready to use, and computer operates normally.

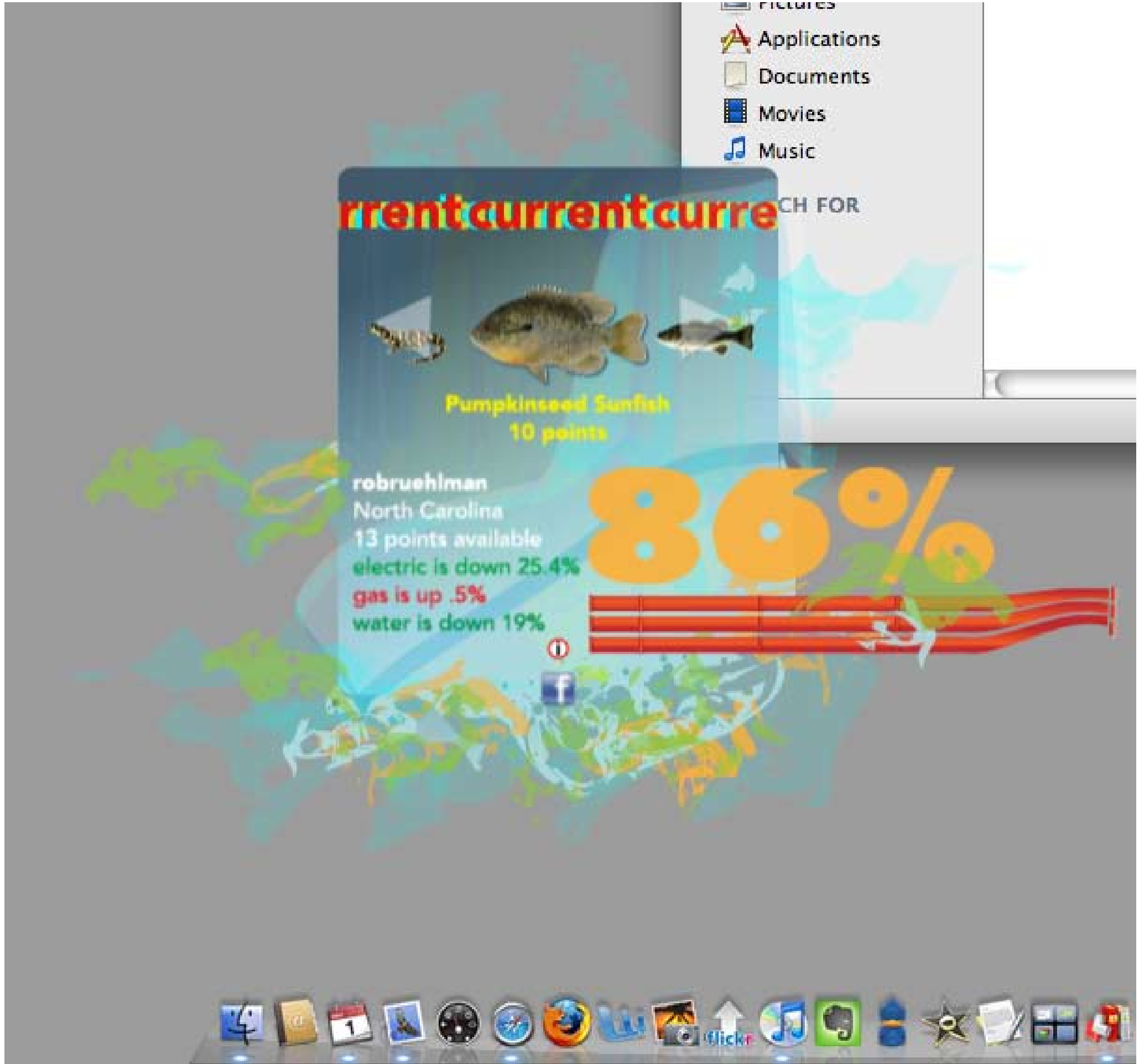


User tests screensaver. Appearance adjusts to user's personal information—in this case, wildlife is local to North Carolina.



A fully stocked aquarium.

INVISIBLE
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/
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HANCOCK
RUEHLMAN
NCSU
08
DESIGN
WORK



Enlargement of widget.

Americans use more energy than any other people on the planet. It takes billions of gallons of fresh water a day to produce all the energy we need. A great deal of the energy we consume is used to pump, treat, move and heat water.

Our nuclear power plants draw tens of millions of gallons of water a day. There are more than 100 nuclear power plants in the United States; 24 of them operate in drought-prone areas.

Coal power plants consume more than two billion gallons of water a year, each. Two billion gallons is enough water to support a city of a quarter-million people.

Power plants in the United States are responsible for almost half of our carbon dioxide pollution, which contributes to climate change, which leads to droughts and water shortages in summer, flooding in winter.

Power consumption of the average American is about six times the world average. The energy used in a year by the average American household takes 20,000 gallons of water to produce.

But by employing efficient appliances and energy-saving techniques, we can reduce our energy draw by 80% or more, saving thousands of gallons of water per household.

A compact fluorescent light bulb, for instance, uses 75-80% less energy than a standard bulb. Switching out half the bulbs in your house can conserve hundreds of gallons a month.

A laptop computer consumes as much as 85% less energy than a desktop. An LCD monitor uses only a fraction of the power of an outdated CRT. Letting your computer sleep or power off can save a thousand gallons of water a year.

Hot water is the second largest energy draw in the home, after space heating. In addition to directly saving thousands of gallons of water a year, an efficient shower head can indirectly save water through reducing water heating costs.

Combining a water-saving shower head with a solar hot water heater reduces energy consumption to almost 10 times less than with an electric heater and a traditional shower head.

