Mono Lake Water Conservation Center

Producing Agents for Social Change

14621

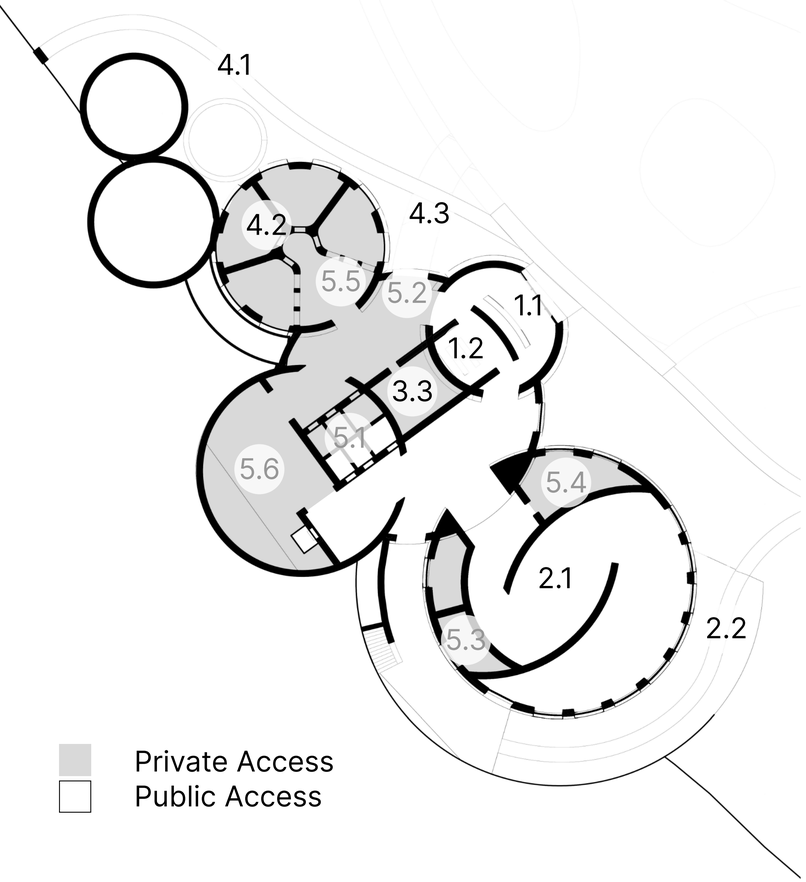
“All things are connected. The plants, streams, meadows, fish, trees, and the wildlife will be restored to the rushing waters talking to all in a refreshing way, drink up my relations. It is a good day. Water is life”
Charlotte Lange - Chair, Mono Lake Kutzadika’a Tribe

Social, ecological, and climate issues of Mono Lake are connected and require large scale social change. Real impacts happen when influential people with power become agents for social change.

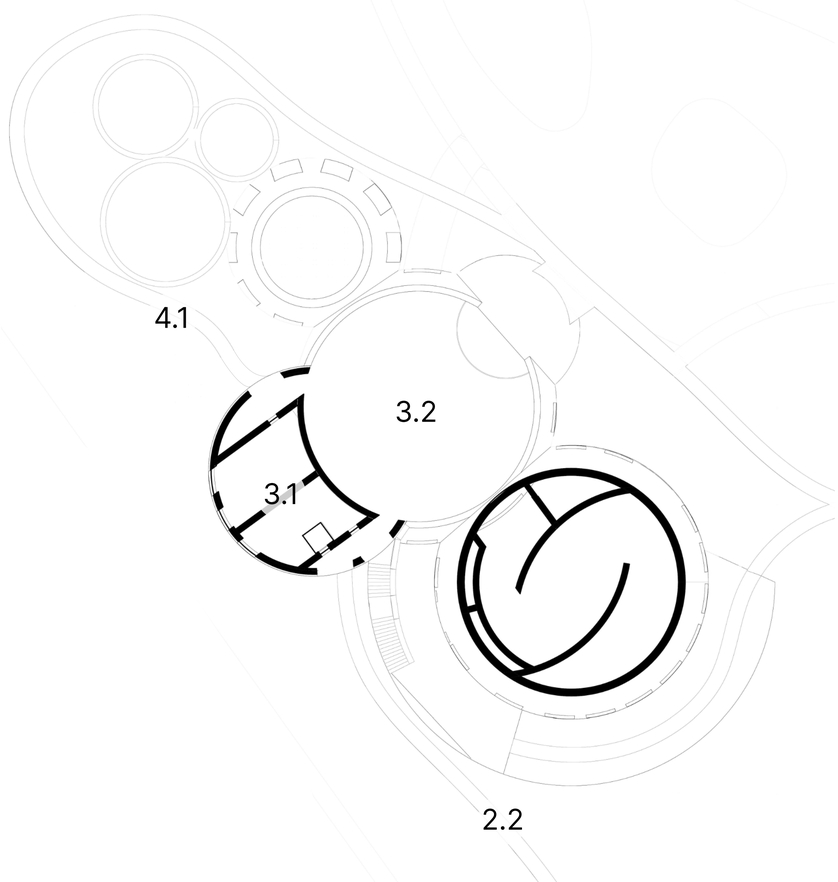
This center turns these influencers into agents of social change through these steps:

