

FIELD ACTION JOURNAL

DESIGNING
SUSTAINABLE
NOMADIC
STRUCTURES

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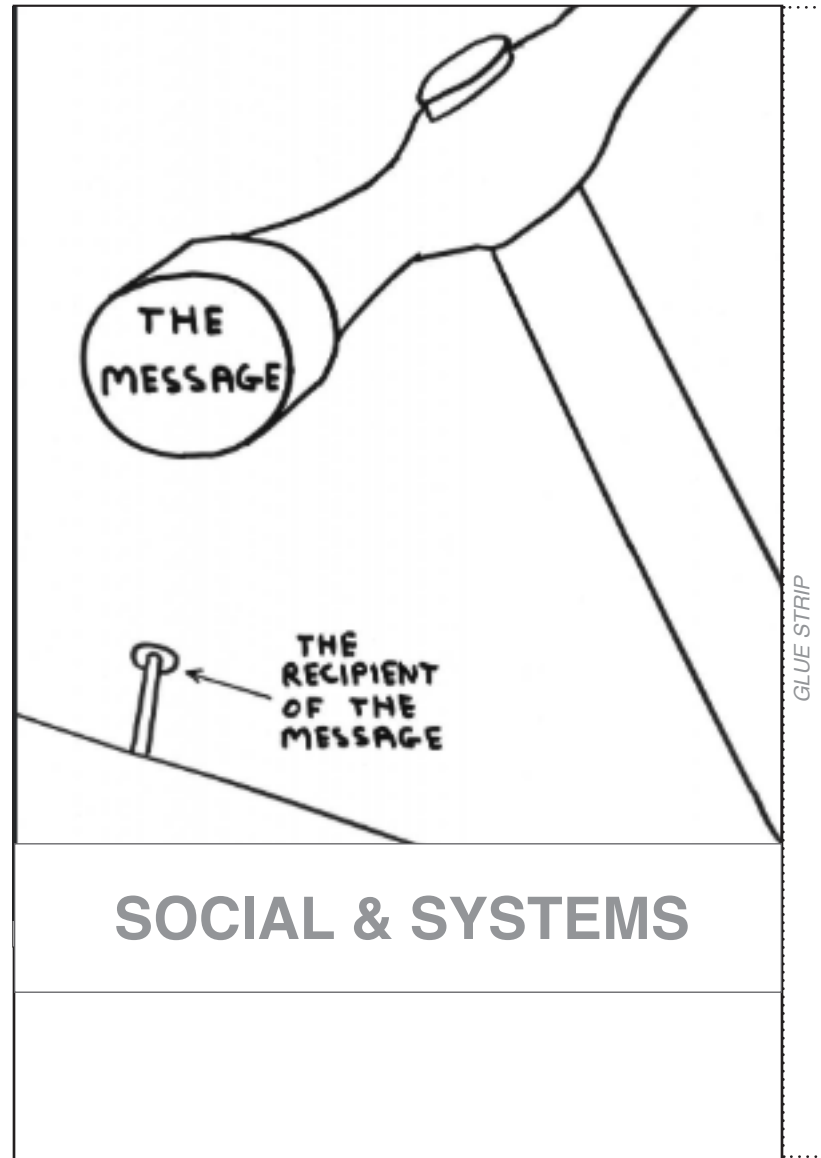


GLUE STRIP

*NOTE: PLEASE ADD PAGES AS
YOU SEE NECESSARY*

SUSTAINABLE SYSTEMS

PARSONS THE NEW SCHOOL FOR DESIGN , SPRING 19
INSTRUCTOR: CAROLIN MEES



FIELD ACTION PROJECT 1 PART 1



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Project 1 Part 2 A



Wheat grass growing process

Project 1 Part 2 B

Mary uses a community garden because she knows it's convenient for her community, the world and herself. She uses this garden to socialize as well as grow her own produce so that she can maintain a healthy diet without having to spend large amounts of money on expensive produce. Mary grows tomatoes, cucumbers, and basil in the garden space she has reserved in a

four plot square that other people reserve. As part of participation in the community garden she is asked to maintain parts of the garden including lounge spaces and pruning of wild life. Mary and the other people who make up the community garden are asked to bring their compost from home as part of keeping the community garden running sustainably. Along with team work the efforts put into the community garden are all for the greater cause of making New York a greener place.



