DESIGN 301 • DESIGN PROJECT 4

Systems Check

South Bay Salt Pond Restoration Project as photographed by Peter Esssick for National Geographic

CHALLENGE

You Are Here *(physically, at least)* in the San Francisco Bay Area. Some associations that come to mind when you think of the Bay Area might include Silicon Valley and big tech, the Golden Gate Bridge, redwoods, U.S. Highway 101, and maybe Stanford's campus. Less top of mind for most people is the Bay itself, a body of water 20% larger than the city of Los Angeles with a shoreline 650 kilometers long (400 miles) - half the length of the entire California coastline. Its waters create a protected natural harbor and ecosystem that has sustained plants, wildlife and people for millennia.

"The Bay is inextricably woven into each resident's sense of place, culture, and community; it is a dynamic and interconnected system whose value is crucial to the region's environmental, economic, and social prosperity." -SF Bay Conservation and Development Commission

The unique estuary that is the Bay currently faces a number of challenges, including stress from industrial pollution, demands on water in response to population growth, climate change considerations such as salt water intrusion and sea level rise. Many of these challenges disproportionally affect marginalized communities. At the same time, the Bay is a feat of restoration. It is a beautiful, life-giving, socially and environmentally-important place. It's on all of us to be stewards of its health.

This team challenge is about connecting (and re-connecting) people to a sense of place - **how might we engage people in the vitality and shared stewardship of the San Francisco Bay?**

This team challenge is about exploring our connection to place, layering multiple types of data, and ultimately identifying several design opportunities to increase shared stewardship of the Bay.

You will choose a stakeholder group and, leveraging both quantitative and qualitative data sets and your own design research, identify key opportunities to promote the vitality of the Bay. This project is an opportunity to indulge in your curiosity, elicit and directly test your assumptions, learn from others, and to practice design research methods along the way.

PROCESS

1. As a team, **unpack the opportunity space by making a stakeholder map**. What parts of the large system that is the bay are particularly interesting to you as a team? Continue to refine your map as you read and learn more.
2. Go on location. Visit the bay. Hike next to it. Talk to people using it for recreation or research. Explore visitor centers or talk with people who organize volunteers. Soak it in. **Practice deep observation and in situ interviewing.**
3. **Gather both qualitative and quantitative data** about your chosen area of focus. At a minimum your qualitative data should include at least one 'tether' or lengthy observation, and 5-7 interviews with stakeholders. These interviews should be with people beyond your family and friend circles. Source at least one quantitative data set that informs your opportunity space as well.

4. **Synthesize your data.** Unpack your data and use multiple synthesis techniques to surface insights and opportunities.
5. **Create an opportunity space map** that highlights 'how might we' areas of possibility at every level of the design layers framework.
6. **Craft an ethics statement** specific to the opportunity space you've identified.
7. **Present your work** on a 4x8' project board.

Your board must include the following elements:

(1) Your refined, detailed, beautiful systems map, complete with stakeholders, inhibitors + enablers, quotes and insights.
(2) A second beautiful map of the opportunity space using the design layers framework. While you need to use the framework, you can choose to visualize it however you like, and should consider all of your elements as a cohesive set.
(3) Your specific ethics statement.

You will be evaluated on your team presentation and the three elements outlined above, your in-process research work and homework assignments, and your teamwork.

Working as part of a team is both delightful and tricky. You'll need to schedule plenty time together well in advance of deadlines, and design your group design work intentionally.

TIMING

Project launch: October 28, 2024

One location visit complete: November 4, 2024 (bring notes to class)
One interview complete: November 4, 2024 (bring notes to class)

Rough draft systems map: November 11, 2024 (bring to class)

Twenty insights identified: November 13, 2024 (bring to class)

Rough draft design layer opportunity map: November 18, 2023 (bring to class)