Building Layout - Visitors follow these steps, turning them into agents of social change.

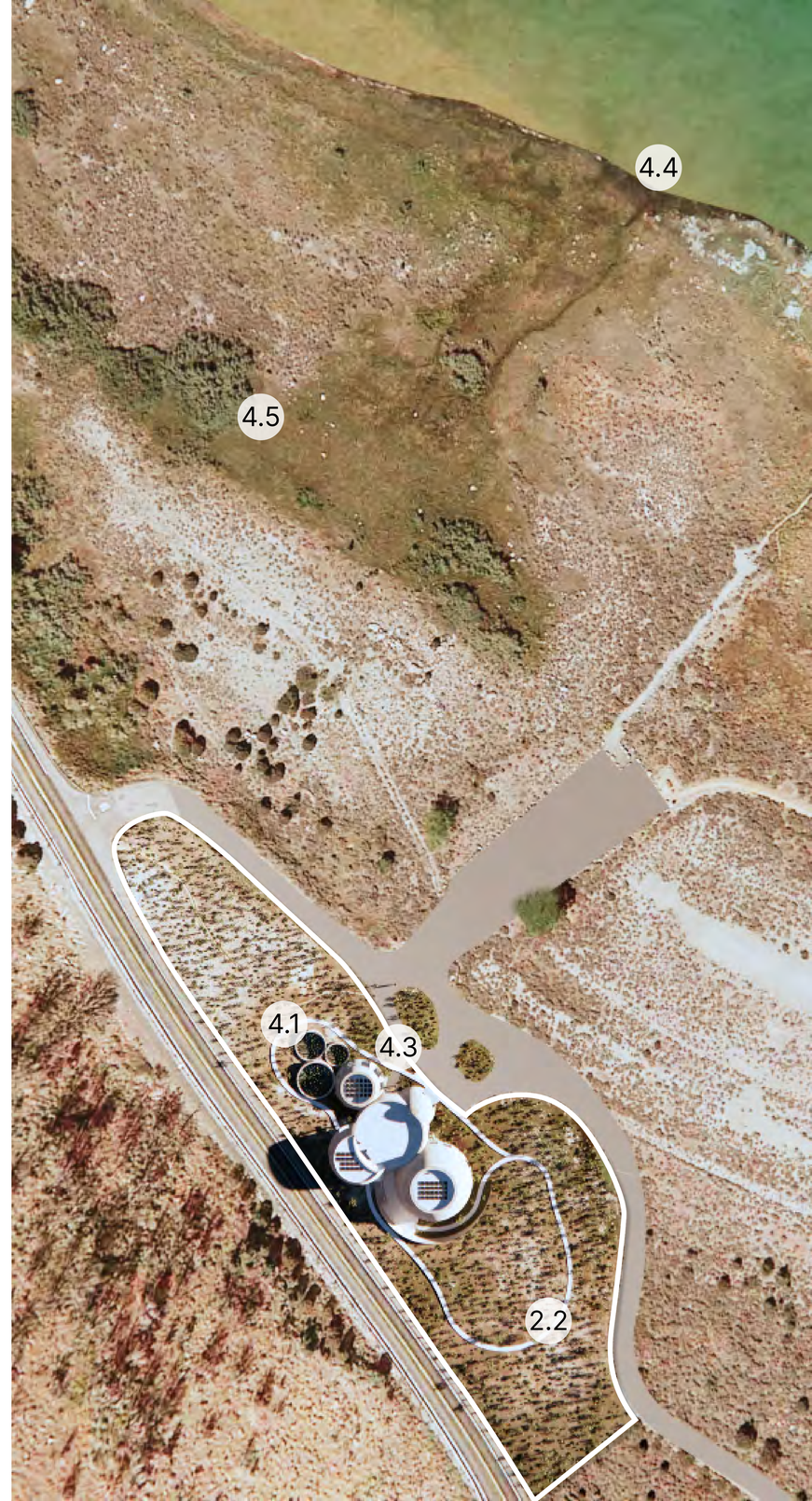
Level 1



Level 2



Site Plan



Private Access
Public Access

Understanding
- 1.1 Welcome Area
- 1.2 Intro Film

Educate
- 2.1 Exhibition Hall
- 2.2 Outdoor Learning Areas

Build a Community
- 3.1 Classrooms
- 3.2 Outdoor Amphitheater
- 3.3 Conference Room

Take Action
- 4.1 Outdoor Research
- 4.2 Laboratories
- 4.3 Environmental Staging Area
- 4.4 Water Testing Area
- 4.5 Ecological Restoration Focus Area

Support Spaces
- 5.1 Restrooms
- 5.2 Loading Area
- 5.3 Educational Offices
- 5.4 Exhibition Offices
- 5.5 Research Offices
- 5.6 Storage and Utilities

