

Taylor Shellfish Henderson Bay Geoduck Farm

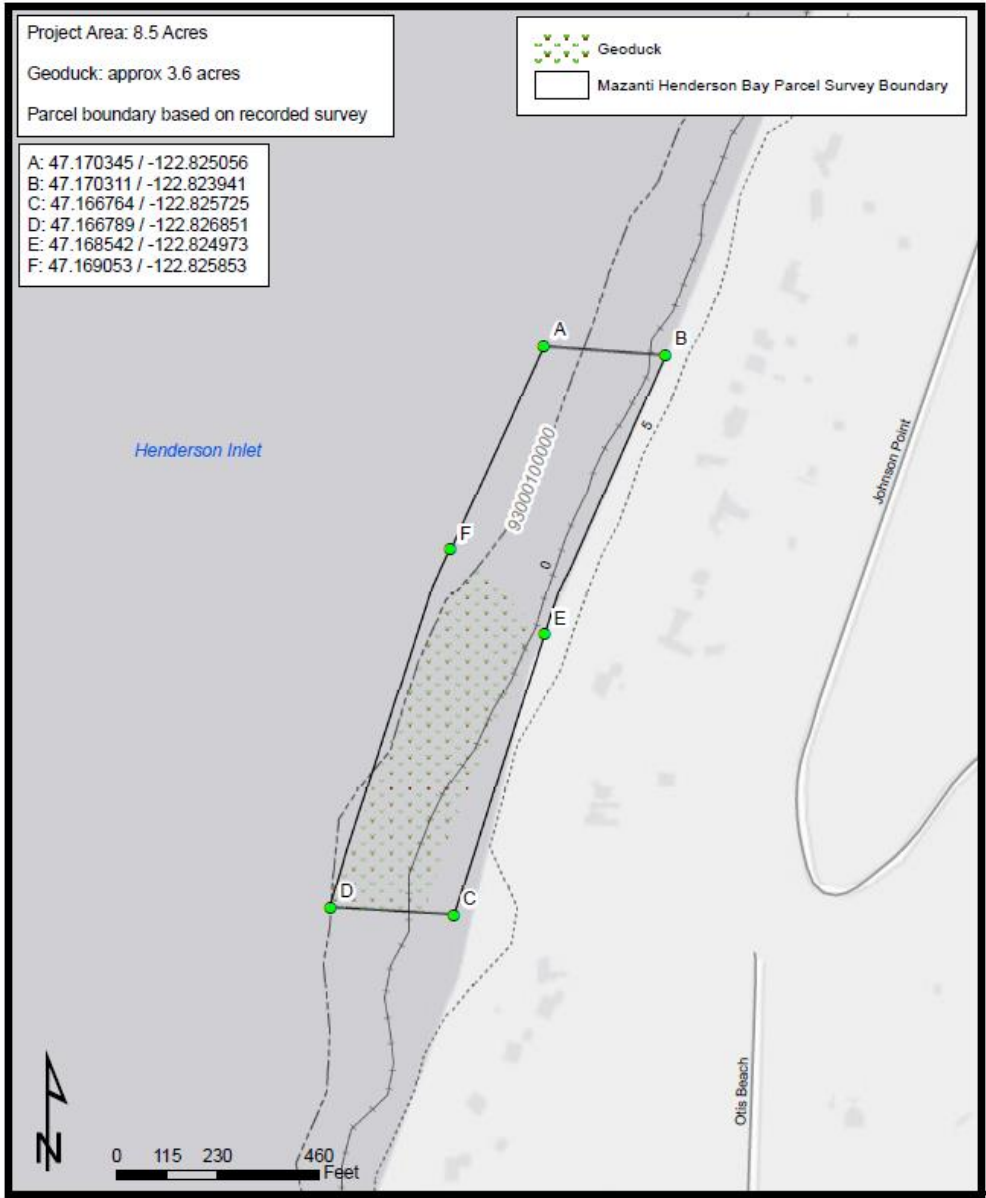


Thurston County Project 2022103702

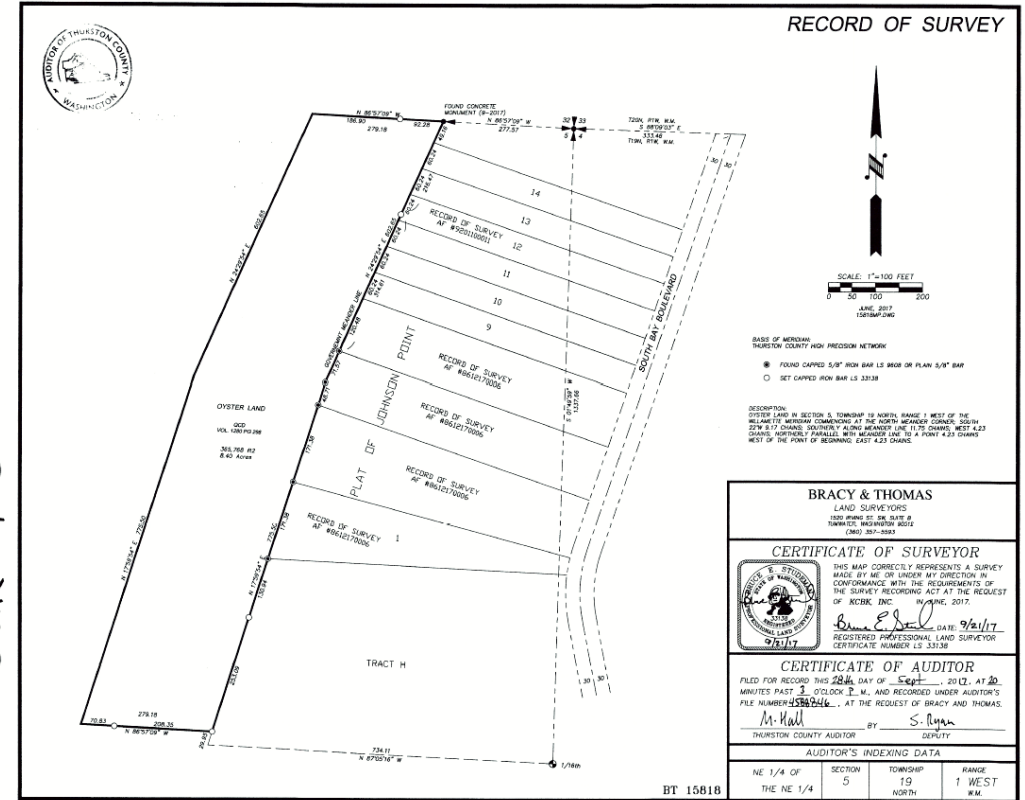
January 9, 2024

Thurston County Hearing Examiner