INVISIBLE
WATER
**SHARED
VALUES
FOR
SHARED
WATER**

CHORNYAK
McCAFFERTY
NCSU
08

The structure of our society promotes isolation, however the structure of human nature yearns for nearness and community. We are inherently social.

Conviviality places value on dependence and collaboration; away from independence and individualism.

INVISIBLE
WATER
**SHARED
VALUES
FOR
SHARED
WATER**
CHORNYAK
McCAFFERTY
NCSU
08
PAIR
TOPIC
STATEMENT

The world has a water problem.

Our perceptions is that when water enters our residences it is mine to own and waste.

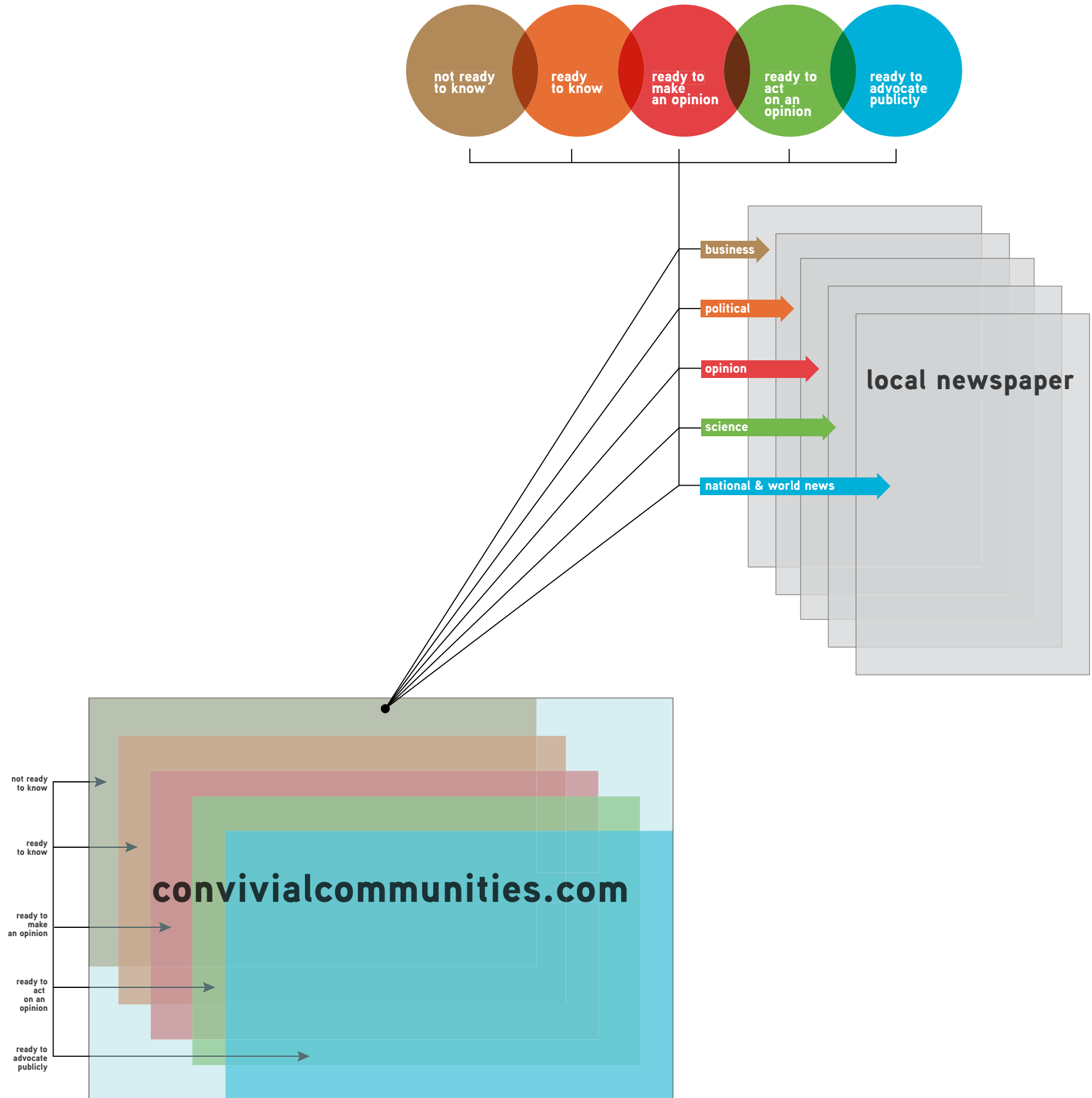
Water is a shared resource and so the individualism of our society depletes the resource faster than we can regenrate it.

If we can reconfigure our society to a more convivial lifestyle through changing our models of building and repurposing common spaces in our communities.

Through sharing resources we ultimatly will conserve water.

	NOT READY TO KNOW	READY TO KNOW	READY TO HOLD AN OPINION	READY TO ACT	READY TO ADVOCATE	
CLARITY						
FOCUSING ON A QUESTION	<p>Not Ready to Know</p> <p>Is my lifestyle contributing to a water problem?</p>			Can I learn about conscious landscaping?	Can I conserve water by collaboration?	What if we all had greywater systems?
ANALYZING ARGUMENTS				community efficient?	How can my interest best be put into action?	Is my community making appropriate changes to become water efficient?
ASKING QUESTIONS				start a dialogue community?	Conviviality is about shifting our value system of living from an individual, independent lifestyle to a dependent, collaborative community.	How can I organize my community to repurpose it's cul-de-sac?
JUDGING CREDIBILITY		Water is a critical resources, but around the world its availability is threatened.	There are spaces and objects that we can share in our community, Though sharing we can conserve water.	Sharing products with our neighbors instead of consuming as individuals conserves water and builds stronger communities.	How can i put my values into action?	
OBSERVING			Just like sharing a lawnmower it makes sense to share water consuming devices and practices.	Would you be willing to plant and grow a shared community garden on your property?	What tools do I need to organize my community effort?	
INFERENCE						
DEDUCING AND JUDGING DEDUCTIONS			It is important to protect the resource of water for our children.		How can i start a water conservation dialogue with my community?	
INDUCING					How can I see that I am making progress conserving water?	
MAKING VALUE JUDGEMENTS						
ADVANCED CLARIFICATION						
DEFINING TERMS						
IDENTIFYING ASSUMPTIONS				<p>Ready to Advocate</p> <p>How can I take part in the movement to conserve water?</p>		
DECIDING ON ACTION						
INTERACTING WITH OTHERS						
EMPLOYING FALLACY LABELS						

