

The background features a topographic map with brown contour lines and dashed lines, overlaid on a light orange grid. Two blue wavy lines are positioned at the top and bottom right of the page.

Environmental Justice at and around the Great Salt Lake

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Sydney



About Us



Environmental Humanities



Maggie



Today's Agenda

- Biodiversity of the Great Salt Lake
 - Why is it unique?
 - What's going on?
 - Why does it matter?
- Environmental Justice and Injustice
 - What is it?
 - How does it impact humans, plants, and animals?
- What can we do about it?
 - Hopes, goals, and actions

Environmental Justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, in the development, implementation, and enforcement of environmental laws, regulations, and policies.



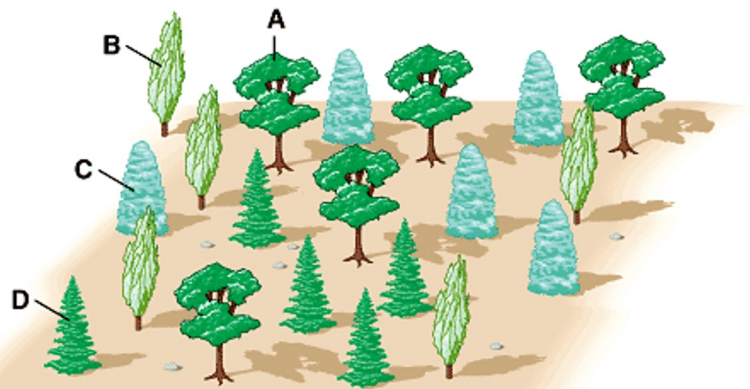


Biodiversity

“The name we give to the variety and amount of all life on Earth.”

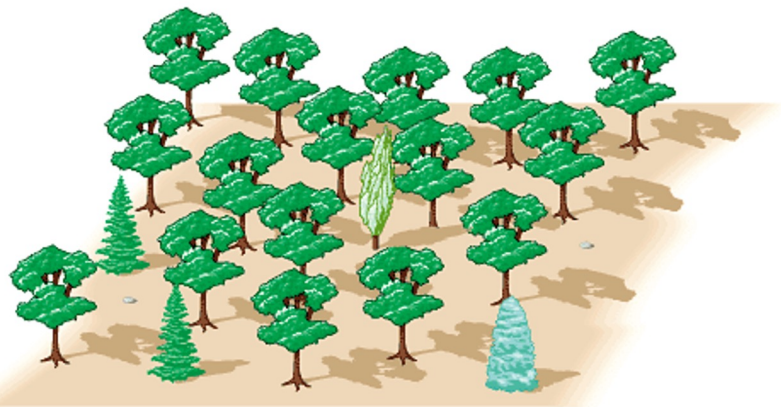
More specific ways to measure:

- Species richness
- Species evenness
- Genetic diversity



Community 1

A: 25% B: 25% C: 25% D: 25%

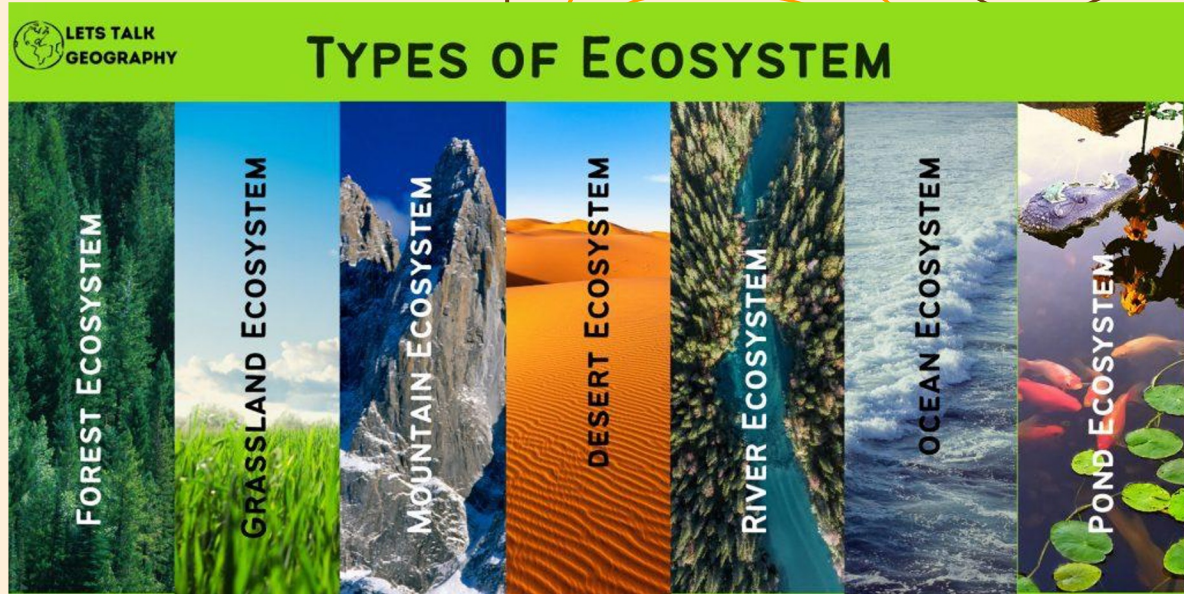


Community 2

A: 80% B: 5% C: 5% D: 10%

Ecosystems

- A biological community of interacting organisms and their physical environment
 - Complex
 - Interconnected
- Varying types based on climate:
 - Temperature
 - Water
- Saline lakes are an extremely unique ecosystem type!
 - Great Salt Lake
 - Dead Sea



Great Salt Lake- Saline Lake

Few species live in
the water: Brine
shrimp

70 miles up/down
25 miles across

River inputs have
dams

Small waves,
storms add
significant area

Great Salt Lake AND Freshwater lakes

Migratory birds depend
on them!