SUR 4588846



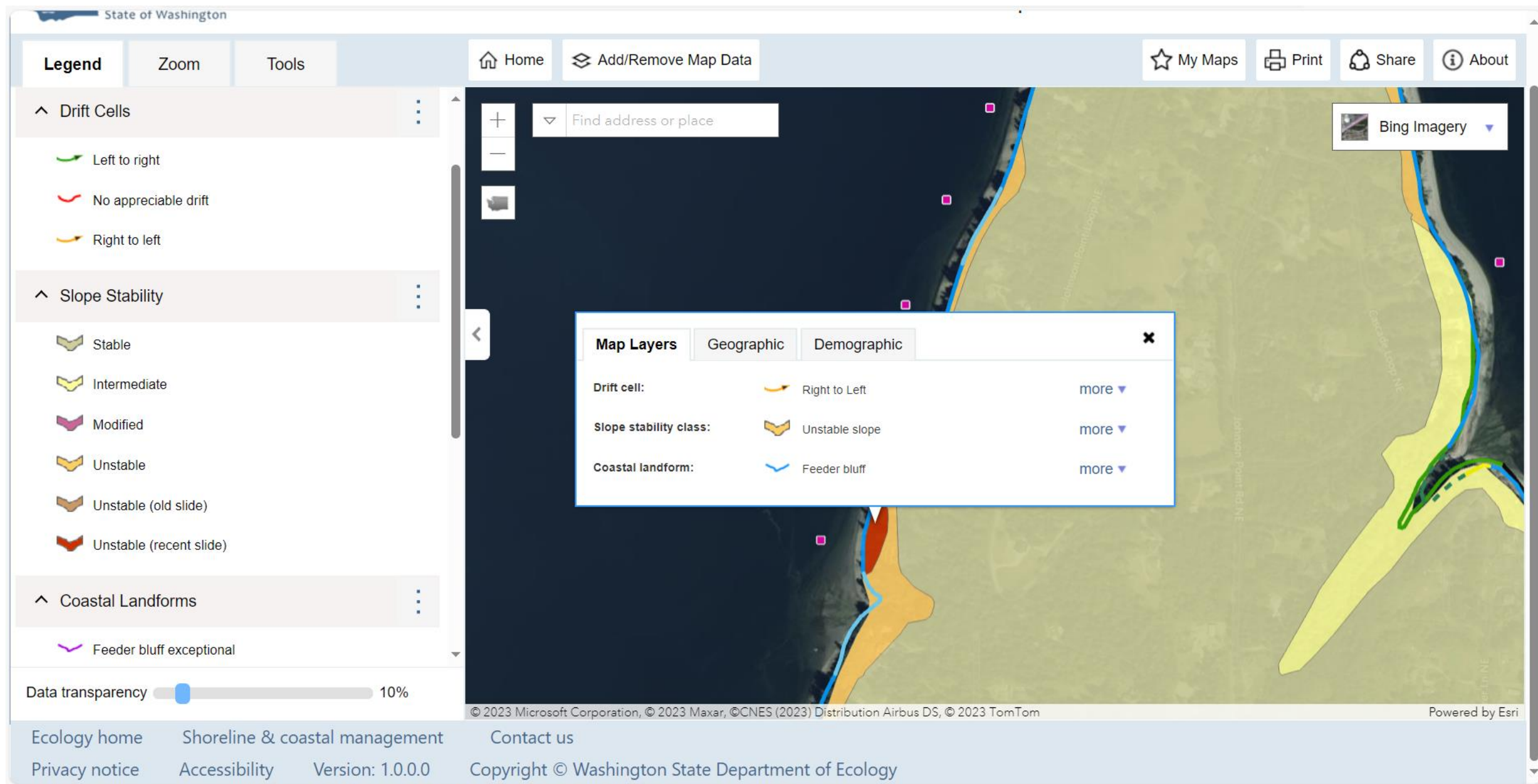
Farm Details

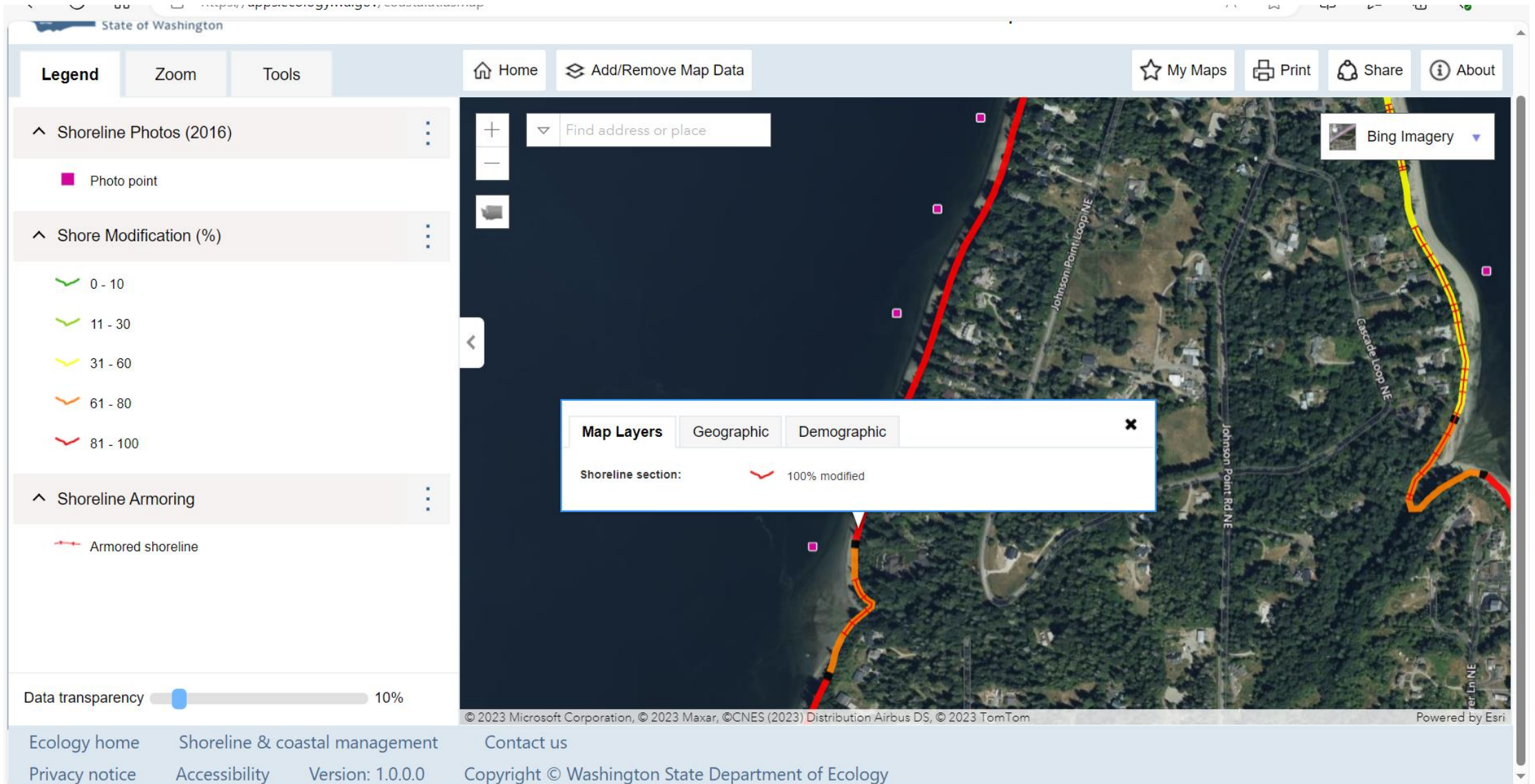
- Planted between +1' and extreme low
- Approximately 3.6 acres
- Flexible HDPE mesh geoduck sleeves

