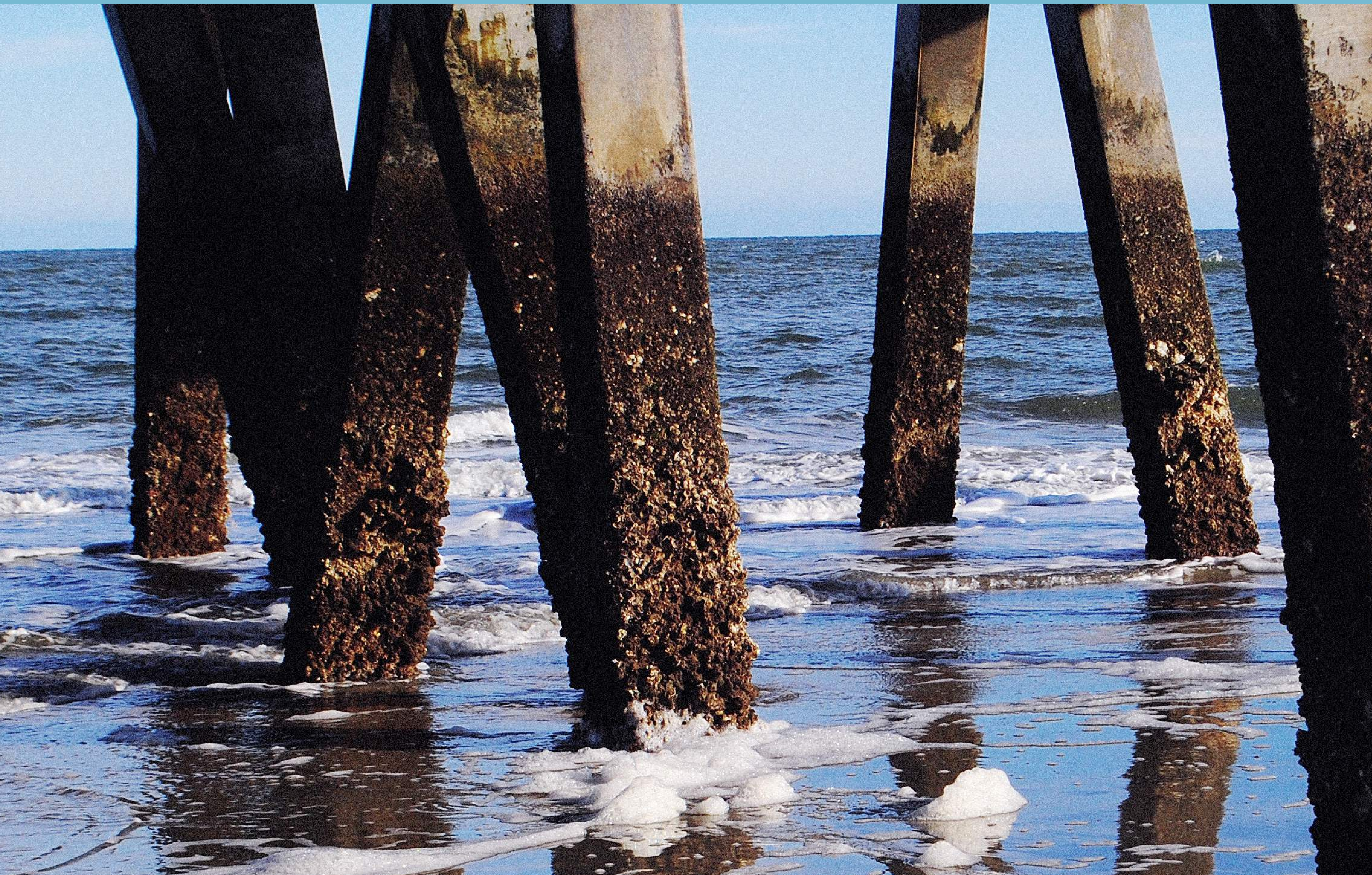




INSIGHT REPORT

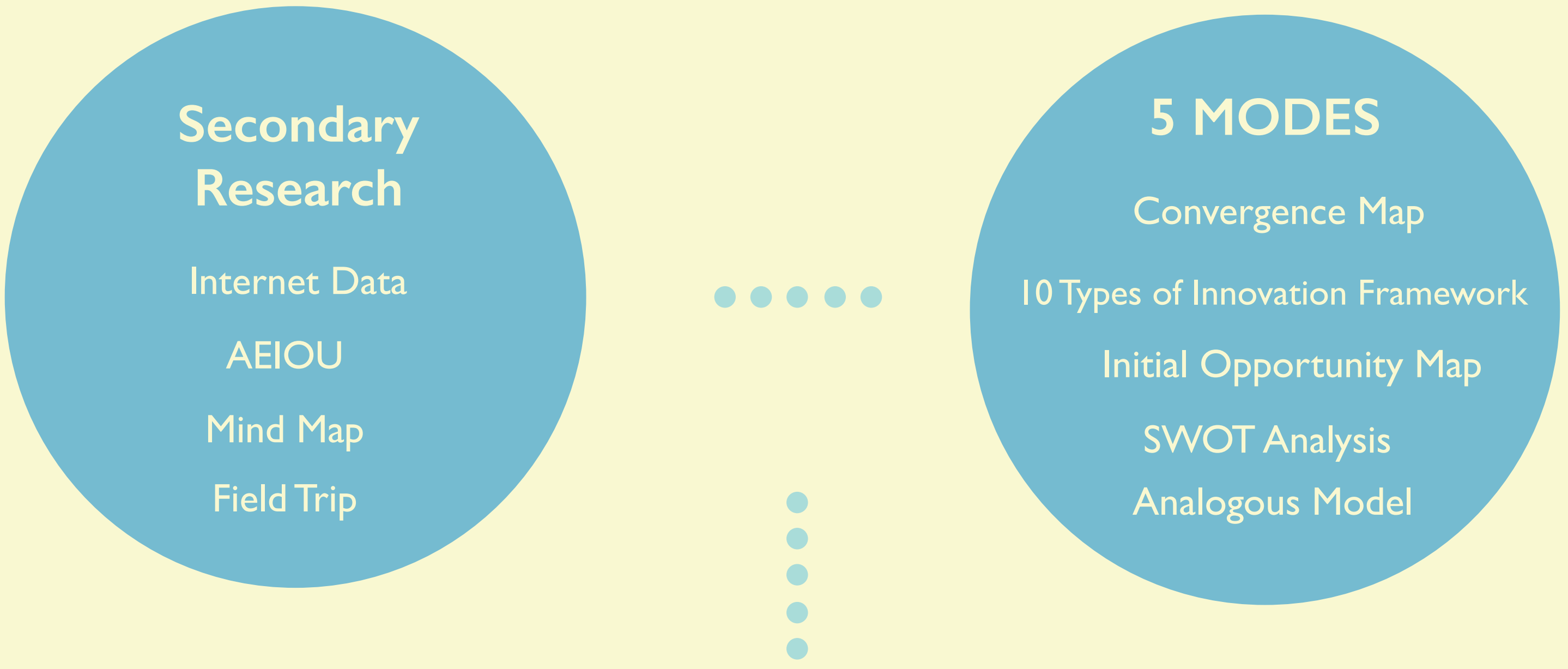
Culture of **WATER USAGE** (Savannah, GA)