So big it can be difficult
to see the other side

Rivers flow into them

Water added during
storms



The Great Salt Lake

GSL Ecosystem

Brine Shrimp



**Migratory
Birds**



Brine Flies



**Microbialites &
Algae**



What is happening?

Where are all my brine flies??



Lower water level

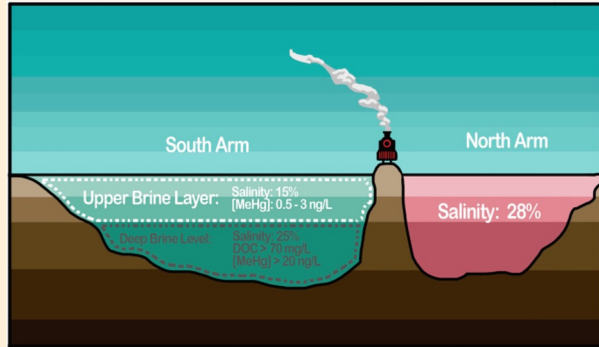
Higher salinity

Brine shrimp can't survive above 30% salinity, some algae also can't survive

Brine flies have less food

Birds have less food

Lower species richness and evenness



The Southern Pacific Railroad Causeway

South Arm

- Bear River
- Weber River
- Jordan River
- Lower salinity : 12–15%



North Arm

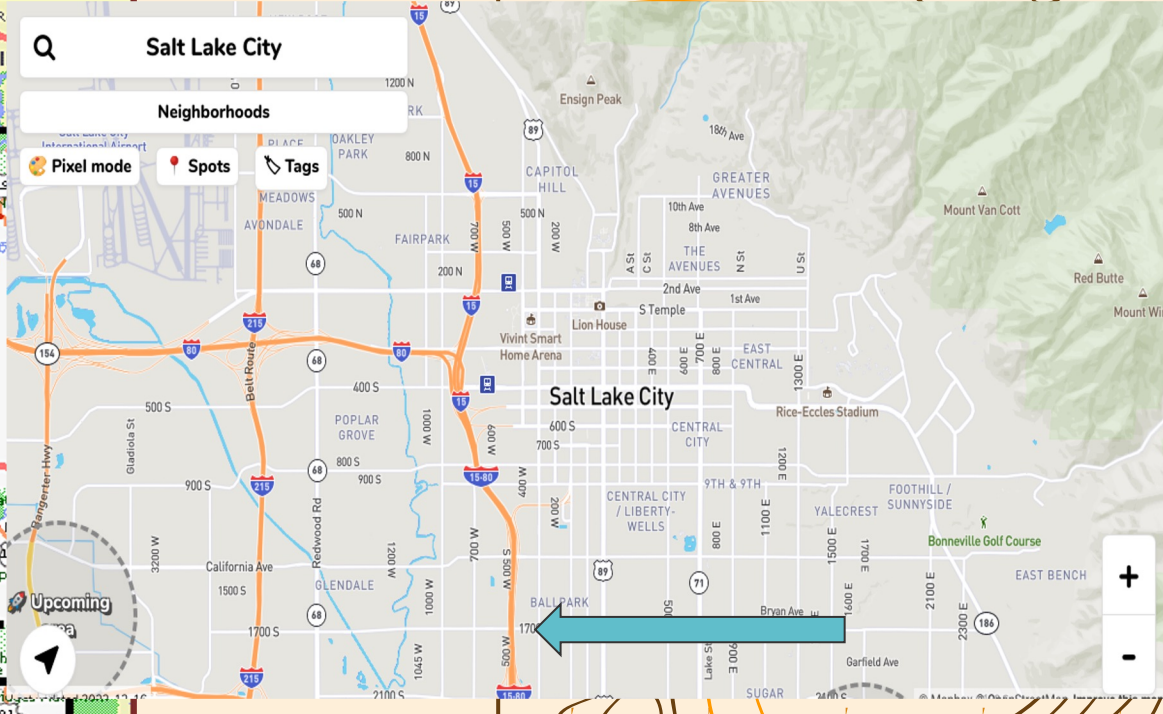
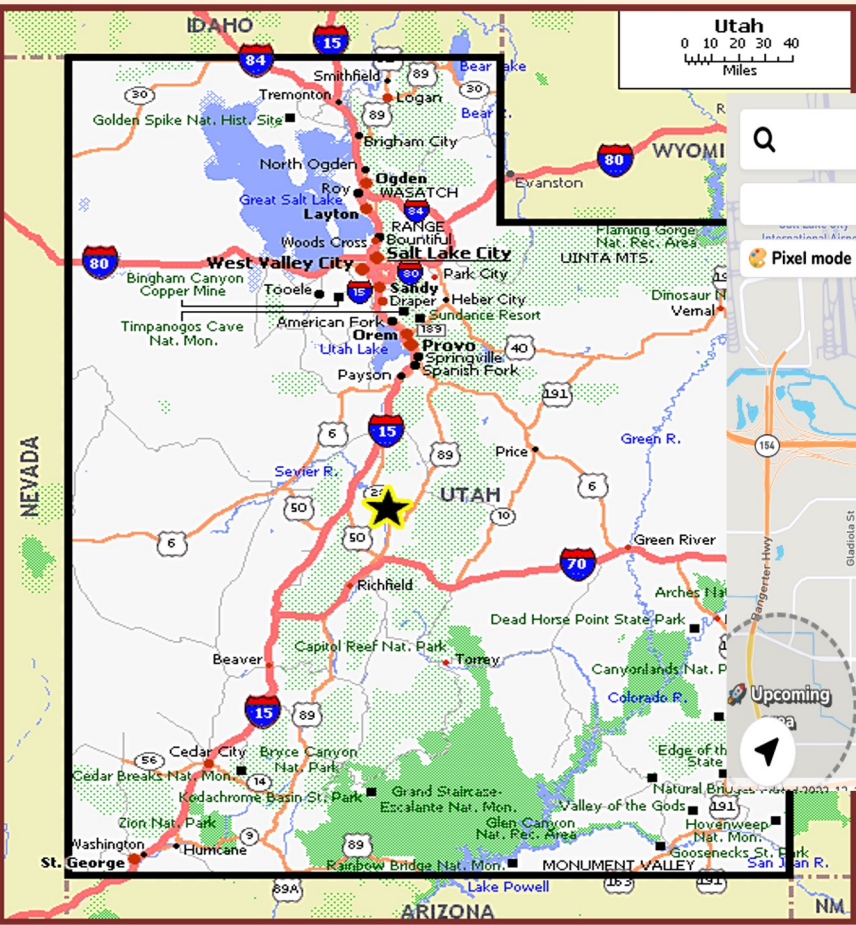
- Fed by what little (salty) water can trickle under the causeway
- Higher salinity: 26–30%