User Journeys - Follow Eleanor and Brian as they visit the center, and turn from influencers to agents for social change.

Eleanor’s Journey

Eleanor is the principle at a nearby elementary school. She has visited the lake before but doesn’t remember the air so dusty or the lake level so low. She is always looking for activities and programs to recommend to her teaching staff.

Brian’s Journey

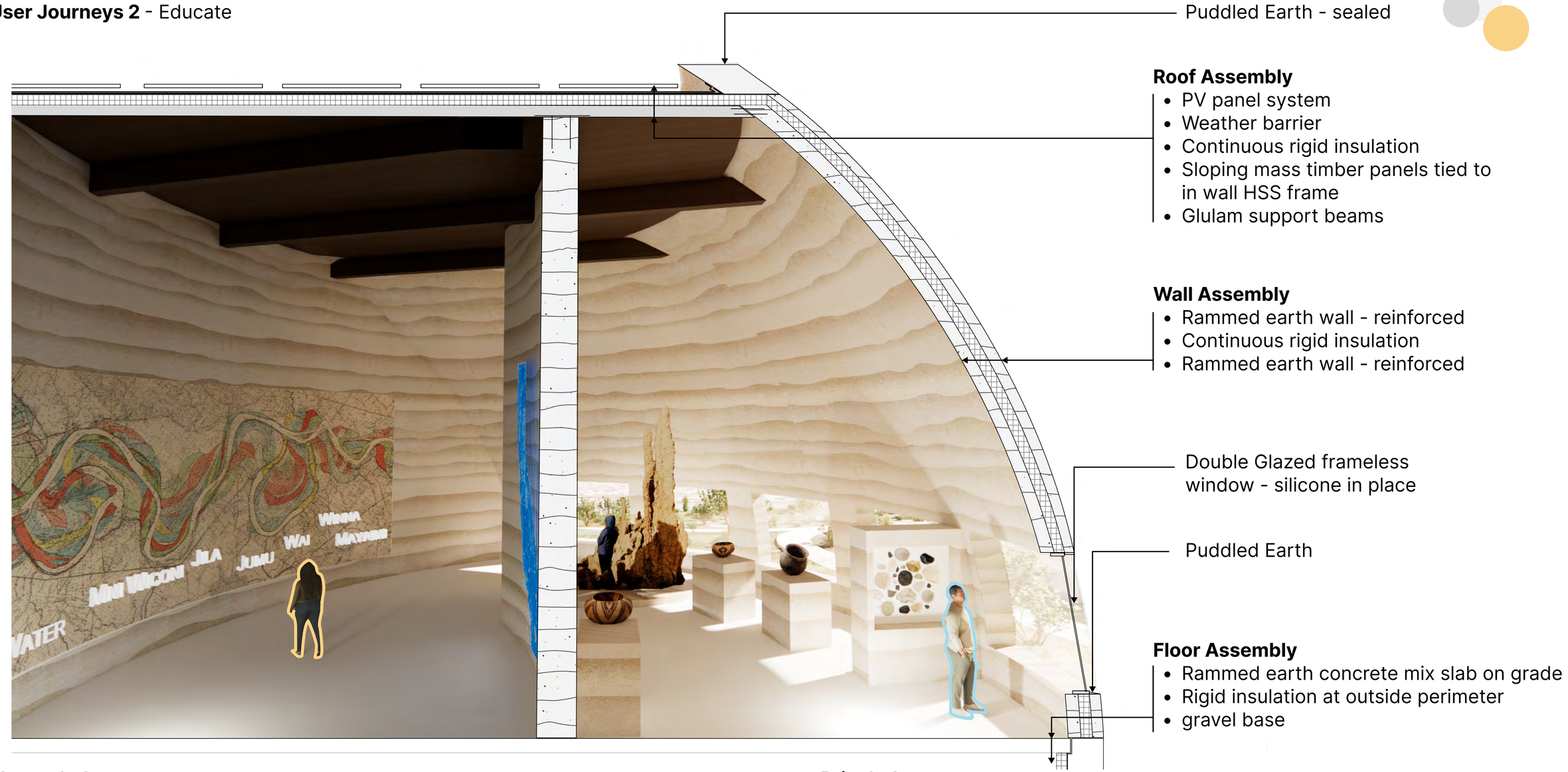
Brian is an industrial tech entrepreneur living in LA. They have never visited this region before but heard that the water conversation center is a great way to learn about the area. They are always looking for business opportunities in new markets.