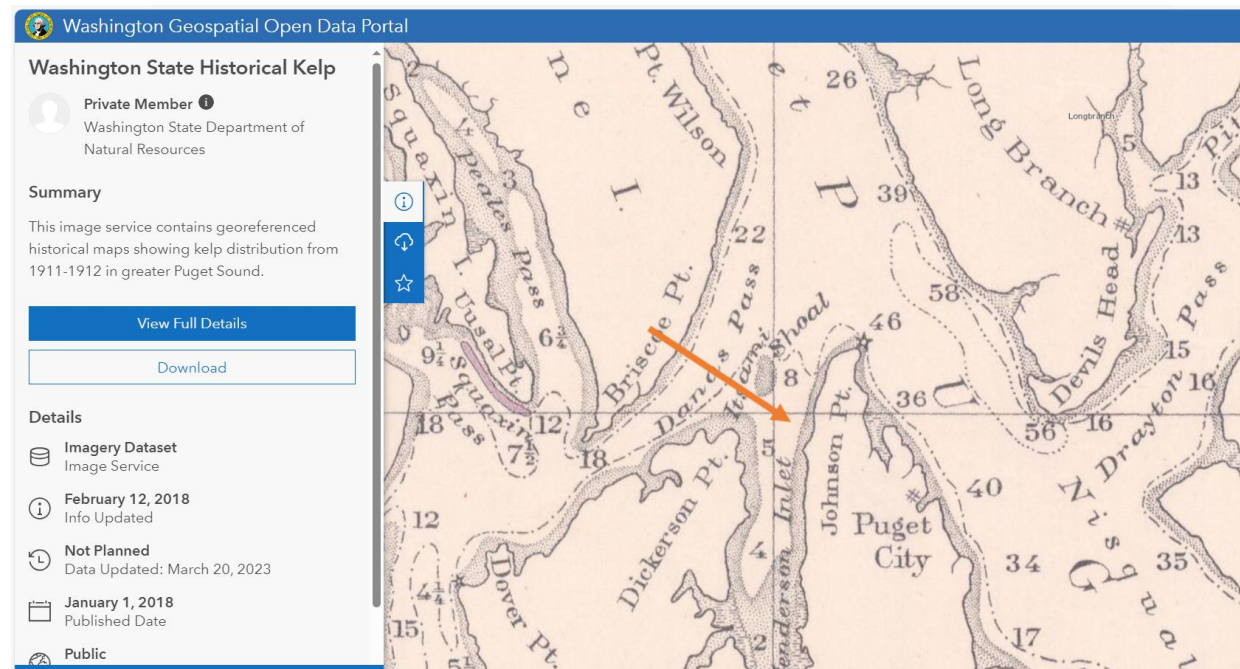
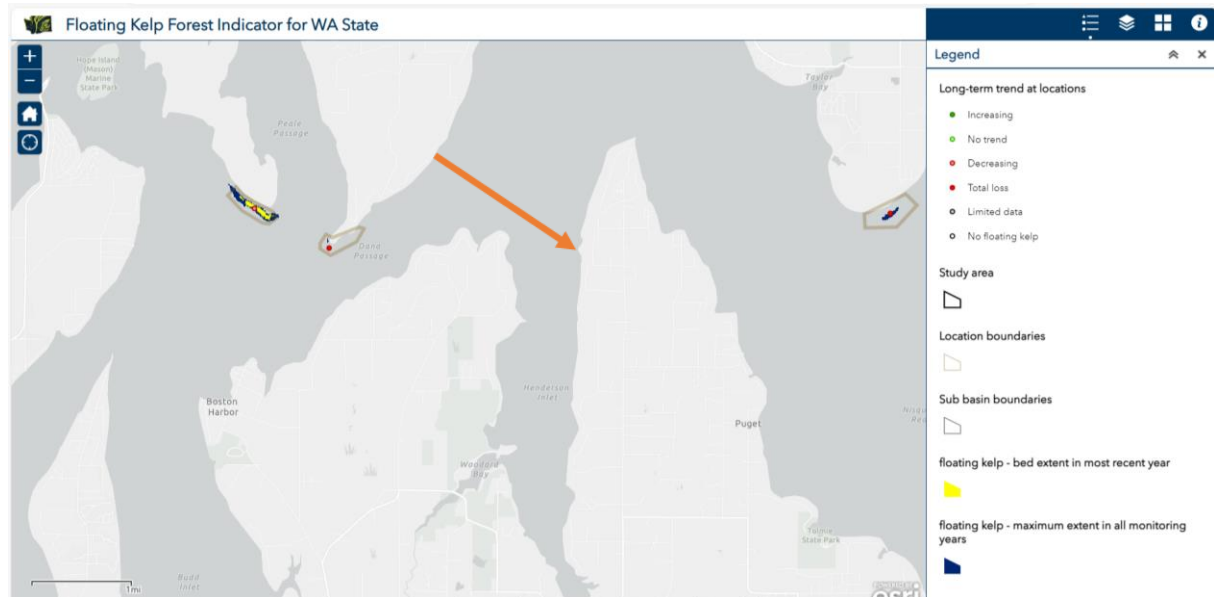