INVISIBLE
WATER
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08
**DESIGN
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The New Times

COUNTRY WATER INDEXES

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Belgium	21.40	19.21	20
Brazil	8,233.00	233.59	92
Britain	147.00	73.07	30
Canada	2,902.00	62.80	80
China	922.00	12.13	61
Chile	2896.57	883.39	93
Columbia	2,132.00	34.05	84
Czech Republic	13.15	16.15	71
Denmark	6.00	7.68	40
Egypt	58.30	69.50	81
Finland	116.00	8.93	59
Germany	154.00	126.95	47
Greece	74.25	25.21	65
Hungary	104.00	7.89	84
India	1,896.66	987.38	98
Indonesia	2,838.00	296.06	10
Israel	1.57	8.27	26
Italy	191.30	134.64	49
Japan	430.00	146.85	36
Korea	69.70	55.25	39
Malaysia	580.00	13.00	72
Mexico	457.22	140.16	70
Morocco	29.00	43.60	85
Norway	382.00	6.65	39
Pakistan	222.69	166.22	95
Peru	1,913.00	20.02	77
Philippines	479.00	116.86	89
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Today we are facing a number of serious water problems linked to patterns of unsustainable housing and community development, which had been left to their own devices all throughout the environmental crisis which became clear to us all at the turn of the century.

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Farmlands that North Americans depend on are now overrun by low-density suburban development.

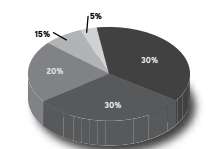
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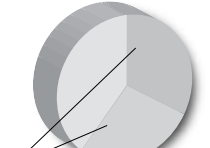
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Many scientist and environmentalist estimate that a change in development strategies could have been a catalyst that empowered whole communities to live lighter, less resource dependent lifestyles—a criticism that has been leveraged against North American now for many years, and yet still seems to fall on deaf ears.

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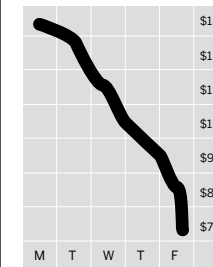


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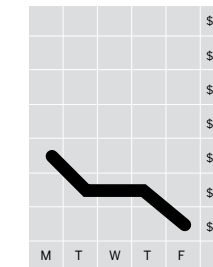
STOCKS IN THE NEWS



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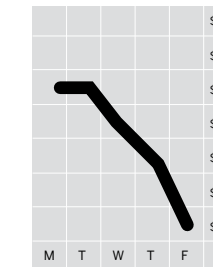
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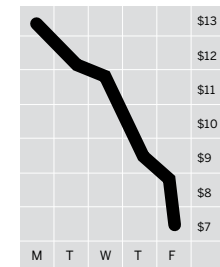
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Convivial Communities Save Water

Toolboxes for Developing and Building and Convivial Communities

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By developing alternative sustainable methods for building homes and communities which unburden a city's water infrastructure and combats sprawl.

Through the building of shared spaces like community gardens and community graywater collection systems, in spaces that are under used.

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INVISIBLE WATER SHARED VALUES FOR SHARED WATER
CHORNYAK
McCAFFERTY
NCSU
08
DESIGN WORK

COUNTRY WATER INDEXES

COUNTRY	TOTAL SUPPLY	TOTAL DEMAND	WATER DEFICIENCY
Argentina	60.00	51.00	8.99
Australia	270.00	19.00	251.00
Belgium	21.45	12.02	9.43
Brazil	42,232.00	222.36	41,999.64
Canada	2,822.00	62.00	2,760.00
China	922.00	12.11	899.89
Czech Republic	12.20	18.75	-6.55
Denmark	4.90	7.90	-3.00
Egypt	34.30	95.10	-60.80
France	220.00	8.51	211.49
Germany	124.20	125.36	-0.16
Greece	18.20	17.03	1.17
Hungary	224.00	7.97	216.03
India	1,804.00	187.10	1,616.90
Indonesia	2,538.00	254.00	2,284.00
Iran	420.00	145.62	274.38
Italy	20.20	124.64	-104.44
Japan	89.30	10.70	78.60
Malaysia	282.00	12.00	270.00
Mexico	427.27	140.16	287.11
Netherlands	27.90	42.00	-14.10
Norway	280.00	0.00	280.00
Poland	1,183.00	20.00	1,163.00
Portugal	41.00	12.12	28.88
Russia	43.30	77.00	-33.70
Spain	4,507.00	77.00	4,430.00
South Africa	16.00	10.47	5.53
Taiwan	10.00	10.00	0.00
Thailand	33.00	18.21	14.79
United States	124.40	124.40	0.00
USA	3,049.40	894.04	2,155.36

Developers Hit By Water Woes Due To Outdated Development Strategies

As we are all beginning to understand the serious implications of "Peak Water," much of the trouble this unfortunate reality is having today impacts on both the role of society and the personal lifestyles of America's builders, developers, and their financiers in general.