SCAD - Savannah College of Art and Design

IDUS 711 - Winter 2015
Methods of Contextual Research
Prof. Sara Johnson

Carol Massá
David Londono
Yang He
Isaac Hsu

PROCESS



INSIGHTS

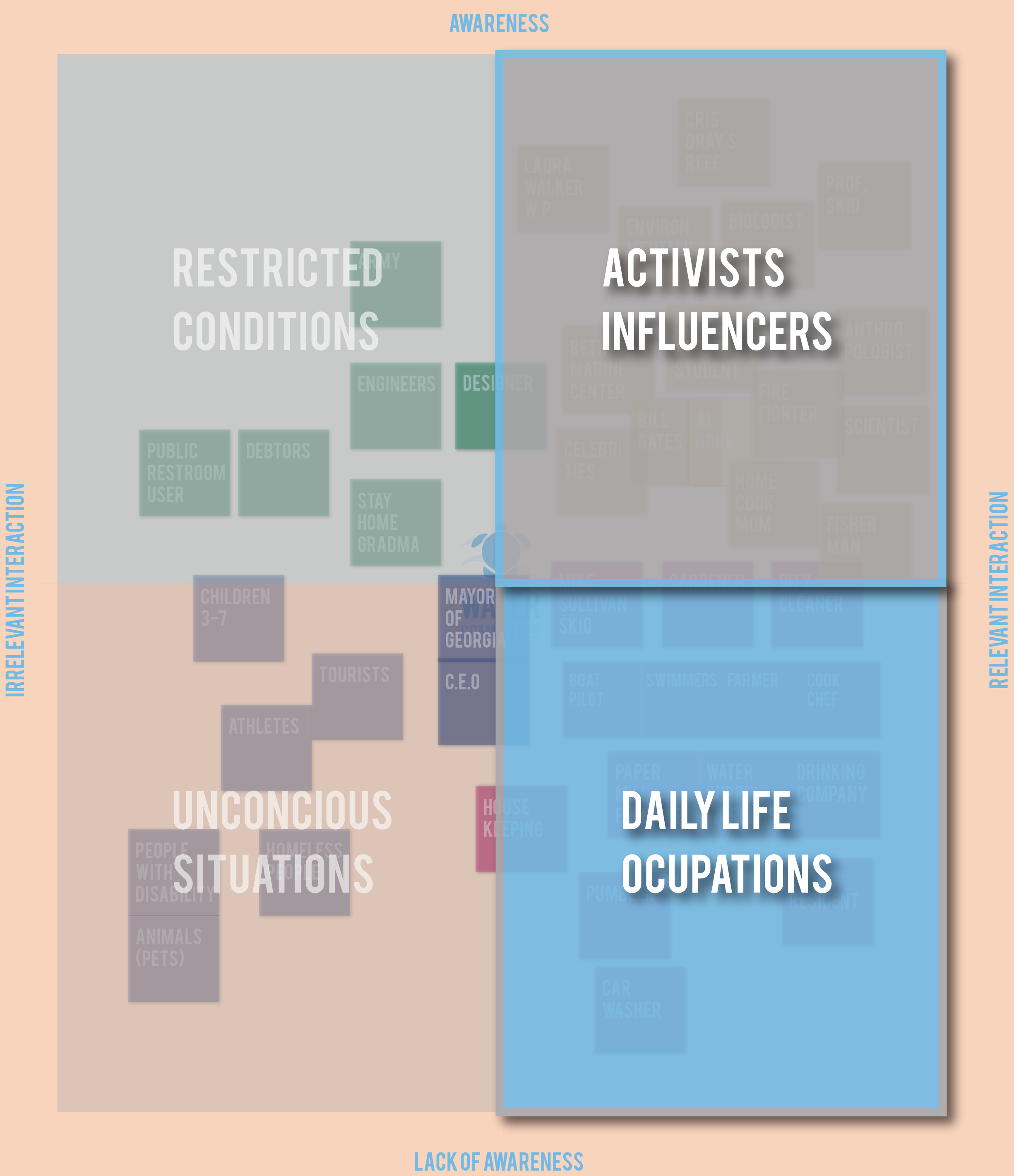
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 - Replace false beliefs and facts through daily better (trustable) informed sources
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 - Water demands keeps growing all over the world reuse, recycle and appropriate disposal have been on “focus” these last few years
 - Develop an innovative approach to improve the awareness on water usage through education, politics and media for Savannah’s population.
 - Should water conservation program approach differently to cultivate new interested groups?
 - Should water conservation program approach?

MAIN INSIGHTS

Don’t know, don’t see, don’t care	We will eat plastic for dinner
“The high price of cheap”	Technology is a valuable ally
The more you learn, the more you save	Seeing is believing
Know the coast, save your life	We are water

The time to change is now

WATER CAST

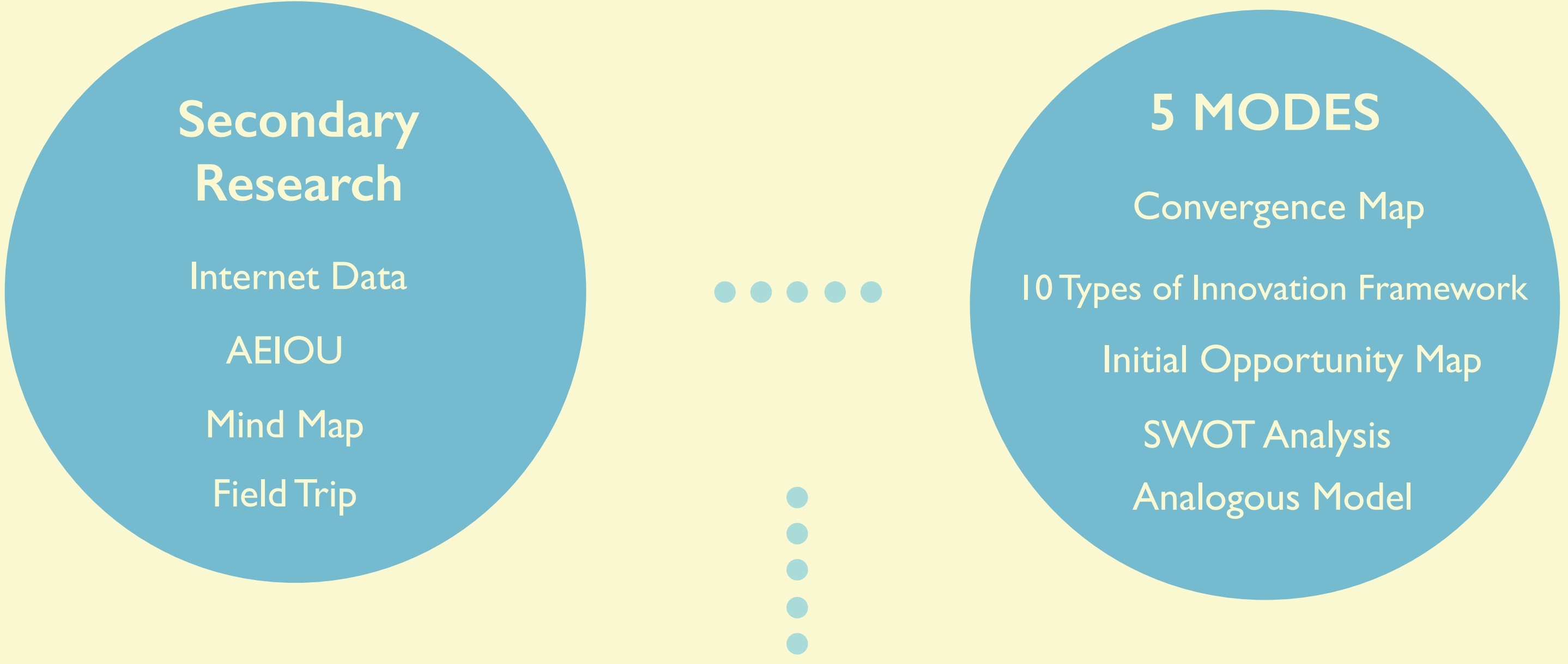


DRIVERS MODEL



enablers: Education, Management, Technology, Community, Policy, Environment, Awareness, Infra-structure, Primary Need, Economy.