Farmed Geoduck





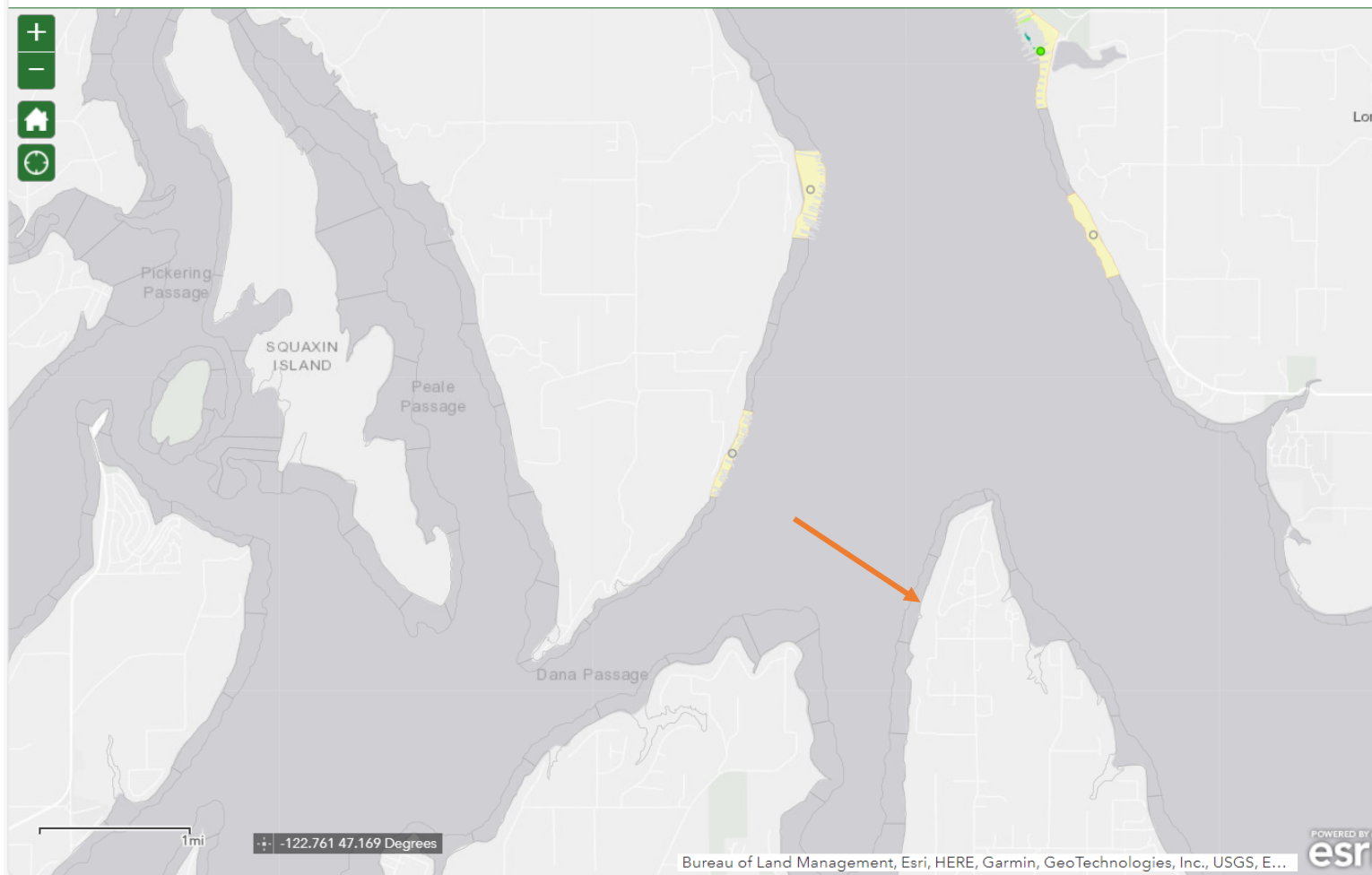




Puget Sound Seagrass Monitoring

Washington Department of Natural Resources

Submerged Vegetation Monitoring Program



Legend

Seagrass Species

- Eelgrass
- Eelgrass and *Z. japonica* mix
- Eelgrass and Surfgrass mix
- *Z. japonica*
- Surfgrass
- No seagrass