Today we are facing a number of serious water problems linked to patterns of unsustainable building and economic development, which have been left to their own devices all throughout the environmental crisis which became clear to us all at the turn of the century.

Even though many alternatives to their widely used and outdated building patterns were available, many developers...

USA WATER CHARTS



Amount of water saved through conservation. 20% for agriculture, 30% for industry, 50% for residential.



20% to 60% of all urban fresh water is used for watering lawns. 30% is wasted because of lost timing or because of over-watering.

STOCKS IN THE NEWS



Company	NYSE	Friday's Close	Week's Change	Est. P/E
Aqua America	NYSE: WTR	\$13	-23.32%	3.31
General Electric	NYSE: GE	\$4.13	-7.2%	3.13
Roper Industries	NYSE: ROP	\$5.13	-13.23%	7.13
Veolia Environment Corp.	NYSE: VE	\$4.13	-9.13%	12.01

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Your Biz Week

THIS WEEK INFLATION UPDATES COULD EASE RATES



Construction work is busy in a California Bay Area.

The Producer Price Index, which accounts for the change in the price level of the goods and services that go into making up the GDP, is expected to rise 0.2% in October.

ECONOMIC CALENDAR

FRIDAY: The National Association of Realtors releases pending home sales index for October. 10:30AM: Consumer Durable Goods Orders, monthly. 11:30AM: Retail Sales for October.

CALENDAR

Today: The Florida International Association of Business Communicators (FIA) will hold its annual meeting in Orlando, Florida. Tuesday: The State of Georgia 2008, presented by the National Transportation Alliance, will be held in Atlanta, Georgia.

SUMMIT ON EUROPE'S ECONOMY

British Prime Minister Gordon Brown leads French President Nicolas Sarkozy, European Commission President Jose Manuel Barroso and European Economic and Financial Affairs Commissioner Joaquin Almunia to a summit on Europe and the economy.

WEAK DEMAND HURTS CHIP MAKERS

National Semiconductor Corp. is expected to report lower quarterly profit this week as demand for chips used in vehicles falls.

CONTACT US

Business editor: 313-421-4765, mcs@newtimes.com
Assistant business editor: 313-421-4232, aeb@newtimes.com

Historic union vote comes this week



Southwest Florida workers vote on a representation contract in 2007.

It's Election Day for the Southwest Florida Electric Workers Union. The union is voting on a new representation contract with the Florida Power & Light Co. (FPL).

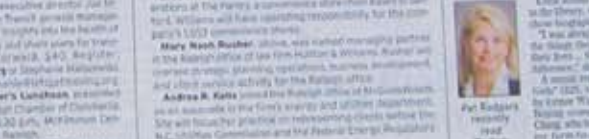
CAREER MOVES

Owen Voss, Miami, has been promoted to managing partner in the Raleigh office of accounting firm Deloitte & Touche. Brad Williams, Raleigh, has been promoted to senior advisor.

CEO WATCH: WHAT THEY ARE READING

Peeking into other lives

Building CEO agrees with Buffett's outlook on ethics. Address: DataBank took on talk with leading media star before she and her husband...



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FOR COMPLETE CALENDAR LISTINGS, SEE FRIDAY'S BUSINESS PAGES.

READ MORE CAREER NEWS EVERY TUESDAY IN THE BUSINESS PAGES.

The New Times

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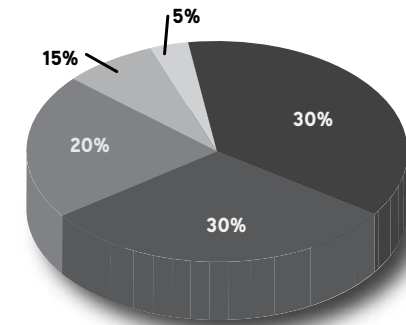
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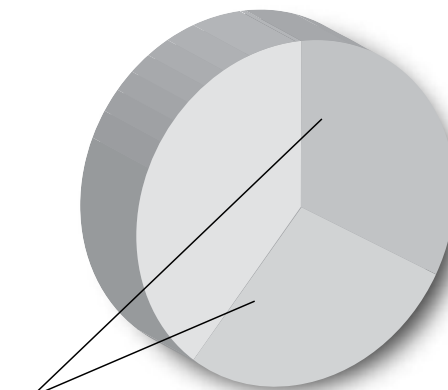
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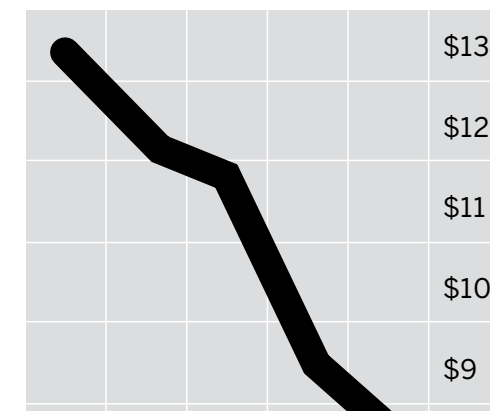
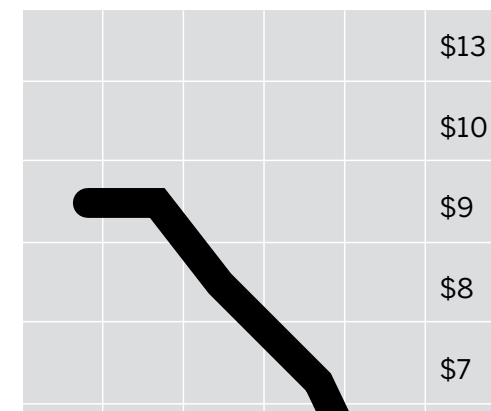
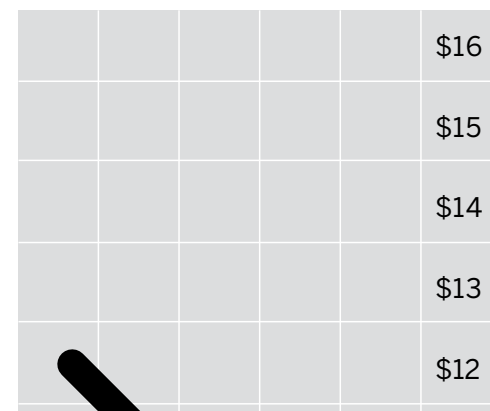
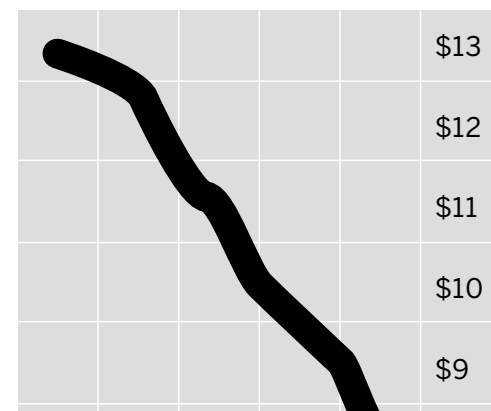