Eleanor’s Journey

Eleanor meets the center’s receptionist and asks why the air is so dusty around the lake today. She learns that more demand for water lowered lake levels, which exposed dust, leading to unhealthy air pollution. She never realized these events are connected.

Brian’s Journey

Brian watches a film introducing the many challenges faced by the Mono Lake region. They never realized that the water from their tap in LA comes from a source like Mono Lake.



Eleanor's Journey

Eleanor learns how paths of water change over time, what water means to indigenous peoples, and how local crops have been grown using low water techniques over hundreds of years. Eleanor considers how modern agriculture could adapt using these lessons.

Brian's Journey

Brian learns how the building used locally sourced earth, built in layers like the tufa towers, and formed into the shape of local indigenous water vessels. Brian considers how they can use their supply chain knowledge to support contextually responsive building systems.

Eleanor’s Journey

Eleanor talks with Brian about how low water use irrigation systems would be pretty easy to put into effect at her school garden. Kids would love to have the garden growing throughout the year, and Brian recommends a few technologies and experts that could assist with picking the right plants and watering systems.

Brian’s Journey

Brian noticed the composting toilet system and closed water harvesting loop in the building. They ask Eleanor if there is a market for these systems in remote communities in this region. Brian has never had issues with water access in LA, so they didn’t realize there is a solvable problem here.

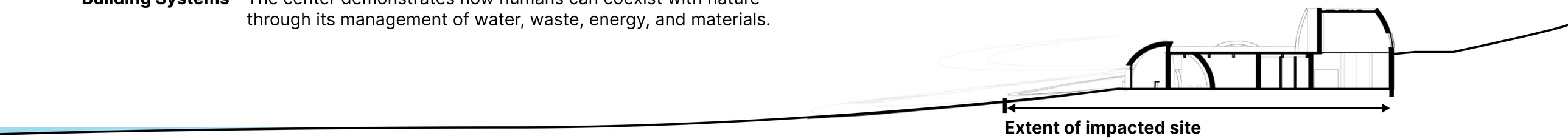
Eleanor's Journey

Eleanor notices the center is hosting an invasive species removal event. The loading dock is turned into a staging area for groups to get out onto the Mono Lake surroundings to remove the Bassia hyssopifolia, which is restricting the local bird nesting grounds. Eleanor takes their first step toward action, and plans how to integrate water conservation into programs at her elementary school.