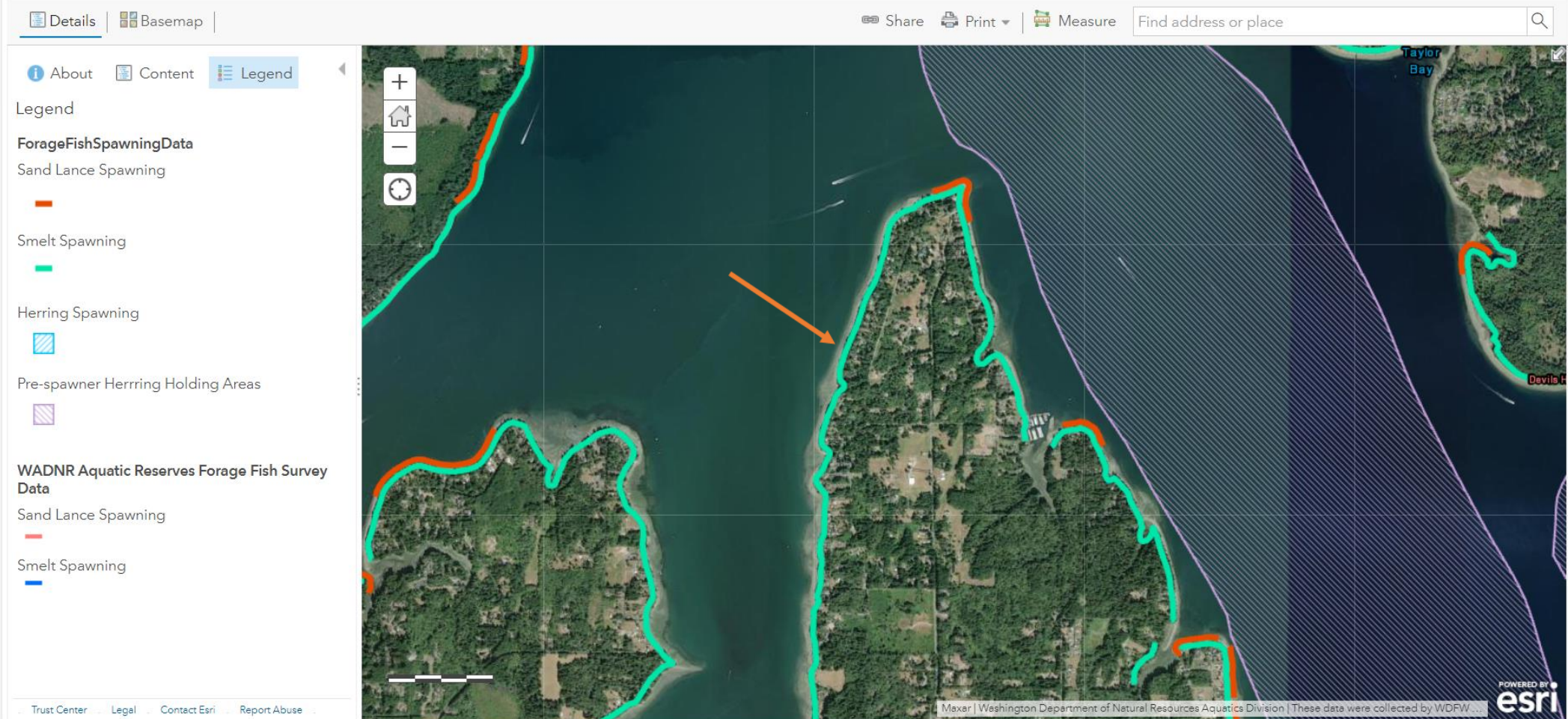
2020 Surveys

- No seagrass present
- Eelgrass
- Eelgrass and *Z. japonica*
- *Z. japonica*
- Eelgrass and surfgrass
- Surfgrass

2019 Surveys

- No seagrass present
- Eelgrass
- Eelgrass and *Z. japonica*
- *Z. japonica*
- Eelgrass and surfgrass
- Surfgrass





Thurston County Comprehensive Plan 2040

- *“Maintain and enhance natural resource-based industries.”*
- *The policies in the plan provide that normal aquaculture practices should not be considered a nuisance unless they threaten public health or safety.*
- *The residents of Thurston County envision a thriving and robust aquaculture industry and take responsibility for ensuring that its potential can be fully realized.*
- *Marine aquaculture activity should not be considered a nuisance if carried out in a reasonable manner and within applicable regulations. Restrictions should not be imposed on aquaculture activities unless they are necessary for preserving public health, welfare or safety.*



Shoreline Management Act and SMP

- Shellfish aquaculture is a preferred, water-dependent use under the SMA [RCW 90.58.020]
- Aquaculture is an activity of statewide interest that can result in long-term over short-term benefit and protect the resources and ecology of the shoreline [WAC 173-26-241(3)(b)(i)]
- Shellfish beds provide important ecological functions and are critical saltwater habitat [WAC 173-26-221(2)(c)(iii)(A)]
- Thurston County SMP states that all types of aquaculture are allowed in the Conservancy Environment, provided that the operation is consistent with the policies and regulations of the program.



Conservation Measures and BMPs

- Compliance with Programmatic ESA & EFH Consultation for shellfish activities in WA
- Protections for ESA-listed species, critical habitat, and essential fish habitat
 - Water quality
 - SAV interactions
 - Species use
 - Gear management
- Compliance with BMPs to further reduce impacts

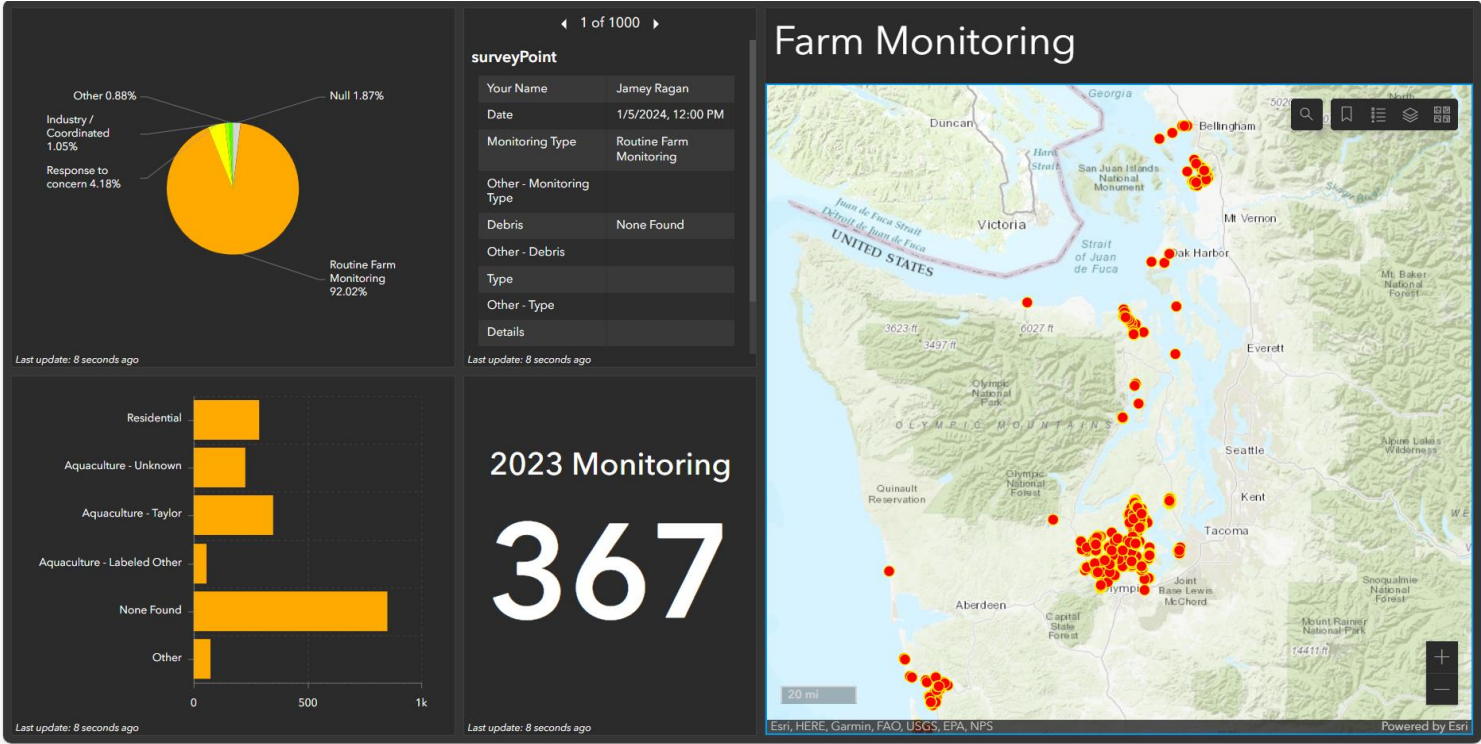


A high-angle photograph captures four children crouched on a dark, wet, and rocky beach. They are all focused on the shallow tide pools and the rocks. The child on the far left wears a white baseball cap and a white t-shirt. Next to them, a boy in a blue t-shirt and sunglasses is reaching into a pool. To his right, a girl with blonde hair in a teal shirt and pink boots is also looking down. In the foreground, a boy in a white t-shirt with a pink and blue floral pattern and plaid shorts is holding a small, dark object, possibly a shell. The ground is a mix of dark sand, wet rocks, and patches of green algae. The scene is brightly lit, casting sharp shadows. The text "Shared Space" is centered over the middle of the image in a white, sans-serif font.