Amount of water saved through convivial lifestyles.
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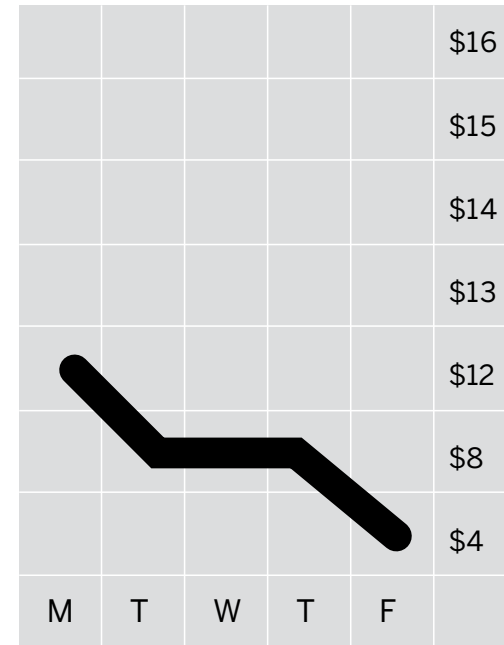
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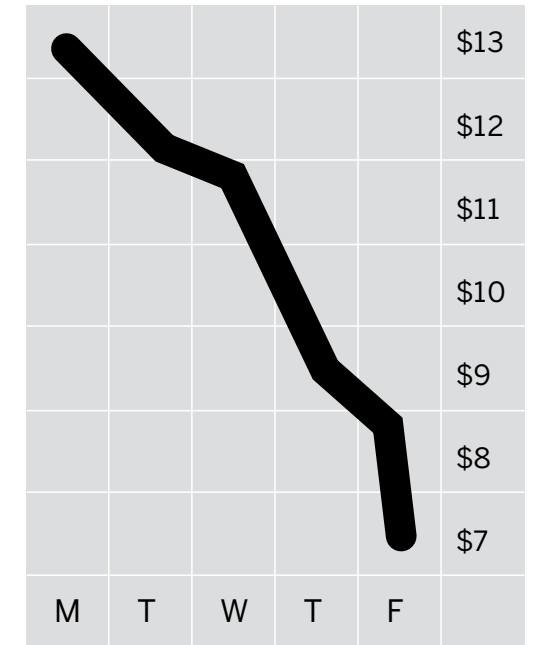


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convivialcommunities.org

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the cul-de-sac as
a community garden?
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What if we
all had graywater
systems?
A shared toolshed?
instead of individual
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What about water
conscious landscaping?
for everyone?

Toolboxes For Convivial Living

*Through changing our habits, our expectations,
our assumptions, we can conserve water and
live a more responsible lighter lifestyle, ultimately
ensuring our future with our most vital resource.*

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Toolbox 5: A Sampling

Repurposing a Cul-De-Sac:
as a community garden or
beautiful social space

Garden Design
Creative, beautiful solutions to reducing a
garden's need for supplemental water
Fundamental Techniques
Simple Renovations

WaterSmart Irrigation
The term low-volume irrigation, reinforces
the idea of responsible water usage
How LVI Works
Choosing a System
Costs
Instillation

Xeriscaping
Landscaping and gardening in ways that
do not require supplemental irrigation
Planning & Design
Soil Improvement
Mulches
Appropriate Plants
Disadvantages



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Toolbox 5: A Sampling Repurposing a Cul-De-Sac: as a community garden or beautiful social space

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Creative, beautiful solutions to reducing a garden's need for supplemental water
- Fundamental Techniques**
Simple Observations
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- Non-LV Works**
Choosing a System
Cul-de-Sac Installation
- Xeriscaping**
Landscape and gardening in ways that do not require supplemental irrigation
- Planning & Design**
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Anarchist youth riot in Greece for a second violent day

Teen's death at hands of police sets off protests that leave dozens of officers injured

BY WILLIAM DUNN
Athens — Following the 19th day of rioting in the Greek capital, Athens, police officers were again injured in a violent clash with protesters on Tuesday. The rioting, which began on Monday, was triggered by the death of a 15-year-old boy, Pavlos, who was shot by police officers during a protest. The rioters, who are mostly young people, are demanding the resignation of the government and the end of the current political system. The rioting has spread to other parts of the country, with similar clashes reported in Thessaloniki and Patras.