PROCESS



INSIGHTS

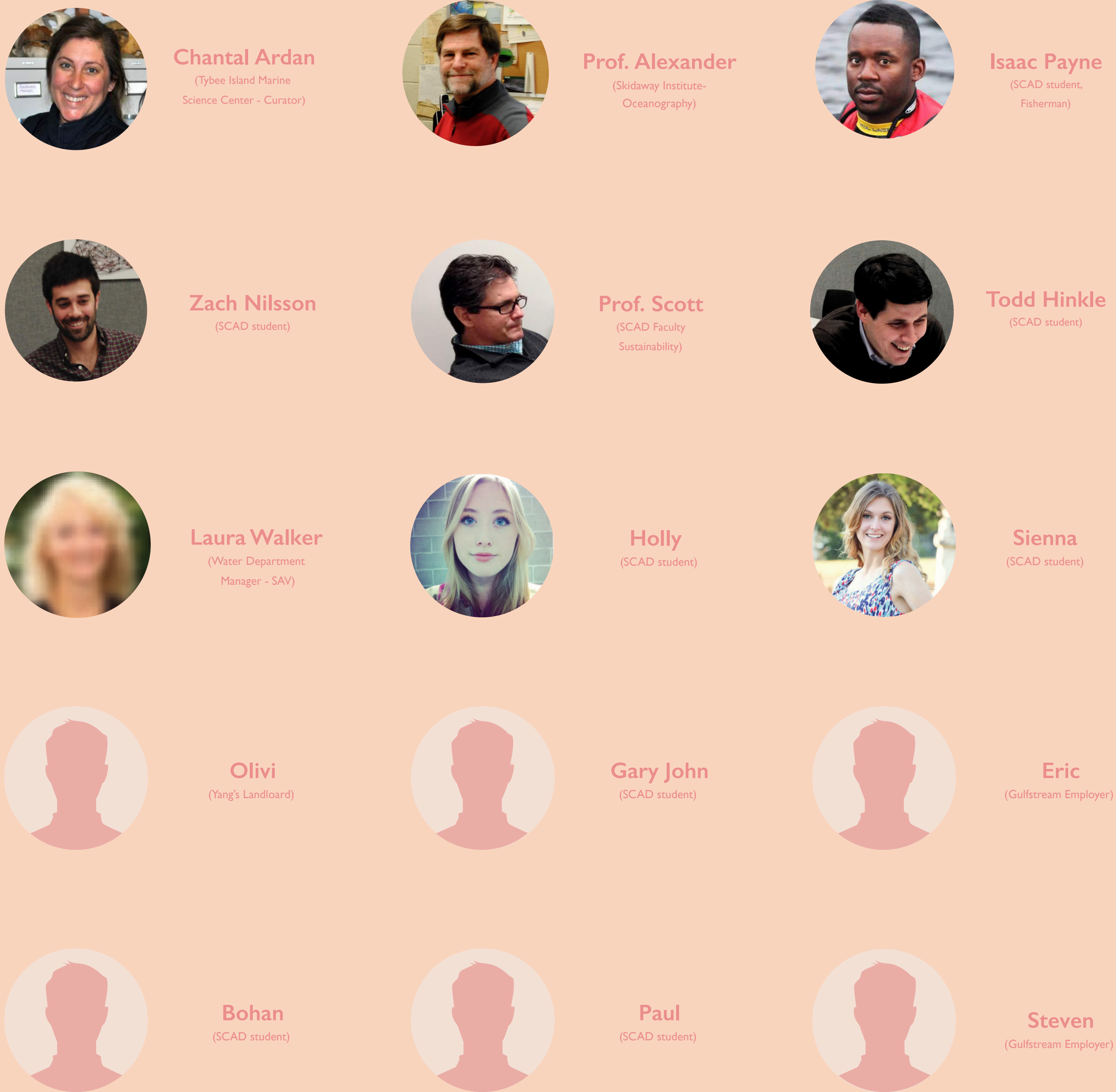
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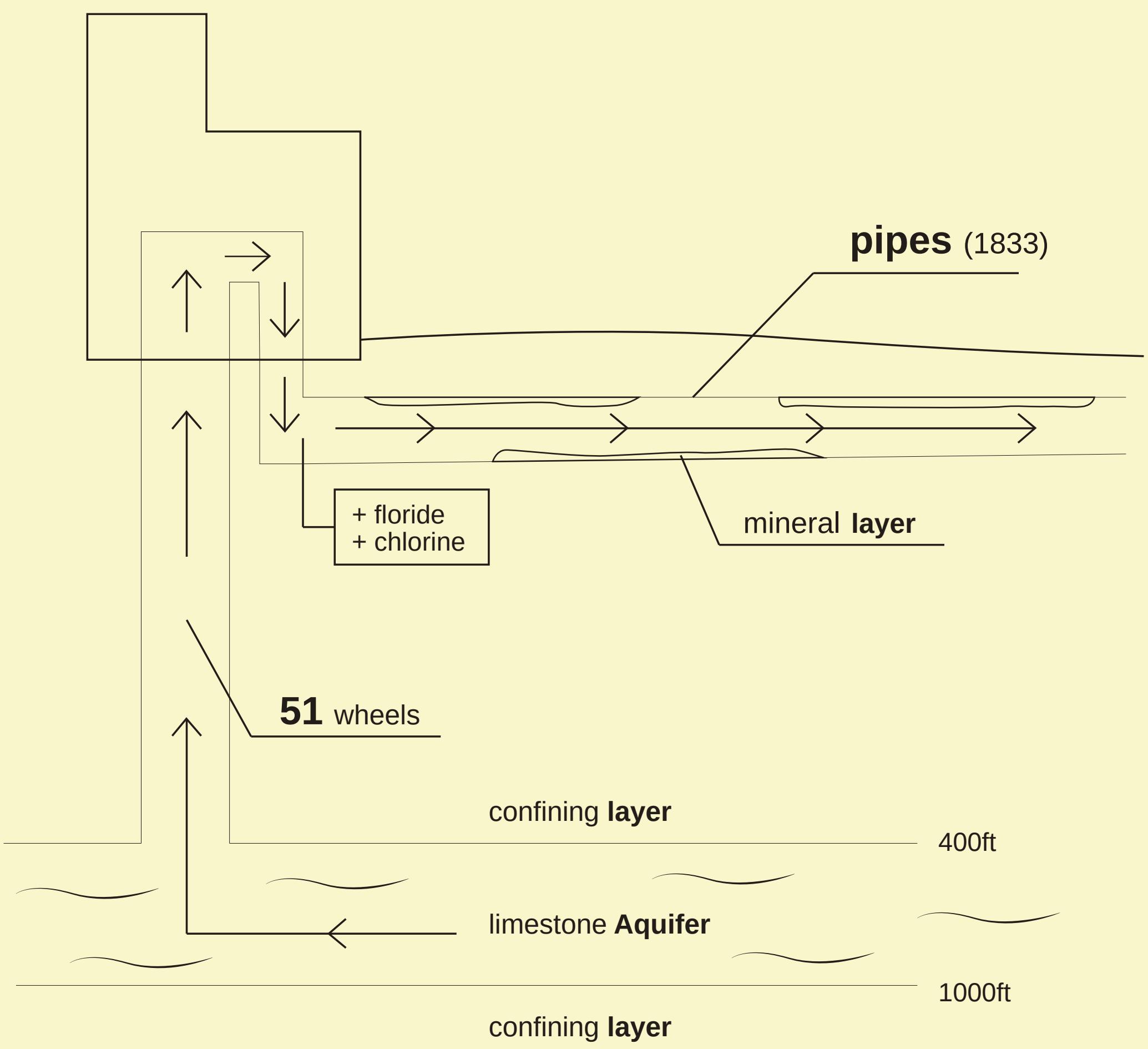
I don't feel the need to
DISCOVER

I don't feel the need to
ACT

Don't **know**, don't
see, don't **care**.

credit: Observation Finding - fire hydrant at Broughton Street, they have different colors because of the length.

Our findings



“I think they have a water treatment facility. I **think** when you **drive out to Tybee**, there is a **big, like building**, that has a water treatment, **but I don't know** where this most come from.”

Holly
(SCAD student)

credit: illustration about how the water is distributed in Savannah, GA.