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FIELD ACTION PROJECT 2 PART 1 A



The electric grid is an interconnected web that delivers electricity from producers to consumers. Off-grid energy systems are designed to help people function without the support of remote infrastructures, like the electrical grid. The most popular source of off-grid energy is solar power. Other options include electricity produced from wind turbines and other methods of wind energy. Micro hydroelectricity can also be used to live off the grid. The easiest way to set up a renewable energy source is with a Small scale hydropower generator. All you need a river or a stream that is running a rate great enough to catch and spin a hydro turbine to supply energy to the generator it is connected to.

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Field Action Project 2 Part 1 B



Scoby Week 1

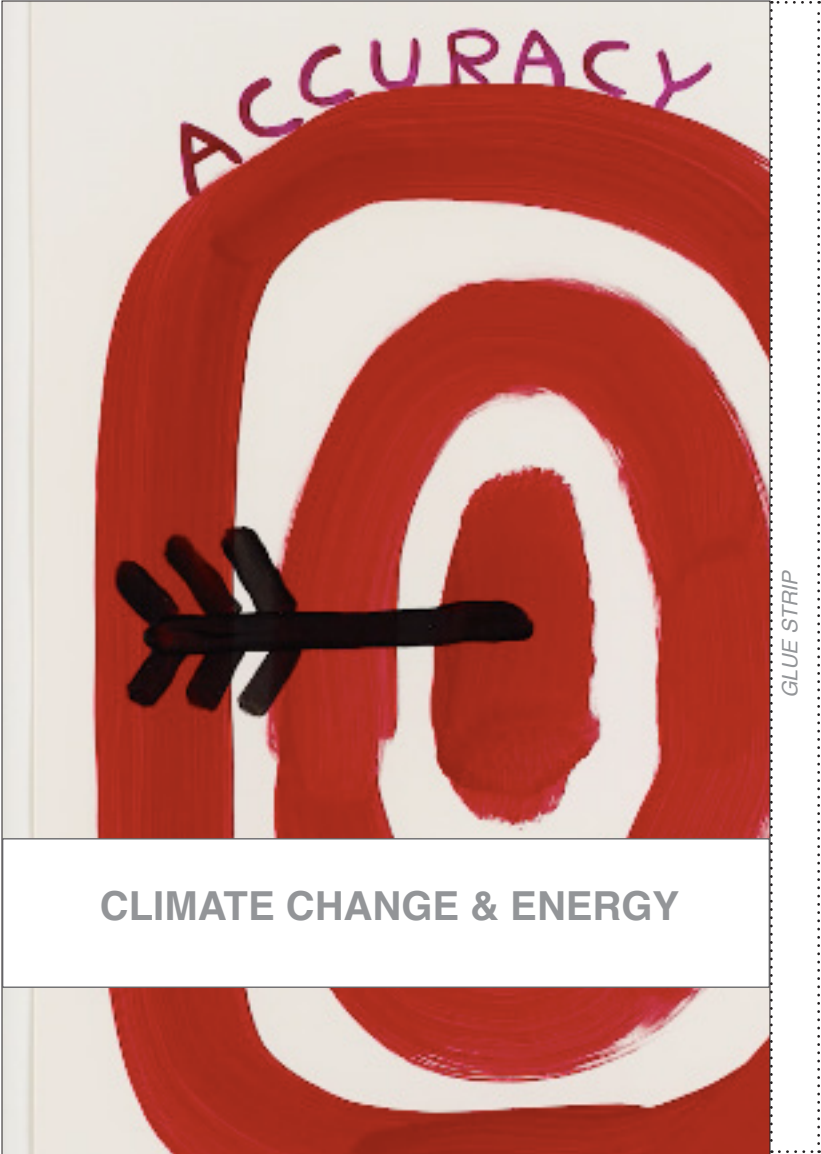
The kombucha leather for a couple of days did not grow, I thought that was because of the lack of heat supplied to the container that the kombucha was in. After four or five days a film emerged on the top of the liquid and it started to grow at a much faster rate. In maybe a week and a half there was a thick layer on the surface. During its growth the smell was brought up a few times

by my roommate and fortunately, there were no fights. I extracted it from its container and dried it on the lid of the plastic box, each day I flipped the leather and it successfully dried. The result was a thin crispy layer of kombucha leather, that was very brittle. Unfortunately, I could not use the leather because of how delicate the dried product had become.