Raiders in Pakistan torch U.S. Humvees



An incinerated Humvee remains at a transport terminal near Peshawar, Pakistan, after being destroyed by a fire. The Humvees were being used by U.S. troops in Afghanistan.

BY ROSE KANE
PESHAWAR, Pakistan — Militants torched 100 vehicles, including 10 U.S. Humvees, in a surprise attack on a U.S. military base in Peshawar, Pakistan, on Tuesday. The attack, which was carried out by a group of militants, resulted in the destruction of the vehicles and the death of several people. The U.S. military has not yet confirmed the number of casualties. The attack is the latest in a series of violent incidents in Pakistan that have targeted U.S. military personnel and equipment.

Obama chides Bush on mortgages

In an interview, he also warns that the economy will get worse before it gets better

BY WILLIAM DUNN
Washington — Criticizing the Bush administration's handling of the mortgage crisis, Barack Obama said in an interview that the economy will get worse before it gets better. Obama, who is running for president, said that the current administration's policies have led to a housing market crash and a loss of confidence in the financial system. He said that the economy is in a state of "panic" and that the government needs to take action to stabilize it.

OTHER COMMENTS
ON THE ECONOMY — Obama said that the current administration's policies have led to a housing market crash and a loss of confidence in the financial system. He said that the economy is in a state of "panic" and that the government needs to take action to stabilize it. He also said that the government should focus on creating jobs and reducing the deficit.

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BRIEFS
Chicago workers say they're staying put
Mystery call put Pakistan on alert

RAID REPORTED
Pakistan forces in Swat province have reportedly killed a number of militants in a surprise attack on a militant camp. The attack was carried out by the Pakistani military and resulted in the death of several people. The Pakistani government has said that the attack was a major victory in the fight against terrorism in Swat.



