PLACE

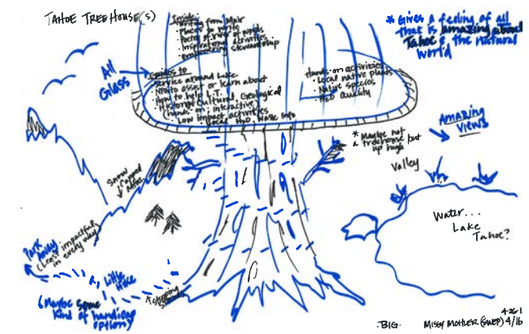
Through our brainstorming exercises with the Tahoe Basin Project team and with select groups of Exploratorium thinkers, we generated an immense number of potential ideas for physical spaces. These ideas ranged in scope from large-scale science centers, to small gathering spaces, to mobile experience units.* From these ideas, we distilled three themes to keep in mind during the development of a the strategic plan. The three themes that emerged were:

STRATEGIC THINKING:

- Increase thoughtfulness of new and existing development
- Create areas of density and bring points of interest to where people already are
- Create better integration of cultural, economic, and educational opportunities

DESIGN:

- Create welcoming spaces for community involvement
- Create dynamic multipurpose spaces
- Blend indoor and outdoor spaces so they feel fluid and inviting



VISITOR DRAW:

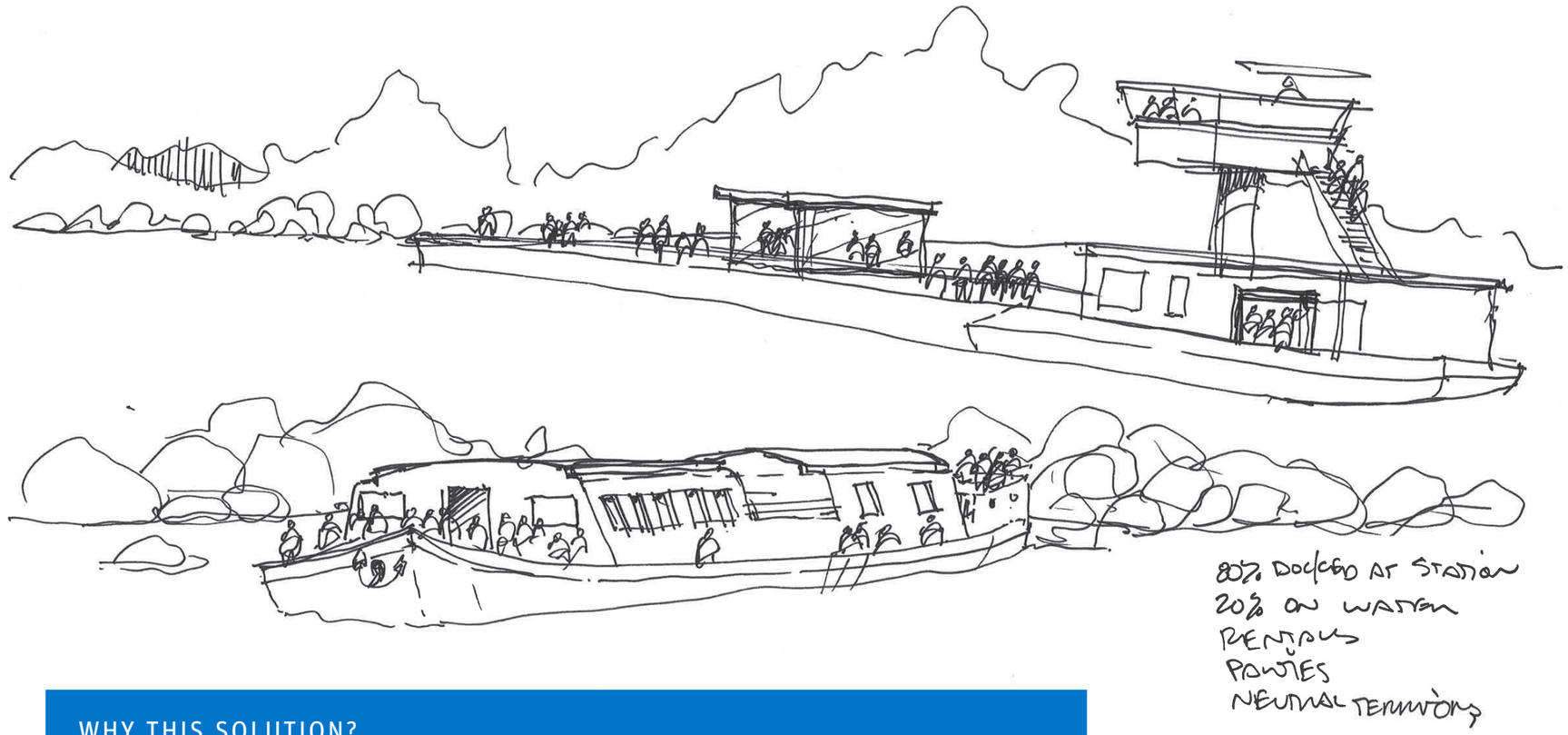
- Build an emblem of stewardship through architecture and programming
- Create a dedicated area to share out about the environmental work underway in the region and bolster personal observation and exploration
- Create a must see experience for visitors and locals alike