Shared Space



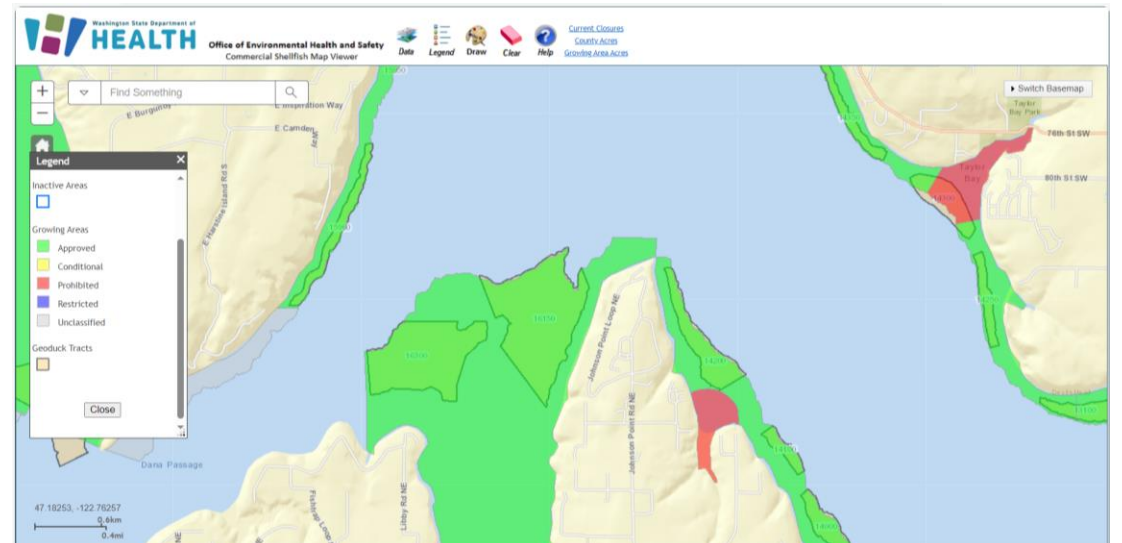
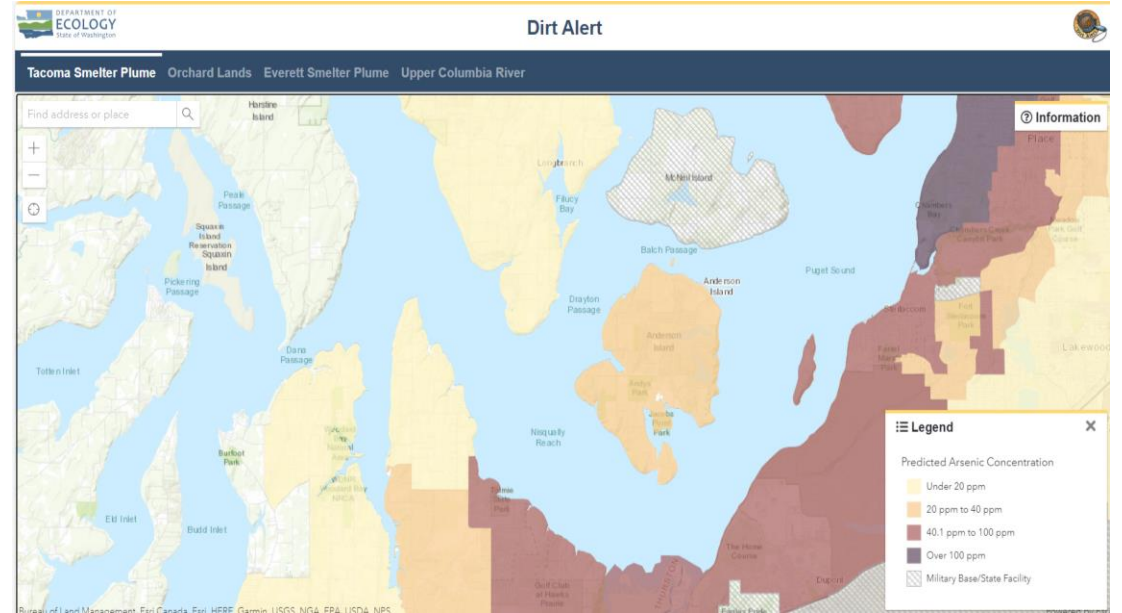
Plastics