How might we?

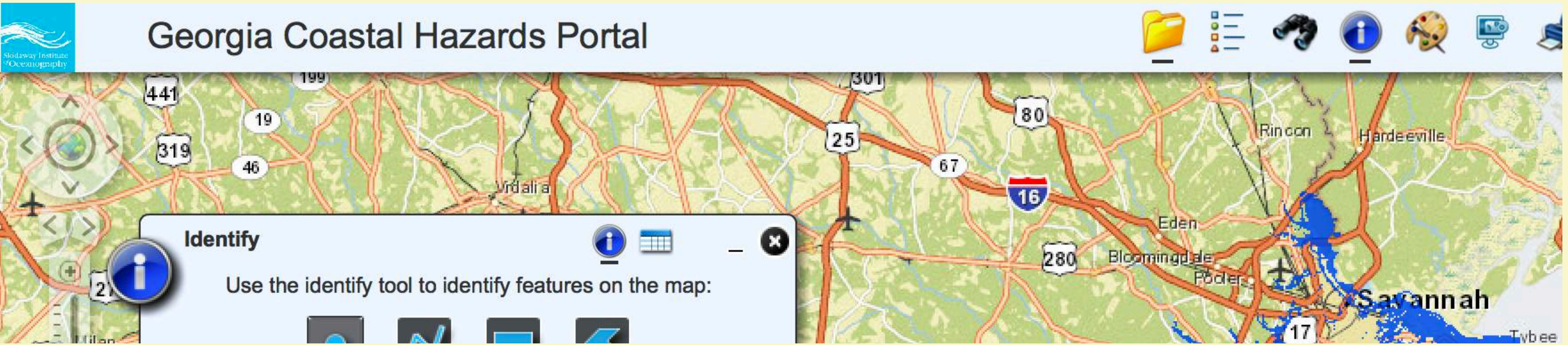
reframe the
water system to
be more visible?

make the water
system more
clarifying?

explain the
“players”
(internal, external)
from the water
system?

build empathy
between people
and the
infra-structure?

develop
innovative
infra-structure
to resist future
weather disasters?



credit: Georgia Coastal Hazards Portal - gchp.skio.usg.edu

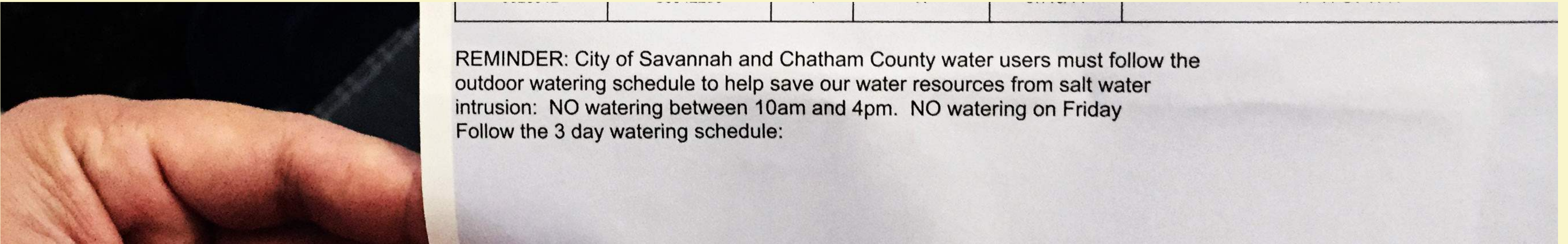


Laura Walker
(Water Department
Manager - SAV)

“People **don't have a connection** to the marshes and the rivers around them and **don't realize** how close that connection is to the insecticides, fertilizers, the pet poop they leave on their yard, **how that goes straight to the river and that hole impact**.”

“**If I wasted** (water), I wouldn't have **noticed** that there is a **difference in anywhere**.”

Todd Hinkle
(SCAD student)



I don't feel the need to
ACT

We will eat
plastic for dinner.

credit: Observation Finding - evidence of wild life on Tybee Pier.

We are starting to realize how **plastic interferes with human health** specially because of the **impact on the ocean** that became **visible** in the last decade. We now see documentaries, **animals dying** because of the **plastic trash thrown in the water** consequently **damaging the eco-system chain**.

There is an **opportunity to decrease the use of plastic** helping slow down the **impact on the water eco-system**.

How might we?

search for
material
substitutes?

deal with existing
plastic waster in
the water?

manufacture
sustainable
packaging?

implement
specific policies
for plastic
industries?

engage
environmentalists
in the society in
a more invasive
way?

Our findings

“Bottle water... **I hate bottle of water**... is kind of a big consumer scam like Dasani, here (*Marine Center*) in the center **we don't drink bottle water** of course we sell it to the public but, we have our own containers that we refill our water with pitcher water.”



Chantal Ardan
(Tybee Island Marine
Science Center - Curator)



credit: Ad Campagin - You buy, the sea pays.



credit: Screen shot from the animation - “Are we eating plastic for dinner?”

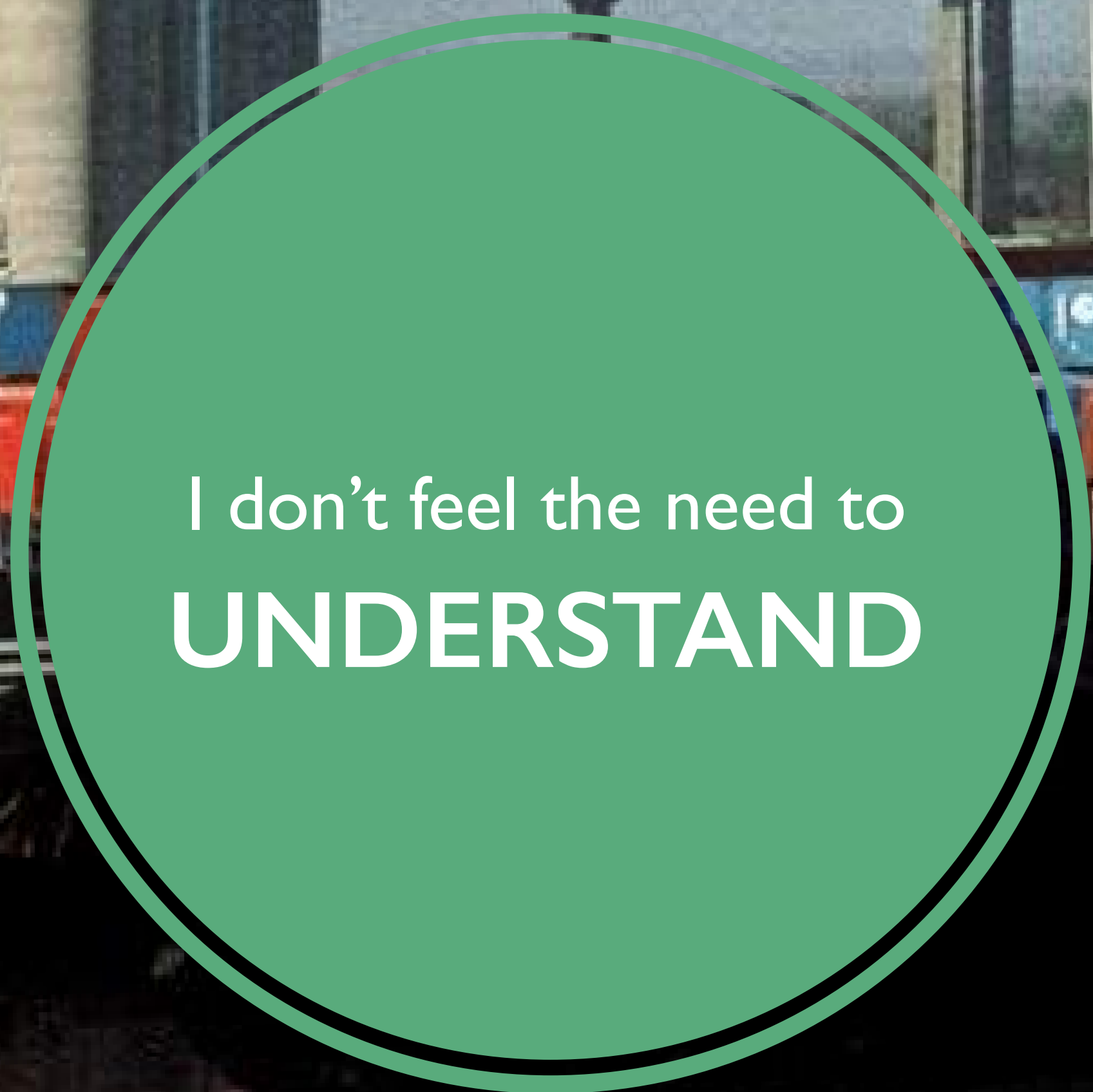
"The water is contained (*bottle of water*) in something **so toxic and so dangerous** to the environment."