shared green space
shared water
shared water



Japanese Barberry
Spiraea Yucca
Corydalis Sun
Gosh
Her

Chinese Wisteria Lilac
Boston Ivy
Creeping Juniper English
Medium Liriope La

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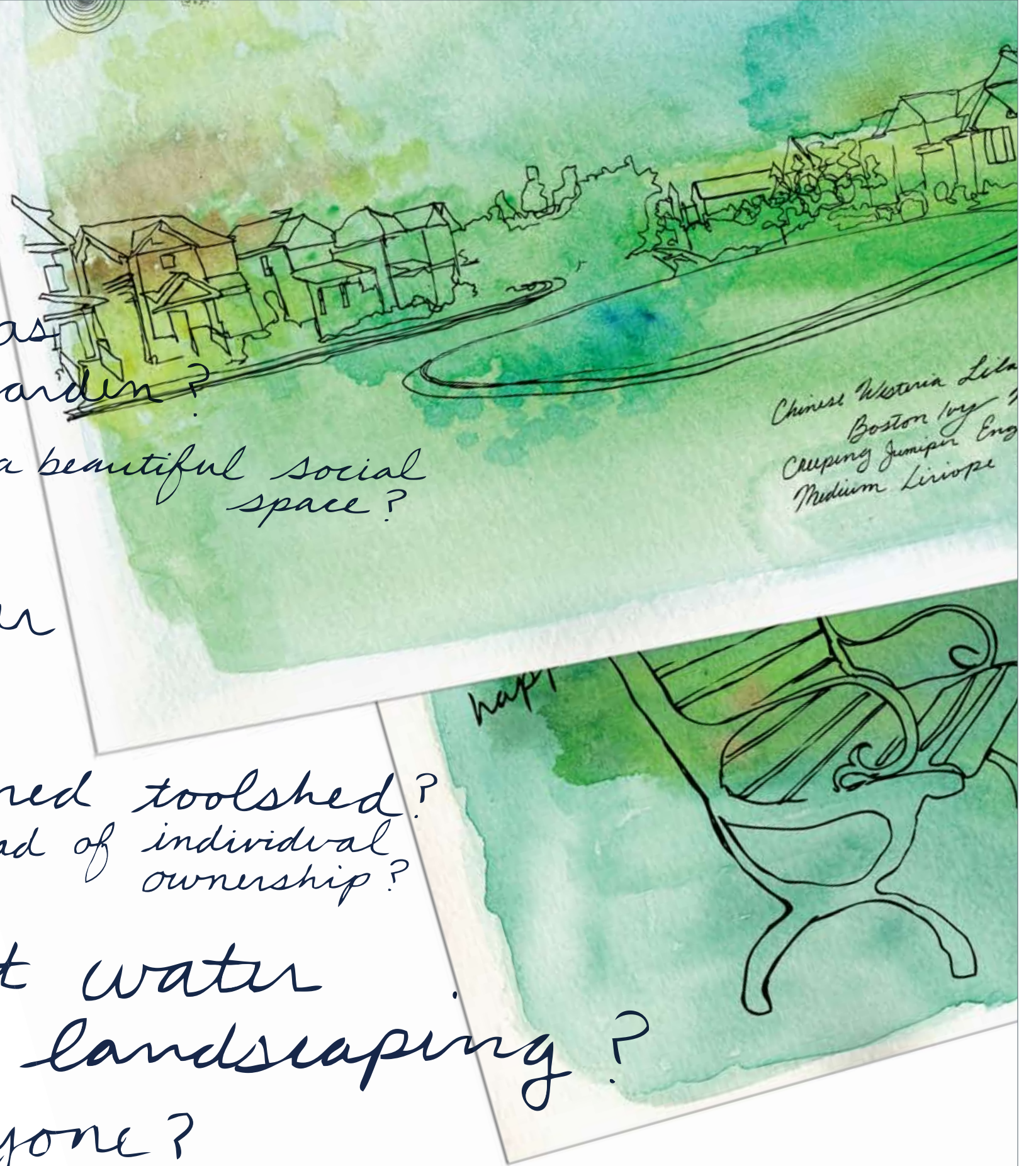
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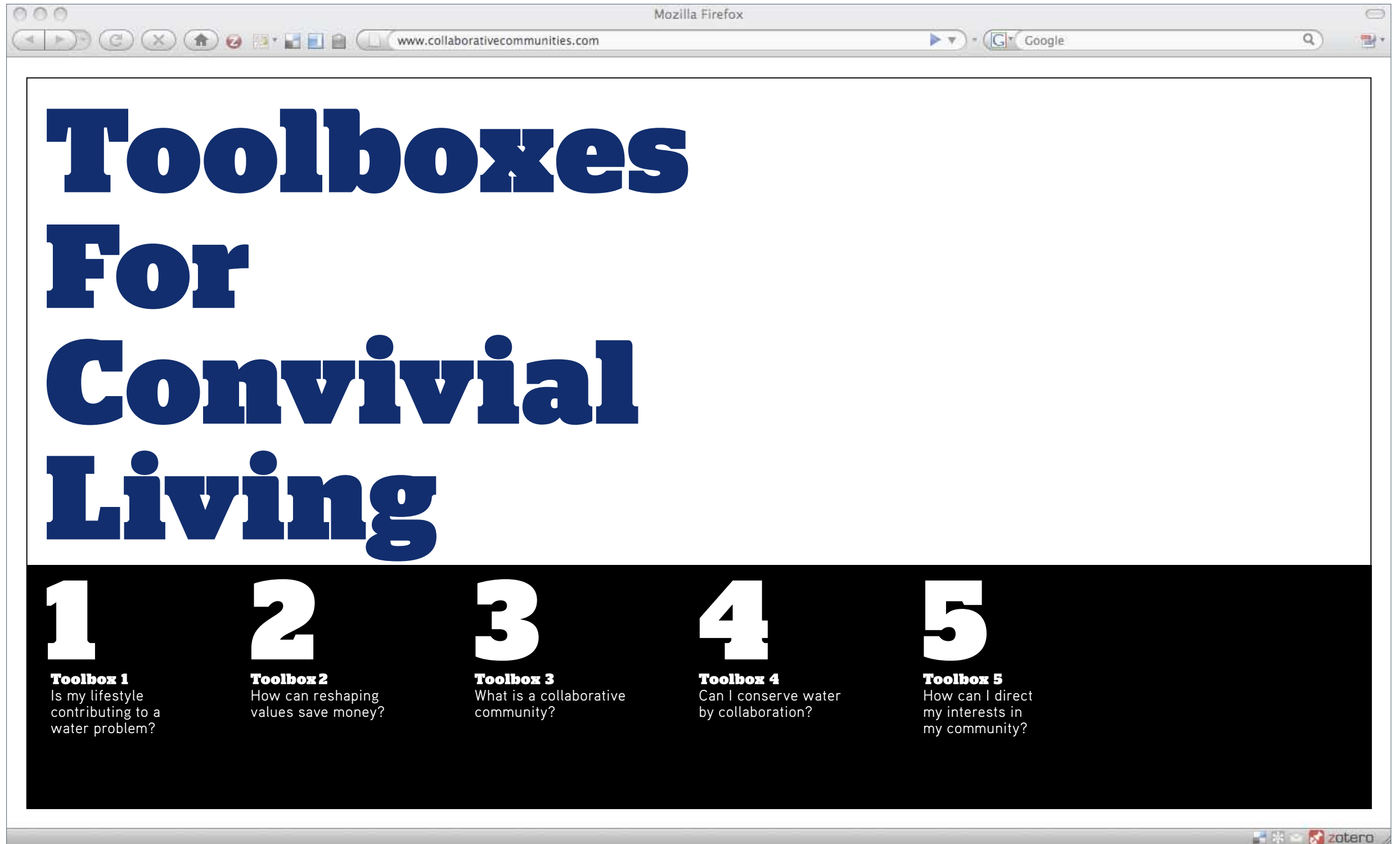
Disadvantages

Mozilla Firefox
www.collaborativecommunities.com

Convivial Communities Save Water

- 1**
by increasing our abilities to pool resources, and reduce our consumption of water reliant products
- 2**
by reducing our dependence on third party systems of support, and increasing our interdependence on families and neighbors
- 3**
by promoting shared green spaces such as community gardens and community graywater collection systems
- 4**
by developing alternative and sustainable methods for building homes and communities which unburden a city's water infrastructure and combats sprawl
- 5**
by empowering communities, one at a time, to stand against policies that abuse, pollute and steal our common heritage

zotero



Toolboxes For Convivial Living

1

Toolbox 1
Is my lifestyle contributing to a water problem?

2

Toolbox 2
How can reshaping values save money?