* SEE APPENDIX OF A COMPREHENSIVE LIST OF BRAINSTORM IDEAS.

FLOATING LAKE OBSERVATORY

We believe that in order to overcome some of the challenges identified and create a powerful place for learning, an iconic, mobile, lake-centric space would thrive. The physical space we propose for the One Tahoe organizations is a **Floating Lake Observatory**. This architectural structure built upon a barge will have a feel that is unlike a boat or a research vessel, being more like a flat, indoor-outdoor building on the water.

The Floating Lake Observatory will be a shared space for One Tahoe organizations. It will be open to the public to explore and will have regularly scheduled programs. The observatory programs can take place while docked onshore or offshore, and the observatory can travel around the lake.



WHY THIS SOLUTION?

- The concept is inspiring. It sparks curiosity, wonder, and awe. Everyone will want to go there.
- The location is central to Tahoe. It puts the focus at the heart of Tahoe, which is the lake.
- A central location means more equitable access.
- There will be one clear place to direct visitors to go learn about Tahoe.
- This one place will be shared across One Tahoe organizations, lifting all efforts.

FLOATING LAKE OBSERVATORY

Examples of observation exhibits

STRUCTURAL CHARACTERISTICS

- Approximately 5,000 square feet of indoor and outdoor space
- Architecture on the water—not a research vessel
- Comfortable seating and weather-protected spaces suitable for use in all weather
- Flexible space for exhibits, lectures, and community and cultural events
- Integrated program storage space
- Bathrooms on board
- Special features such as a glass-bottomed viewing portal or an algae chandelier

TOOLS

- Networked audiovisual systems for simulcasting
- Exhibits such as Settling Column, Lake Windows, or Surface Currents that leverage the surrounding environment
- Observation tools such as binoculars, microscopes, secchi discs, nephoscopes, echosounder
- Documentation such as maps, historic photos, and guide books

COST ESTIMATES

- $5 million to $10 million capital investment
- $1 million to $2 million annual operating budget
- 12 staff members (three dedicated and nine full-time equivalents from existing programs)

FLOATING LAKE OBSERVATORY

There are many examples of research and learning vessels throughout the world. While these are wonderful ways of fulfilling other organizations missions, a research vessel is not the best approach to the Floating Lake Observatory. Research vessels need to function as both a laboratory and a ship. The Floating Lake Observatory will borrow from laboratory design found on a research vessel but will be more heavily focused on visitor experience, architectural innovation, and creating a welcoming, open, flexible space.

Clockwise:

On the deck of the Lake Guardian, an EPA research vessel located on the Great Lakes.

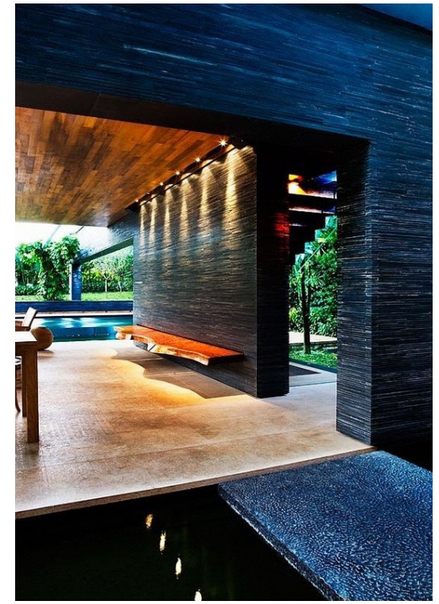
The Science Barge is a floating urban farm developed by NY Sun Works and run by Ground Work Hudson Valley in New York.