Prof. Scott
(SCAD Faculty
Sustainability)



credit: Observation Finding - Trash at Boundary Village Creek



I don't feel the need to
UNDERSTAND

“The high price of cheap”

credit: Savannah Port photo from google.com, citation from Marketplace NPR

Policy: a course or **principle of action** adopted or proposed by a government, party, business, or **individual**. When it comes to elaborate a water **permit** in most cases what is settled is **not** the most **suitable** process **but** the one most **profitable**. Consumers are **misled** and industry and goverment “**blind**” them.

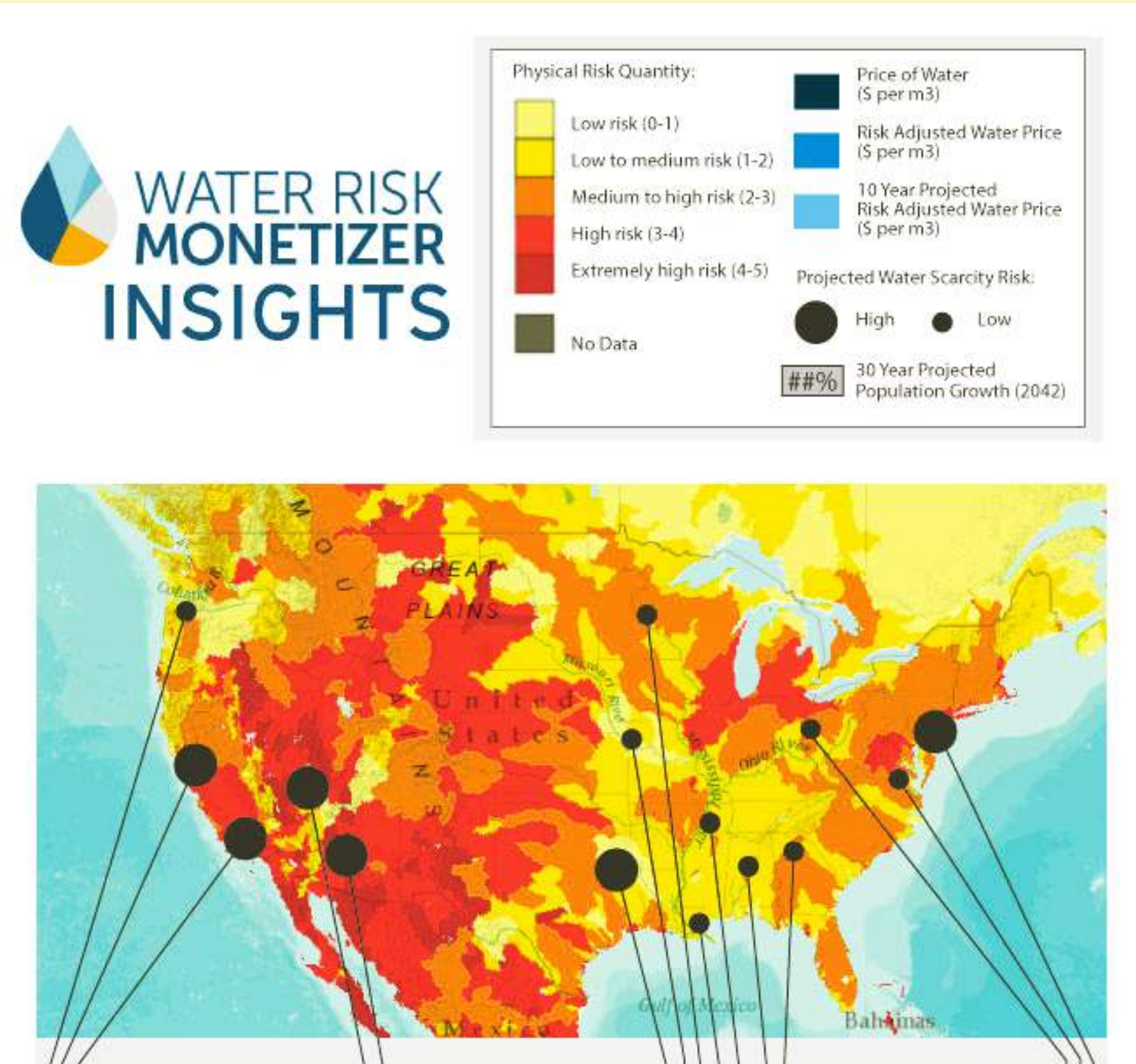
There is an **opportunity** to develop a more adaptable and accessible system of water policies.

Our findings



Prof. Scott
(SCAD Faculty
Sustainability)

"There is the **price of** water and there is the **cost of** water usage and if the **price** is too **low** than **people are allowed** to do that (*leave the water running*) **waste a lot of water.**"



credit: Water risk - Marketplace NPR

How might we?

change the way
people interact
with those
policies?

develop a clear
and new
communication
about water
policies among
media channels?

engage people on
the development
of a water policy?

encourage others
to learn about
water policies?

bridge the “gap”
between citizens
and government
regarding water
policies?

regulate indus-
tries validating
the policies
process without
misleading
conduction?

‘Water-sharing’ plan is water grab

That means communities like Savannah, Augusta and Athens could pay a price in terms of less surface water, a growing source of future drinking water.

credit: extract from Savannah Mornign News about changes in water plan. (2013)

“We had **one-on-one** meeting with the **regulator** that regulate all this sorts of things as well, we've talked with coastal communities, Tybee Island...**they were happy to know but they don't have the capacity to do anything..**”

Prof. Alexander
(Skidaway Institute-
Oceanography)

"We've got water, and industries and **business interests** because of our **cheap water**, cheap and good water."

Laura Walker
(Water Department
Manager - SAV)

“When you work in the very **high class** kayak, you use **materials** is extremely **expensive. Nothing is reused.** You **dump fuel** into water.”

Todd Hinkle
(SCAD student)

“If the **water** is **more expensive**, people will take **shorter showers**, they will turn off it. There would be a lot of **differences**, because **money talks.**”

Zach Nilsson
(SCAD student)

I don't feel the need to
DISCOVER

Technology is a valuable ally.

credit: Project 1 liter limit faucet - rendering

For the last 20 years, technology became an essential ally when it comes to **reduce and recycle water**. Engineers, scientists, professors, find the use of technology essential to their **professional practices**. Although, this knowledge and applicability is **constrained** to a selective group of people.

There is an opportunity to **increase the value of water** through **implementing technological knowledge** for **people's everyday practices**.

Our findings



Isaac Payne
(SCAD student,
Fisherman)

About a green house he stayed once in ATL...

“They use **gray water** for **flushing** the toilets...rather using fresh water.”

GOVERNING

THE STATES AND LOCALITIES

FINANCE | HEALTH | INFRASTRUCTURE | MANAGEMENT | ELECTIONS | POLITICS | PUBLIC SAFETY | DATA | PHOTOS | VIDEO

ENERGY & ENVIRONMENT

The Power of Purple Pipes

You may have never thought about the color of your pipes. You might even think the topic is so mundane that no one could possibly...