Scoby Week 3

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CLIMATE CHANGE & ENERGY

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FIELD ACTION PROJECT 2 PART 2



Photos from Athenacinema.com

The first thing that caught my attention from the documentary was the conflict between the Native American people and their land being destroyed by a drilling company. I had recently watched Joseph Cambell's documentary on Netflix "The Power of Myth" and what I learned from that was that Native Americans valued their lives, their land and every living thing with as precious. it seems that many mythologies around the world are in accord with life. Americas mythology is largely based in consumerism and capitalism. This mindset devalues the mystery of life and turns it into a commodity. The current push for economic growth was touched on in the movie at both angles, the pros, and cons of what growth brings. As growth brings advancement it also leaves behind a mess that is hard to clean up. And when we advance towards cleaning up our mess with

creating tools and products to clean up the mess we end up taking more from our planet and leaving more damage behind. The economic dependency on Fossil Fuels is showing to be extremely damaging to our planet as many people are aware of, taking part in a more beneficial way of living that counters the effects of fossil fuels have become more attainable but seem to have little impact when there is a giant portion of our population that in some cases have no choice or willingly choose to for the sake of survival or financial gain. Fortunately, there are communities that band together and protest against the damage of our planet, giving proof that the human spirit is alive and fighting for the survival of life on the planet. I see joining these groups of people in their fight and protest for protecting life to be the most impactful way to push for change.

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Field Action Project 2 Part 3



Credit: Leaflet/Wikipedia/CC BY-SA 3.0

Wind turbines operate on a very simple principle. The energy from the air turns three or four blades around a rotor which is connected to a generator that produces electricity. There are two types of turbines that exist, Upward wind turbines which faces the wind and Downward turbines which faces away from the wind. The Rotational speed required to create electricity is 1000-1800 rpm. The energy created by Wind turbines is sent to a transmission substation and is then distributed to consumers through the electric grid power lines. Lead acid batteries are used to store leftover energy. Wind turbines can use excess power to compress air that is then stored in large above ground tanks or in underground caverns. When necessary this compressed air can be used through direct expansion into a compressed air motor. Hydrogen Fuel cells can also be used to store excess power. Possible mitigation is still being assessed on wind turbines. The benefits of wind turbines are that they are a clean source of energy using a renewable source (Wind), they are cost-effective and one turbine can supply energy to 3,300 EU households. The Cons of wind turbines are that high upfront investment effect cost negatively, unpredictable weather, noise pollution, and biological and environmental impacts. One crucial part to the design of the layout of wind turbines is that they have to be placed 5 to 10 rotor diameters away from each other to avoid complications. As for companies involved with wind energy AWEA short for American Wind Energy Association is the leading company and voice for wind energy today.