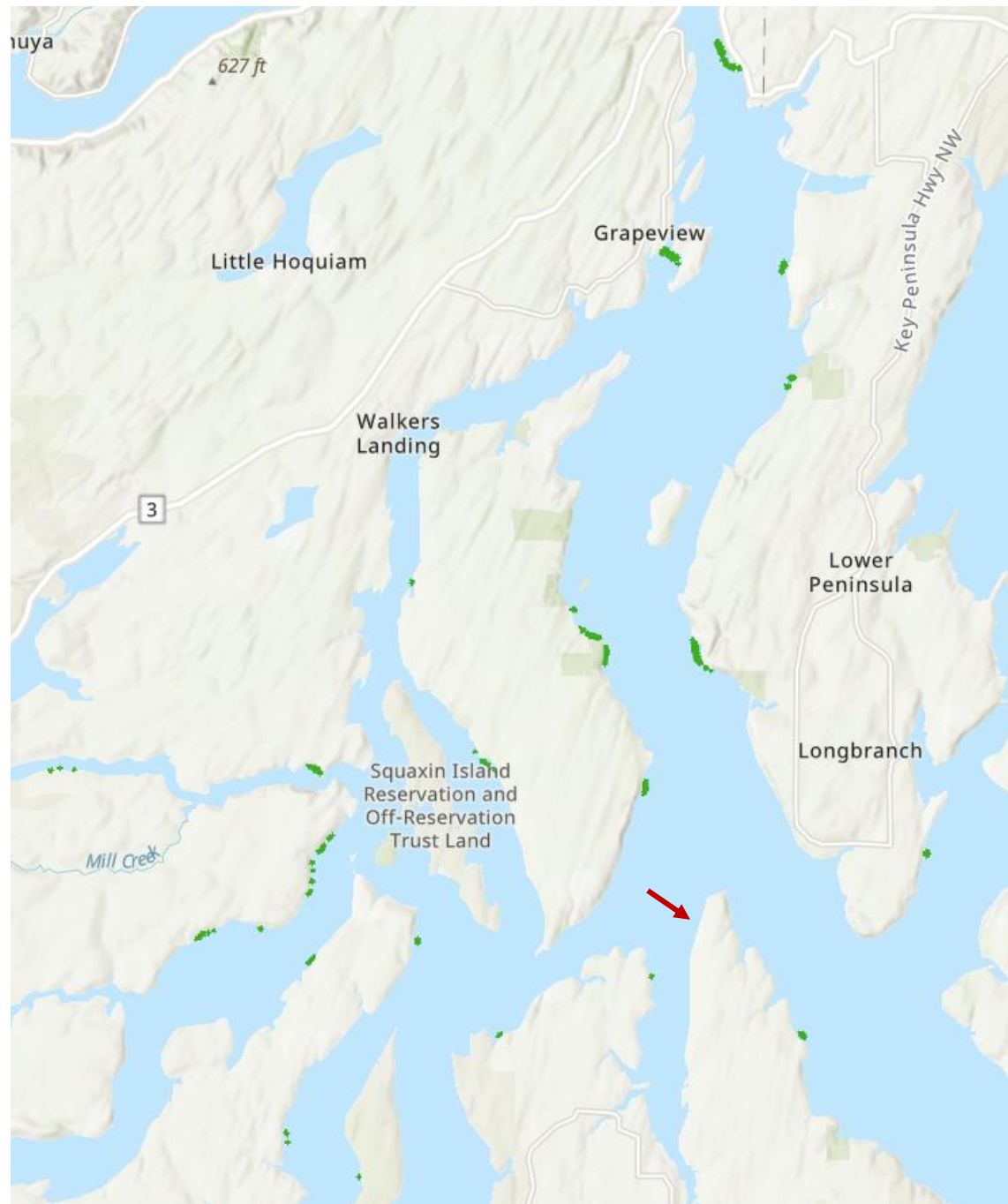


Wildlife

Water Quality



Taylor Shellfish Geoduck Farms

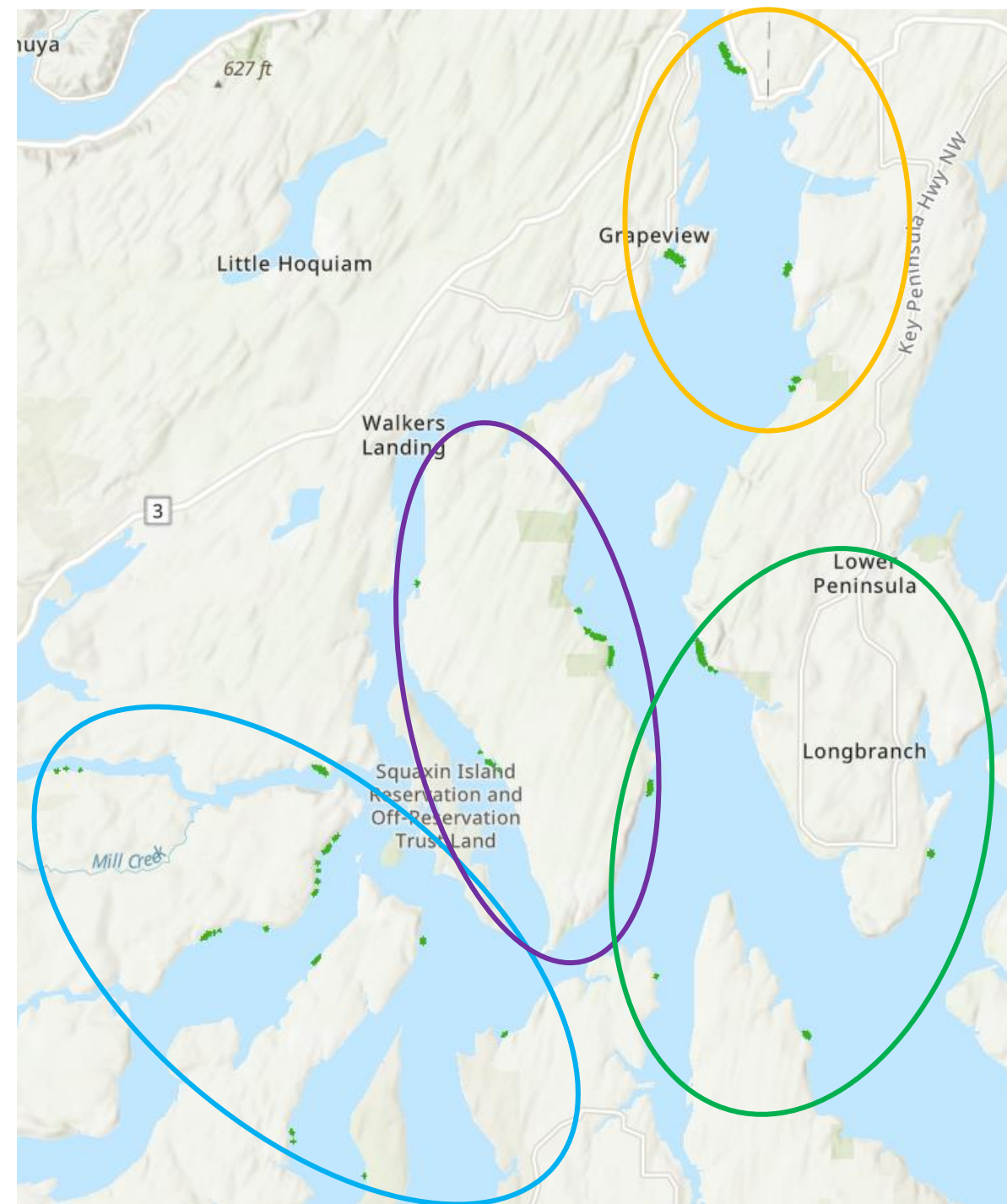




Thank you

Geoduck Farm Management

- 4 South Sound Geoduck Farm Managers
- Farm Directors oversee 3 or 4 farm managers, geoduck operations are split between two farm directors
- 5-7 years / Geoduck Crop
- Tube Installation → Planting → Tube Removal → Grow Out → Harvest