Brian's Journey

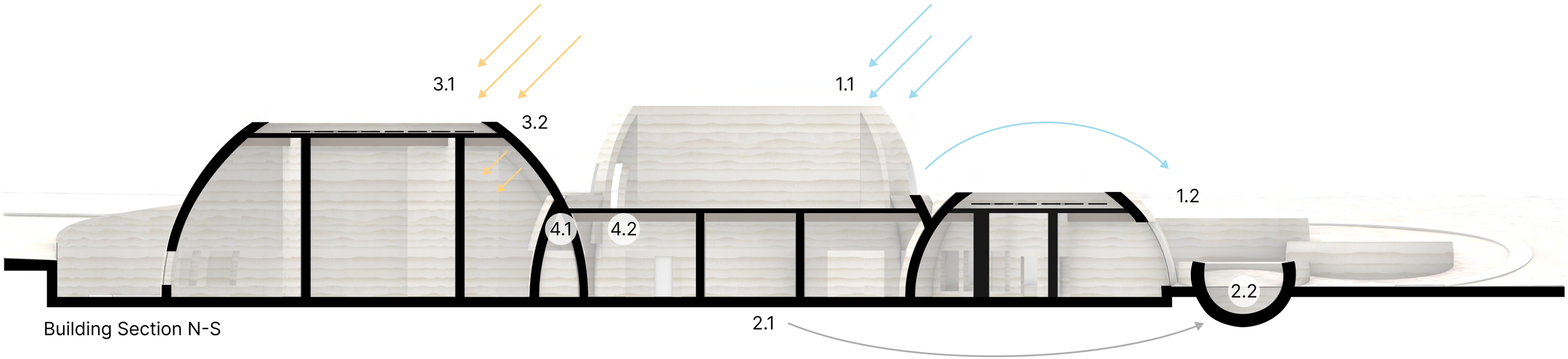
Brian visits the research lab and talks with scientists about the potential of closed loop water systems. They leave with a plan to manufacture closed loop water system technology, and are given relevant research and contacts to reach out to in LA.

Building Systems - The center demonstrates how humans can coexist with nature through its management of water, waste, energy, and materials.



Site Section E-W

Extent of impacted site
A closed loop water system and site barriers prevent runoff or impact to Mono Lake



Building Section N-S

Water System
1.1 Rainwater collection
1.2 Water storage and research

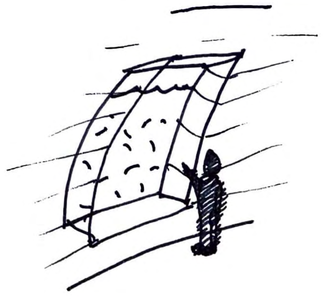
Waste System
2.1 Waste collection
2.2 Waste treatment research

Energy System
3.1 PV panel solar energy collection
3.2 Mass earth passive cooling and heating

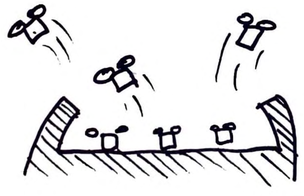
Material System
4.1 Locally sourced rock and earth
4.2 Mass timber support structure

Building Elevation N-S

Building Programs - The center has a variety of research topics, interactive exhibits, and community engagement strategies. 14621



Scientists research the lifecycle of the Brine Shrimp through under water viewports

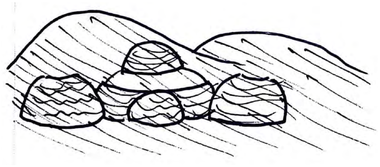


Rooftop areas are used as landing pads for drones that photograph and record temperatures around Mono Lake

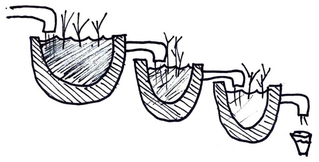
Visitors see the lake from the perspective of migrating birds through VR interactives

The center revitalizes the local economy by hiring local labor to help construct the rammed earth walls

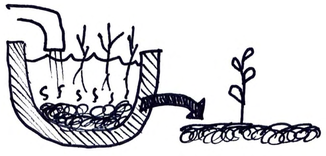
Visitors see a live demonstration of tufa tower formation



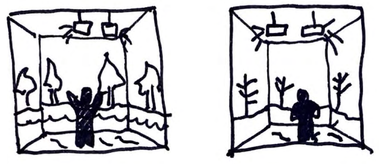
The rammed earth mix is chosen to blend in with the surrounding landscape, making little visual impact



Water tanks are used to test hydroponic waste water filtering

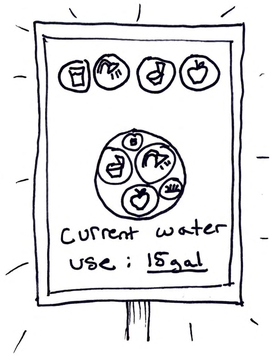


Outdoor planting areas test using building compost to establish young native plants

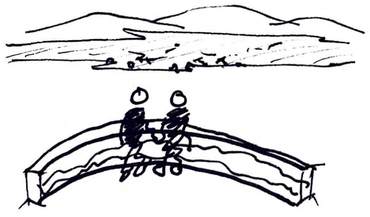


Visitors experience potential futures of the region through immersive projections

The executive briefing center is used to help high profile influencers make their own water conservation plan



Visitors calculate their daily water usage through exhibit interactives



Many visitors choose to see the lake from the center instead of the lake shore, resulting in better views and less impact