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UN class visit

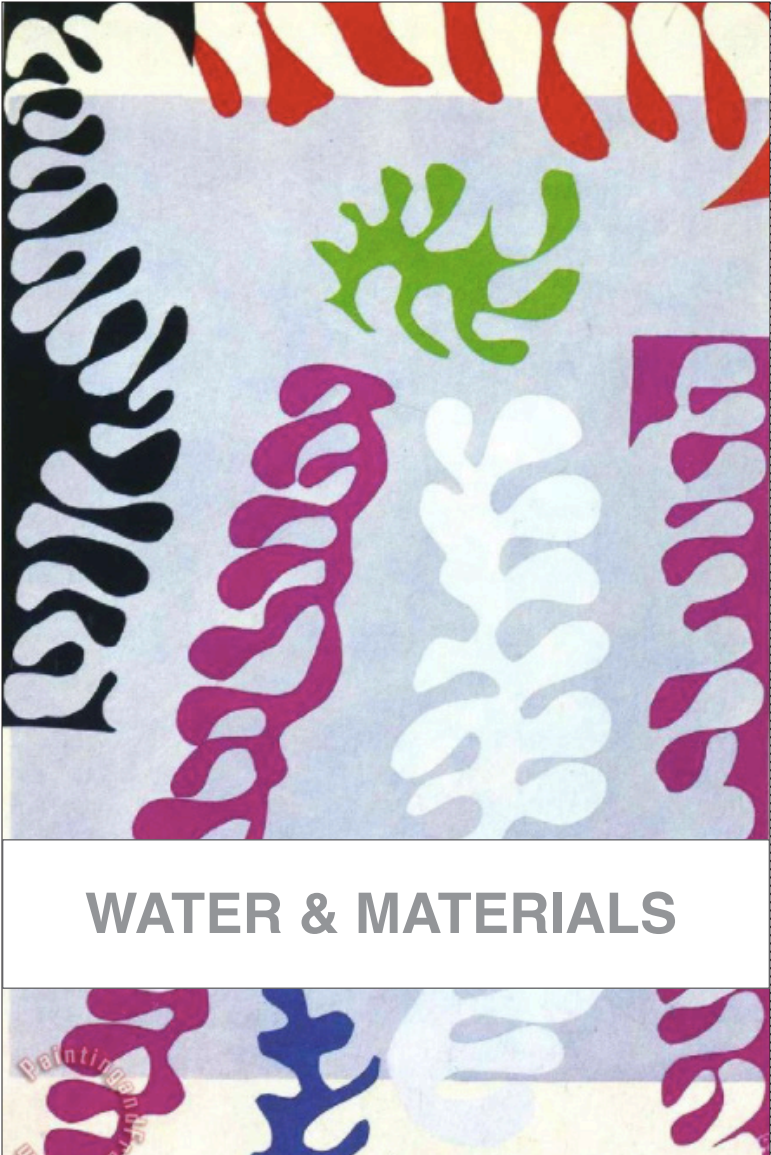


Our Un trip was one of the most impactful moments of my life, seeing the whole school gathering at a high security building covered with murals, art, and information that represented the unity of nations inspired me. During the presentation, I was overcome with dread but instead of feeling defeated by the state of our environment it lit up new life within me, my heart started to race. The discussions of the possible destruction of the copper fields, the mistreatment of Native Americans and their land and impact of a

Nations consumptions was more than enough to get me on board. The slides shown by all three speakers moved me to want to devote myself to a larger cause, a cause that is for the survival and sustainability of healthy life on our planet. Lauren Redniss's books caught my attention because she was using her skills as an artist, illustrator, and writer to impact and inform a large audience. I am inspired to follow in her footsteps and with my skills as an artist, find a living that will be both fulfilling creatively and impactfully.

Changes in precipitation since 1980 due to climate change has resulted in a burning 10 million acres in western forests. According to the National Geographic, heat rises three degrees each year in California. This rise in heat results in moisture being sucked from from the plants and wildlife resulting in higher rates of forest fires. The connection to Climate Change is clear in the research conducted by the National Geographic that records the change from the 1980's. The person I am imagining in this California is a backpacker, someone who is on the road backpacking through Cali. My design is a backpack that holds a tent a blow up mattress, an outer solar panel, water bottle holder with a filtering system for using creek or river water and other included survival qualities. The design of the tent will have one end that will be able to join to other tents if there is someone with the same designed tent. The backpack will be equipped with a professional respirator in cases of ash falling from nearby forest fires.





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WATER & MATERIALS





picture of road runner by Linda Tanner

I chose to study North American Roadrunners. the roadrunner has a few qualities that I want to focus in the design of my module, first I want to focus on the general function of the bird's feathers I want to copy the repetition accrues on the bird's body . second I want my module to incorporate one spe-

cial function the North American Roadrunner and the gazelle have in common, both have a duct by their eye that allows them to get rid of any salt excess salt from it drinking water. whatever way I can in my repetitive module I want to be able to incorporate that function of water purification.

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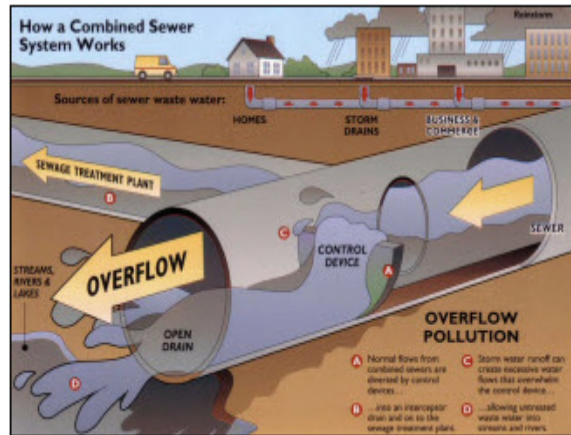


Image: Moundsville WWTP

What I see wrong with the Combined Sewage Overflow is the consequences of the discharge that happens in wet weather seasons. Consequences such as Human and animal health hazards, Water quality impacts, Bathing beach closures due to bacterial contamination, Aesthetic impacts due to floating debris or oil slicks, Shellfishing bed closures, Algae growth, Reduced oxygen levels in the water. Separating stormwater and sewage pipelines seems

like a good option to clear up the negative impacts of CSO but stormwater still draws in pollution from the streets which still contaminates the water. The best is a combo of storage tanks in wet weather and the separation of sewage and storm drain waters to allow for the best results for cleaner water being dumped into bodies of water. Using green infrastructure would be the cherry on top when it comes to completing an upgrade on the CSO infrastructure.

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