Flexible HDPE Mesh Tubes

- Replaces use of PVC and HDPE Rigid Mesh Tubes
- Less Tubes Required
- Less equipment required
- Flexible mesh reduces risk of gear escapement

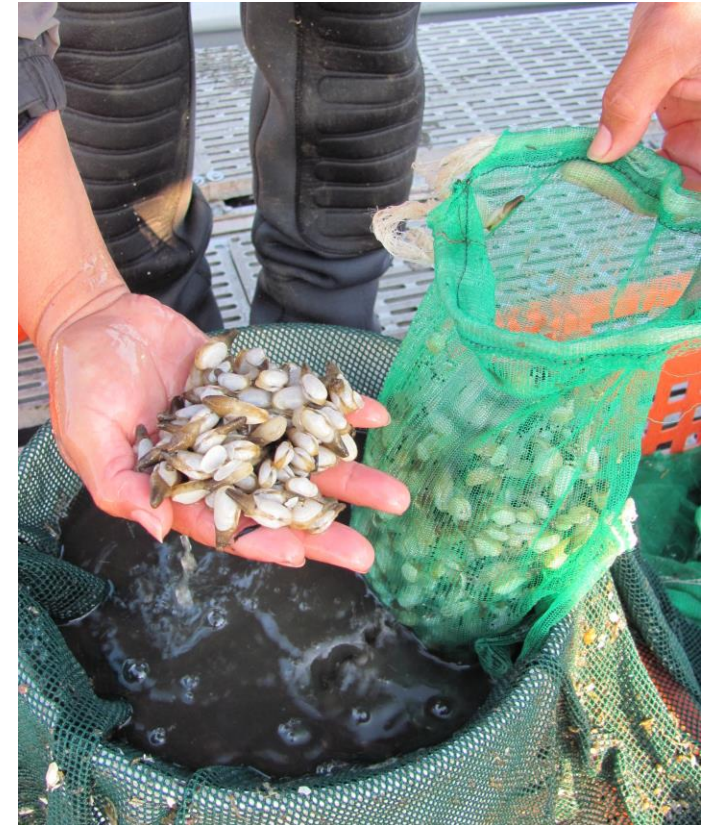


West Key Peninsula – Jan 8, 2024



Geoduck: Tube Installation and Planting

- Farm crews install or plant an acre of geoduck / 7 tides.
- Place 4 seed in each flexible mesh tube.
- No net needed over flexible mesh tubes



Tube Removal and Grow Out

- Tubes removed between 1.5 – 2.5 years.
- Either pulled by hand or use low pressure water pump to loosen the tube from the ground.
- During grow out geoduck necks are generally the only indication that there is a farm on the site.
- Predator net may be placed on crop until harvest, if heavy predation present on farm
- Grow out between 2.5 and 4.5 years after removing tubes, depending on growth rate.



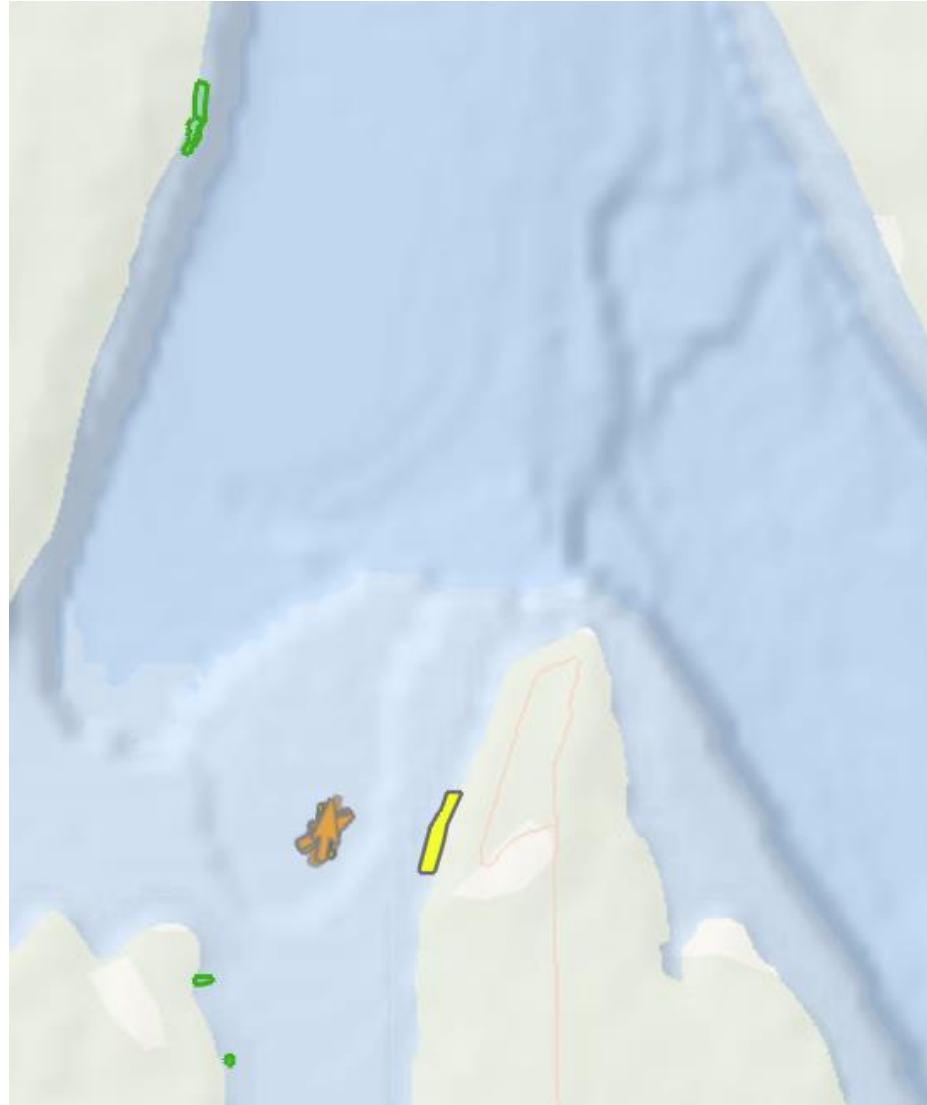
Harvest and Post Harvest

- Low pressure hose
- Harvest either low tide or dive at high tide
- Harvest using pump enclosed in insulated box to dampen noise levels
- Night harvest uses no overhead lights



Wind and Wave Energy

- Exposure of this project site is similar or less exposed than many of our East Harstine and West Key Peninsula farm sites.
- Flexible mesh tubes are installed on many of these sites and we have not seen any tubes work free.





Thank you