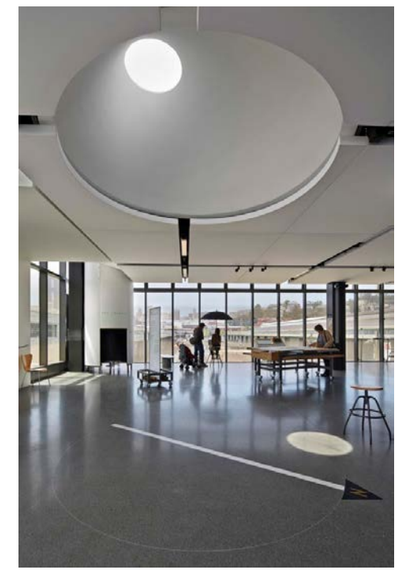
The Lake Guardian is an EPA research vessel located on the Great Lakes.

The Learning Barge is a floating classroom and “steward ship” developed by the University of Virginia and operated by the Elizabeth River Project.

FLOATING LAKE OBSERVATORY

The design approach we propose for the Floating Lake Observatory is one that blends the outdoors and the indoors seamlessly. It integrates the natural elements like water into the architecture and flows visitors throughout the space by creating many different points of visual interest. This space should be inviting, open, and comfortable in all weather environments.





Clockwise

Flor Do Mar Restaurant, Arambol, Goa

Cluny House by Guz Architects, Singapore.

Yachting Club Villa at Elounda Beach, Kriti, Greece.
Photo by Enrico Cano

Exploratorium Observatory, San Francisco, CA

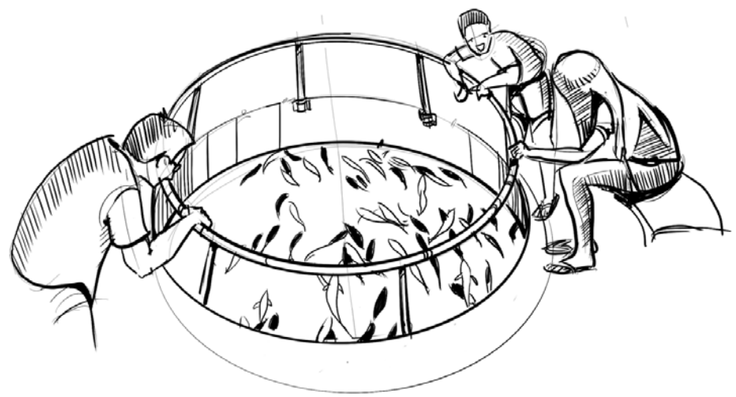
Exploratorium Observatory interior, San Francisco, CA

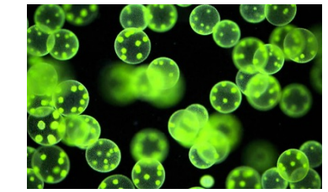
FLOATING LAKE OBSERVATORY

Some exhibit experiences that might be featured on the Floating Lake Observatory could include sliding viewers that could be either digital or analog interfaces. A digital viewer might give the visitor an opportunity to see different points of interest across time with time-lapse or through historic footage. An analog viewer might give the visitor an opportunity to see the different types of sediments found across the lake.

A glass bottom viewer would act as a natural gathering point and would give visitors an opportunity to see below the lake surface without scuba equipment. This could open up a dialog about lake clarity, ecosystems, biodiversity, and so much more.

Easy-to-operate microscopes could also provide a window into another world. Visitors could explore the microorganisms living in the lake, inspect geological samples from the mountains, or analyze flora from different elevations.

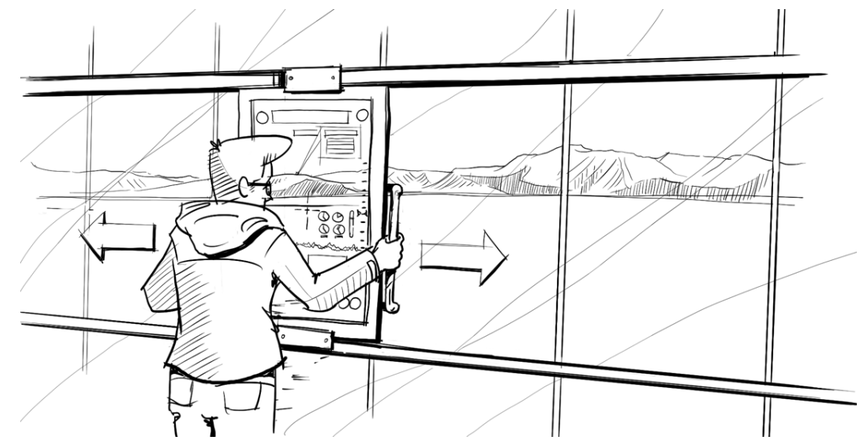




Green algae, Volvox.

Sand Harbor boulders. Photo by Dylan Silver

Glass bottom boat "Dolphin" in Protaras, Cyprus



Digital plankton map at the Exploratorium

Bay windows at the Exploratorium