Unintended Consequences



Making money for railroad companies... at what cost to the ecosystem?

Environmental Justice: I-15



Unintended consequences: Trying to make travel more convenient- Who gets left out?

Uneven Infrastructure



The Salt Lake Tribune

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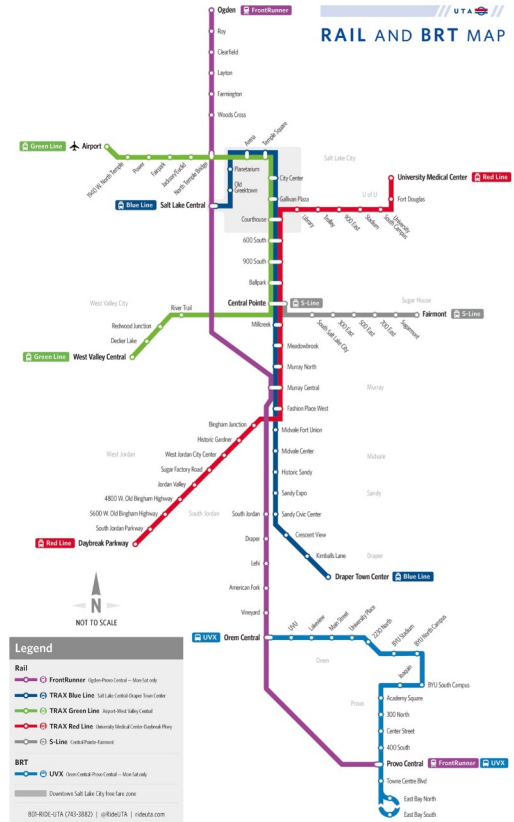
I-15 expansion: Here's what you need to know

How wide would it be? What would it cost? Why might it be needed? Whom might it help? Whom might it hurt? Why do so many oppose it?



Salt Lake west side residents voice opposition to I-15 expansion

1.6 billion dollars allocated to the highway project... any ideas for how that can be spent better?





- Enhance ecological protection
- Sustainability– long term
- De-centering the human
- Co-existence
- Acknowledging the interconnectedness of life on earth

Environmental Justice



- Fair treatment and meaningful involvement of ALL people in developing & implementing environmental laws, regulations, & policies
- Equal access to the decision-making processes towards having a healthy environment to live, learn, and work
- Equal protection

Distributive Justice

Placement of infrastructure (highways and power plants)
and environmental benefits (parks and trails)

Procedural Justice

Making it easy to get involved and share ideas

Interpersonal Justice

Respect for cultures, beliefs, opinions



Activity:

How do you imagine a community working towards environmental justice? What images and words come to mind?