BY JOSH GOODMAN | APRIL 30, 2009

Plumbers rely on coloring to distinguish between pipes that serve different purposes. For years, purple pipes have been designated for what's known as "reclaimed water." Reclaimed water is wastewater that, after being processed through a water treatment facility, is reused for not-potable purposes such as crop irrigation or watering golf courses. Purple pipes are so closely associated with reclaimed water that it has come to be known by a different name: purple water.

Much to the chagrin of reclaimed water's supporters, IAPMO's 2009 code says that

credit: Report from governing.com about purple pipes in the US.

How might we?

create a methodology that supplies the action to saving water?

make current technology more useful/suggest new diverse solution for recycling water?

develop reliable methods of water quality for home use (test/filter)?

develop water portable kits?

elevate the water cost of water so that people became more conscious about wasting?

encourage the next generation be more aware about water usage without reasoning?



credit: Observation Finding at Marine Center - how they supply the aquarium water.



Chantal Ardan
(Tybee Island Marine
Science Center - Curator)

“We use **reverse osmosis** in our system... and is from a **municipal source**.”



Laura Walker
(Water Department
Manager - SAV)

"You can recycle water, you have to **by law**, for new carwashes and water parks, that's law, **they have to recycle**... landscaping will be there as well"



credit: Georgia Water Steward Shipped Act 2010

I don't feel the need to
UNDERSTAND

The more **you** learn,
the more **you** save.

credit: Tybee Island Marine Center | Turtle Activity - happens annually

Even though there are **educational efforts** such as field trips, school events, activity books, non-profit organizations that aim primary schools providing water knowledge, there is a “gap” of information when you **transition** to childhood and adulthood. Due to this **disconnection**, the relationship between water and people has fallen apart. The water usage awareness is build in a **unconscious way**.

There is an **opportunity** to **design and develop** educational strategies that support people’s childhood to adulthood.

Our findings



Chantal Ardan
(Tybee Island Marine
Science Center - Curator)

“So we are huge educational facility... our **mission** is that Tybee Island itself is a **classroom**, we do gallery tours within this building, then we go out for beach walks with the students as well as marsh trips so we **go into the field...**”



Todd Hinkle
(SCAD student)

“It (water awareness project) was a **high school project**, we went to just a kind of resources where the water came from and how it was purified. **I don’t remember many of the details.**”



Prof. Alexander
(Skidaway Institute-
Oceanography)

“You have to get them when they are young and make it part of their expectation...this is how the major social changes have come in this country...”

How might we?

develop new
interactions to
enhance water
usage awarness?

design new
user-friendly
devices to
improve the
water usage
pratice?

create a new
sustainable
approach about
water usage?

enable educational
programs between
professors,
students,
government,
and industry?

engage media to
popularize the
knowledge of
water usage?

encourage the
next generation
be more aware
about water
usage without
reasoning?

credit: Ocean Film Festival | Partnership between Gray’s Reef and NOAA



I don't feel the need to
DISCOVER

Seeing...
is believing.

credit: Observation Finding - evidence of fertilizers in a farm crop in GA.

Our senses provide characterists from the real world. We rely on them to make our judgement about what surrounds us. This fact lead us to build experiences. When a fact doesn't seem to be a typical experiences, affects us and we reframe our perspectives.

There is an opportunity to reframe contradictional stories about water usage and quality.



Prof. Scott
(SCAD Faculty Sustainability)

“Engaging over the last 20 years, you've seen hunting organizations and fishing coming to realize that their best allies are environmentalist, because when they are still trying to catch the amazing **tart** in Gulf of Mexico, Key Biscane and so on, **they are disappearing**, because of **land development and affluence** and all of this. This group of people **are waking up! No longer taking the environment for granted.**”

How might we?

lead people to recognize what is true or false about water usage and water quality?

demonstrate the main water issues?

prevent bias choices without reasoning?

“The **water pipe** in our house **broke** once, and the **water bill** of that month went **completely insane.**”

Gary John
(SCAD International Student)



credit: Observation Finding - Pipe Leaking .



"**Color** and **smell** are the **highest complains.**"

Laura Walker
(Water Department Manager - SAV)

Our findings



Zach Nilsson
(SCAD student)

"If there is a **leak**, if the water **smells**, I call the landlord first or go to the water bill establishment."

Report calls Savannah River third most toxic in America

Posted: June 26, 2014 - 5:58pm | Updated: June 28, 2014 - 9:31am



Dash Coleman/Savannah Morning News

Boaters walk away from their vessel Thursday at Houlihan Boat Ramp Park on the Savannah River in Port Wentworth.

By Dash Coleman

A nonprofit research and policy center is calling the Savannah River the third most toxic in the United States after a report released Thursday showed more than 5 million pounds of toxic discharge were released into its waterways in 2010.

Additionally, with more than 10 million pounds of toxic chemicals being dumped into Georgia's waterways in 2012, the state was ranked eighth worst in the nation in the report by Environment Georgia Research & Policy Center.

"(The report) analyzes data that the EPA stores in something called the Toxics Release Inventory that basically looks at the amount of toxic pollution that's in our rivers," said Environment Georgia director Jennette Gayer. "And unfortunately, the Savannah ranks very high on that list."

credit: Report from Savannah Morning News June, 2014

“I have **heard** that the river is one of the **top three worst** rivers in **America** and I have heard that Savannah is a huge shipping place, huge port city.”

Holly
(SCAD student)



Know the coast,
save your life.

credit: Observation Finding - evidence of wild life on Tybee Pier.

Geography settings are **facilitators** between people and the water. People who live close to a sea shore **intensify** their **relationship** with water but that **doesn't mean** this people are **more aware** of water usage than those who live in the country. Their **advantage** is the **access** to the information and life experience making **their actions more evident**.

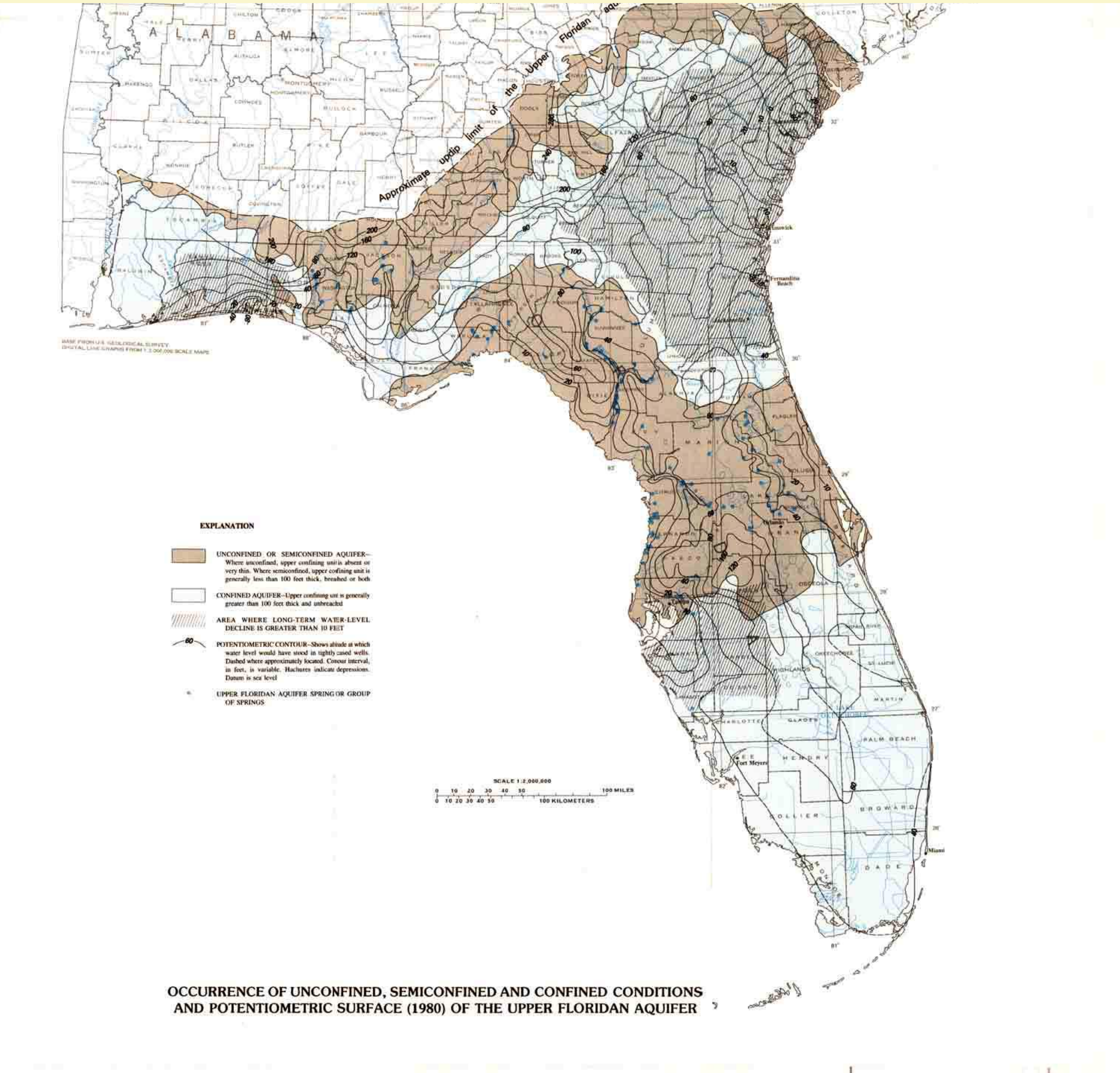
There is an **opportunity** to **benefit** from sea shore communities to create a new **learning approach** that provides water knowledge.