3

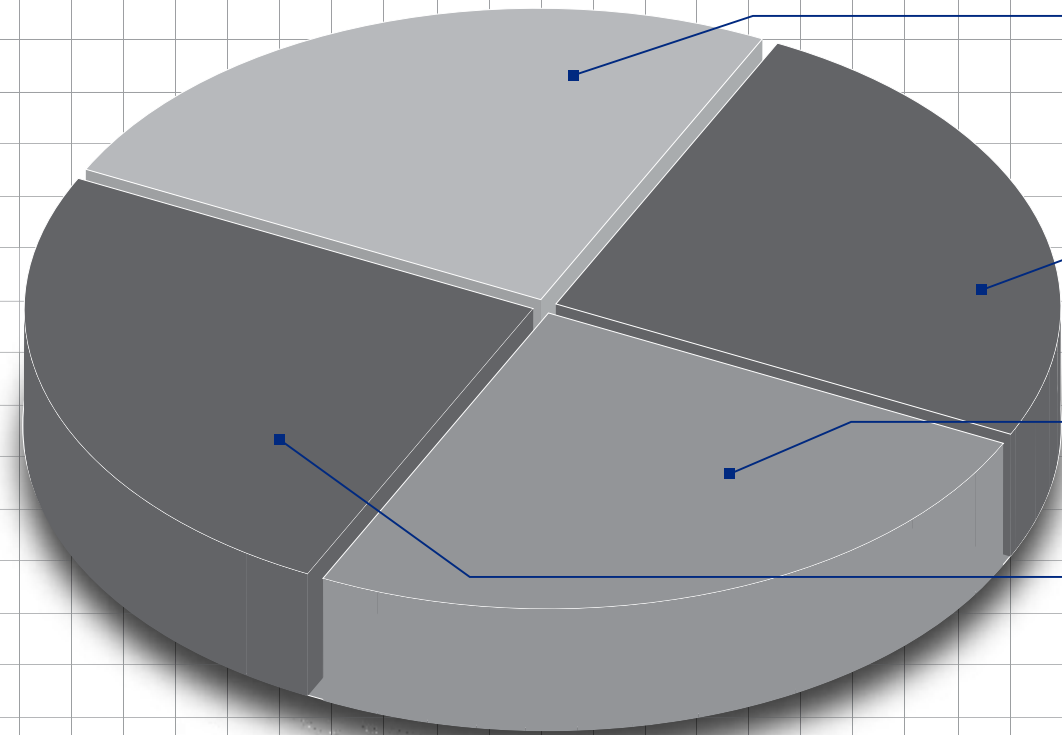
Toolbox 3
What is a collaborative community?

4

Toolbox 4
Can I conserve water by collaboration?

5

Toolbox 5
How can I direct my interests in my community?



Building and
planning: water
conscious options

Hidden costs of
wasting water

New concepts
for ownership

The water in
energy

Is my lifestyle contributing
to a water problem?

Toolbox 1



Garden City /Utopian Communes /New Urbanism

Communities that are built using a New Urbanism framework conserve our water resources in the following ways:

1. The definition of streets and public spaces as places of shared use, allows for communities to have naturally built in systems reducing over-consumption of water-based products.
2. Nature is as important to the metropolis as the garden is to the house, builds in systems for protecting and maintaining our shared heritage.
3. Promoting smaller communities that are self-reliant, it repairs the damage done to our cities through environmental degradation and misguided infrastructure projects.

Toolbox 1

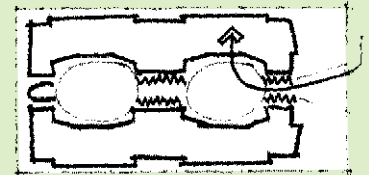
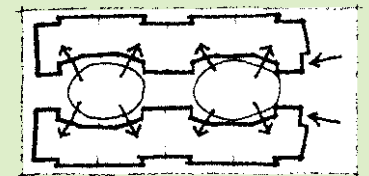
Building and Planning: water conscious plans for developers and builders

Building Plans

Plans and blueprints for building convivial communities and New Urbanist neighborhoods can be found and downloaded here. [More](#)

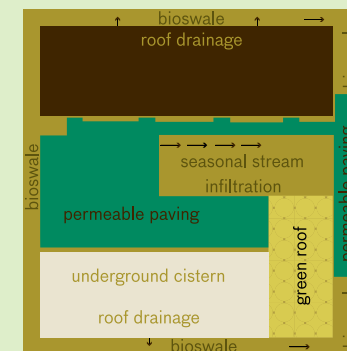
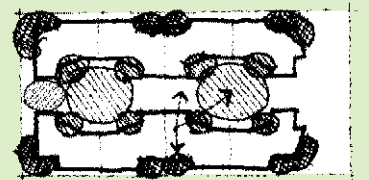
Graywater Community Gardens

Water is diverted to a cistern for graywater use, or to bioswales. A seasonal waterfall and stream acts as a play feature. [More](#)



Managing Water

Water from roofs and surface runoff is diverted to a cistern for irrigation and graywater use. Permeable paving allows infiltration. [More](#)



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How can I direct my
interests in my community?

Toolbox 5



Garden Design /WaterSmart Irrigation /Xeriscaping

Xeriscaping and xerogardening refers to landscaping and gardening in ways that do not require supplemental irrigation. Advantages of xeriscaping are:

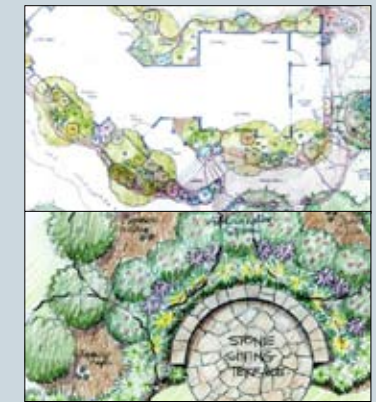
1. Lower water bills
2. More water available for other uses and other people.
3. Less time and work needed for maintenance,
4. Little or no lawn mowing
5. Xeriscape plants to take full advantage of rainfall

Toolbox 5

Repurposing a cul-de-sac: as a community garden or beautiful social space

Planning & Design

Whether you're starting from scratch, or renovating an existing landscape, take the time to plan out your design before you start to plant. [More](#)



Disadvantages

Some homeowners' associations may object to non-traditional plants. Requires that people moving from water-abundant to water-scarce areas change their mind set as to what types of plants they are able to practically and economically maintain. [More](#)

Soil Improvement

Add organic matter in the form of compost whenever you plant. this helps the soil hold extra moisture. [More](#)

Mulches

By covering the soil's surface with some type of mulch, you help retain valuable soil moisture. [More](#)

Appropriate Plants

Use xeric plants for hot, dry south and west facing areas. [More](#)