Final presentations: November 20, 2024

SUGGESTED READINGS, WATCHINGS, LISTENINGS, DOINGS

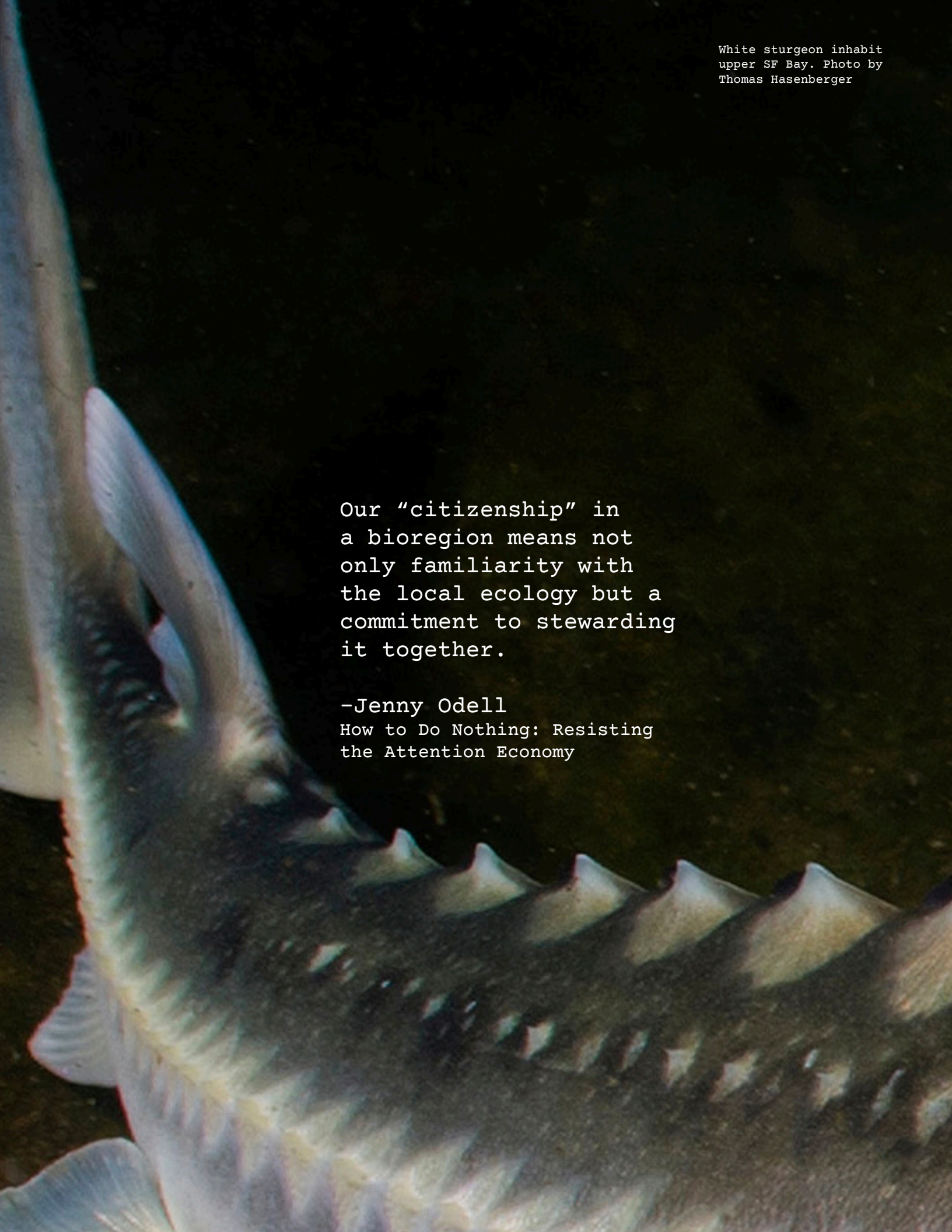
Please see canvas for links to readings on thinking about systems, and design synthesis. You should do additional reading and learning about the Bay itself to round out your research.

LEARNING GOALS

1. Identify and investigate needs and opportunities in **multi-stakeholder systems, living and nonliving.**
2. Synthesize information from **disparate sources, quantitative and qualitative.**
3. **Integrate historical, environmental, cultural and contextual awareness** into design work.
4. Collaborate and communicate as a member of a **multidisciplinary design team.**
5. **Overcome emotional or intellectual disorientation** or discomfort in both individual and team contexts when faced with the unknown.

EVALUATION

Final Stakeholder Map: 70pts.
Final Design Layer Opportunity Map: 70pts.
Final Ethics Statement: 25pts.
Final Presentation: 10pts.
Teamwork and progress towards the final presentation: 70pts.



White sturgeon inhabit upper SF Bay. Photo by Thomas Hasenberger

Our “citizenship” in a bioregion means not only familiarity with the local ecology but a commitment to stewarding it together.

-Jenny Odell
How to Do Nothing: Resisting the Attention Economy