Our findings

"Here in the **south** is so **nasty and hot** most of the **year**"



Prof.Alexander
(Skidaway Institute-
Oceanography)



credit: Floridan Aquifer map - supplies 5 states: AL, GA, SC, NC e FL.

How might we?

interact with the environment in cities such as Savannah without harming the environment?

improve Savannah's recreational places beneficial for water knowledge?

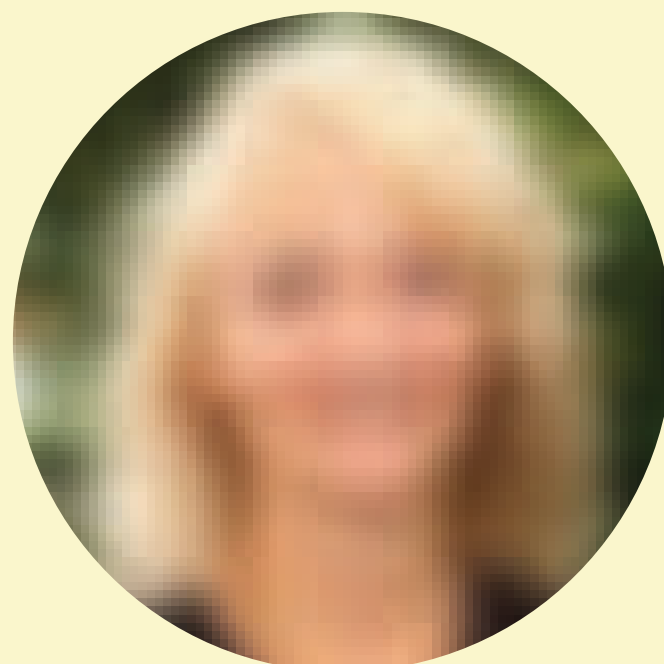
aid wild life to not get harmed by low quality on the water?

construct more water friendly establishments?

"Savannah sitting on the **coast** has an **obligation** to **protect** our surrounding, coastal resources, with the marsh and a colonial bird in the background"

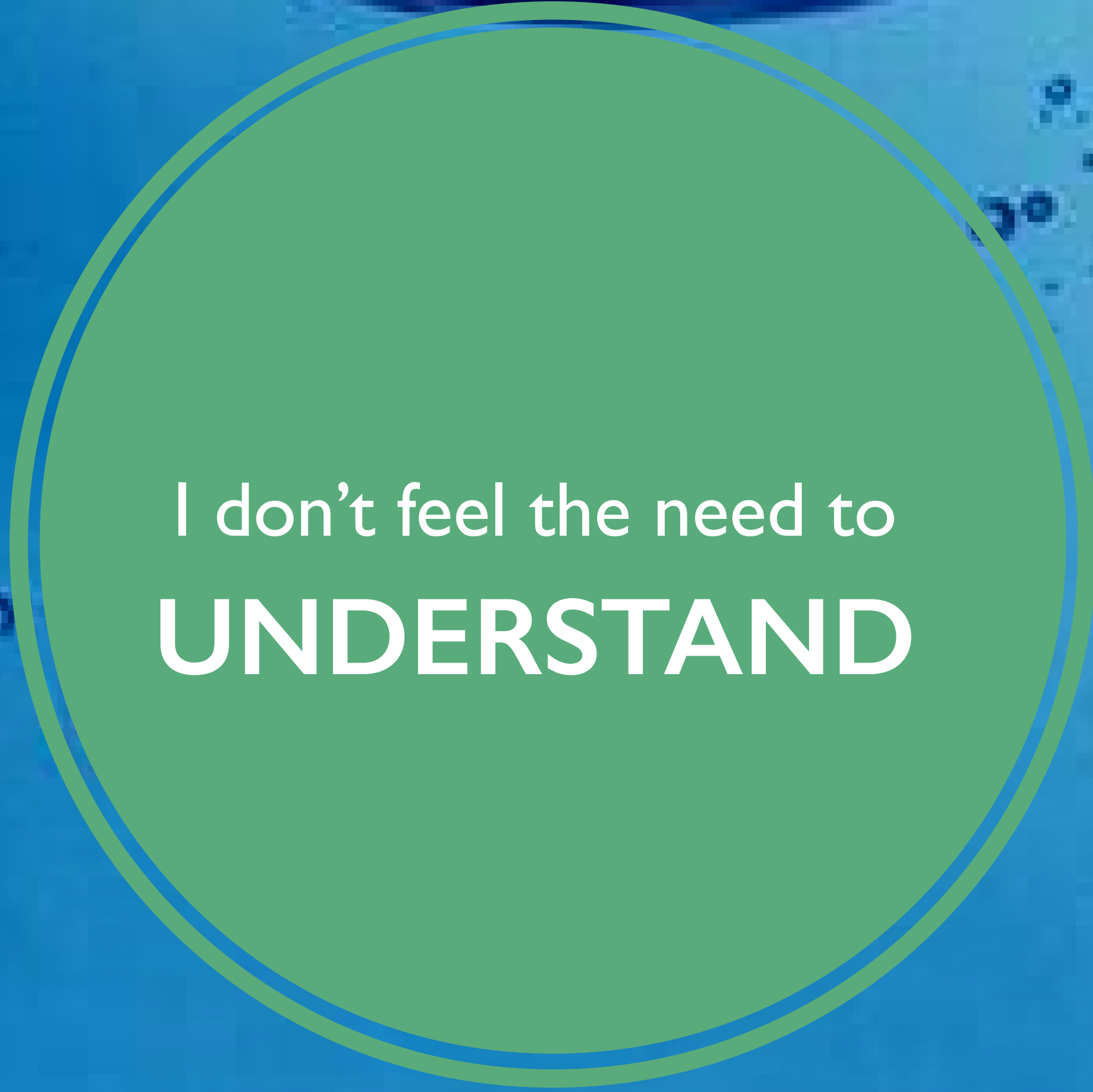
"The **salt water intrusion** is a **problem** from the **overuse of water**"

"**Stormwater** is the **biggest challenge** in Savannah."



Laura Walker
(Water Department
Manager - SAV)





I don't feel the need to
UNDERSTAND

We are **WATER.**

credit:Water photo from google.com

Our findings

We are **75% water**. Our **connection** with water is a **vicious cycle**, it's out **primary need**, it's **impossible to live without it**. It's so vital to us that, our **daily activities** are **tied up** with water.

There is an **opportunity** to **improve** people's awareness between water usage and our **daily basis activities**.

How might we?

approach people to the subject of water usage?

drive people to be more conscious about water usage actions?

create new habits on how to save water?

involve entities to work together to save water?

use design to illustrate water waste?



credit:Tybee Island Beach, photo: David Londono

“I like beach I like find the **treasures of the ocean** it's so beautiful”

Chantal Ardan
(Tybee Island Marine Science Center - Curator)



"It is by far **the most important natural resource** and I'm not biased at all when I say that."

Laura Walker
(Water Department Manager - SAV)



credit:Water photo from google.com

“I feel like **I can't leave away from water** or feel comfortable without water around me.”

Zach Nilsson
(SCAD student)

“**Brushing** teeth, shower, toilet... **cooking...washing** dishes...”

Gary John
(SCAD student)



credit:Water photo from google.com

Prof. Alexander
(Skidaway Institute- Oceanography)

I don't feel the need to
ACT

The time to
change is now.

credit:Water photo from google.com

Some of us **might** understand how we waste water but don't feel
estimulate to **take actions** or are **not sure** what to do. The time
has come for us to **teach each other** and **change our behaviour**
towards **water usage**.

There is an **opportunity** to **rebrand** our **water value** so that
people became more **devotional** about water usage.

How might we?

reward people
willing to engage
to the cause?

develop multiple
strategies to
change people's
behavior about
water usage?

convince laggards
to change their
attitudes?

use the
combination of
government and
industries to help
warn people about
water overuse?

make a simple,
yet effective
objective to
awaken people
about water
usage?

Our findings

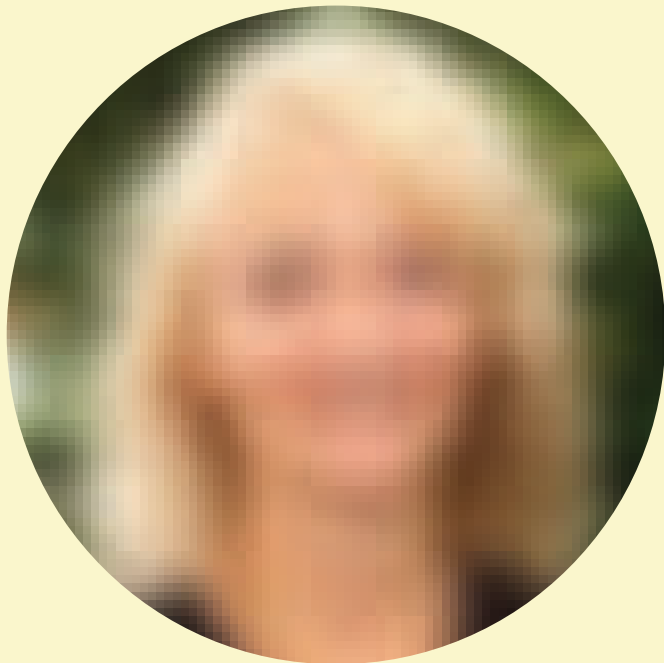


credit: Aquarium Tybee Island, photo: Carol Massá

"If we were on a **drought**, if it's **summer**
or spring without a lot of rain, **water**
consumption goes up, because
people want their yards green."

"People **live the water running**
because they **don't pay directly** their
water bill, **there is no connection to**
the water"

Laura Walker
(Water Department
Manager - SAV)

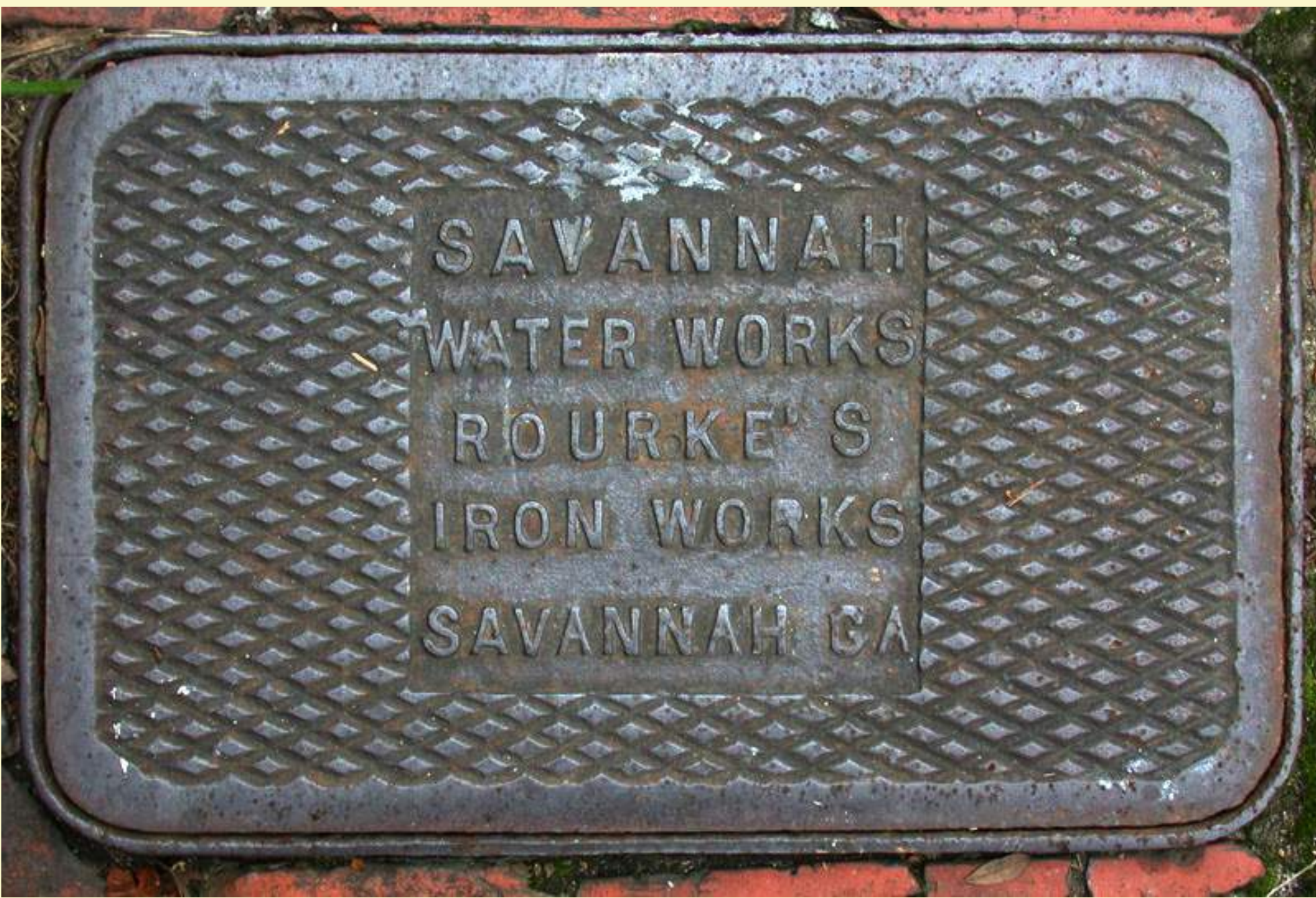


Prof. Scott
(SCAD Faculty
Sustainability)

"The **water meter** should be
reconsider, it's buried on the
ground, it's good for the city but
not for the consumers,
because they can hardly ever see it."

"I would **love to learn** if
someone **provides** one. But I
won't go outside and find one
to join **voluntarily.**"

Bohan
(SCAD student)



credit: Water meter photo from google.com

"If you wanna "correct" the
environment, I would **start** would be
the **local community.** "

Zach Nilsson
(SCAD student)

