

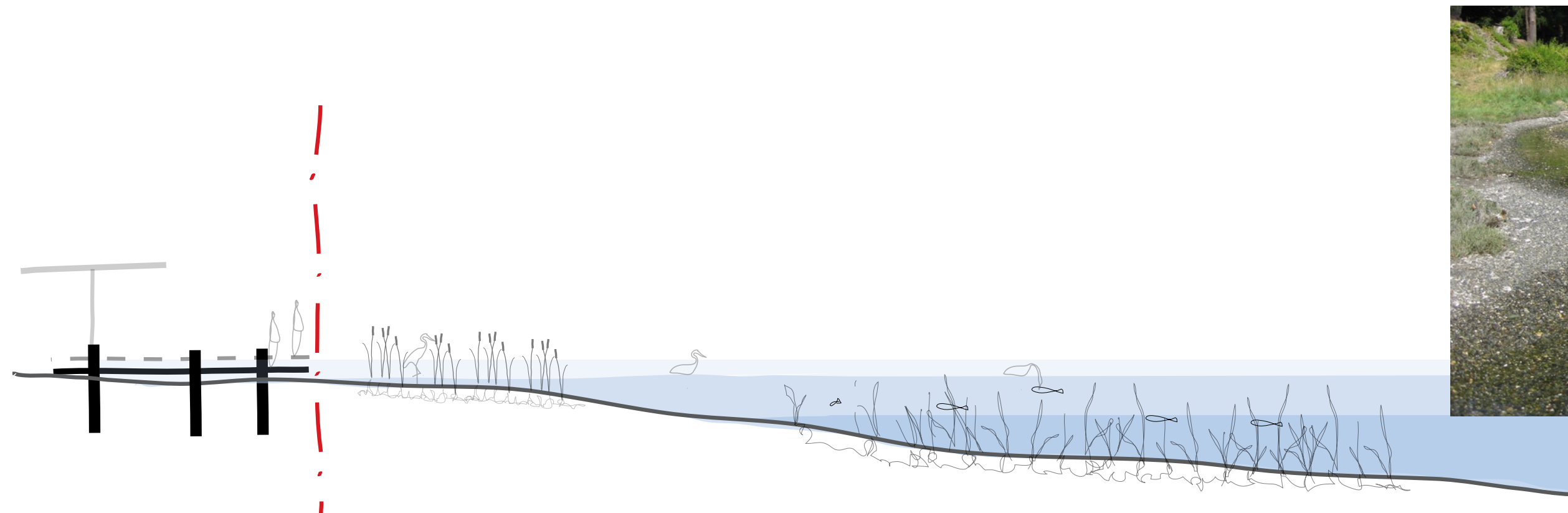
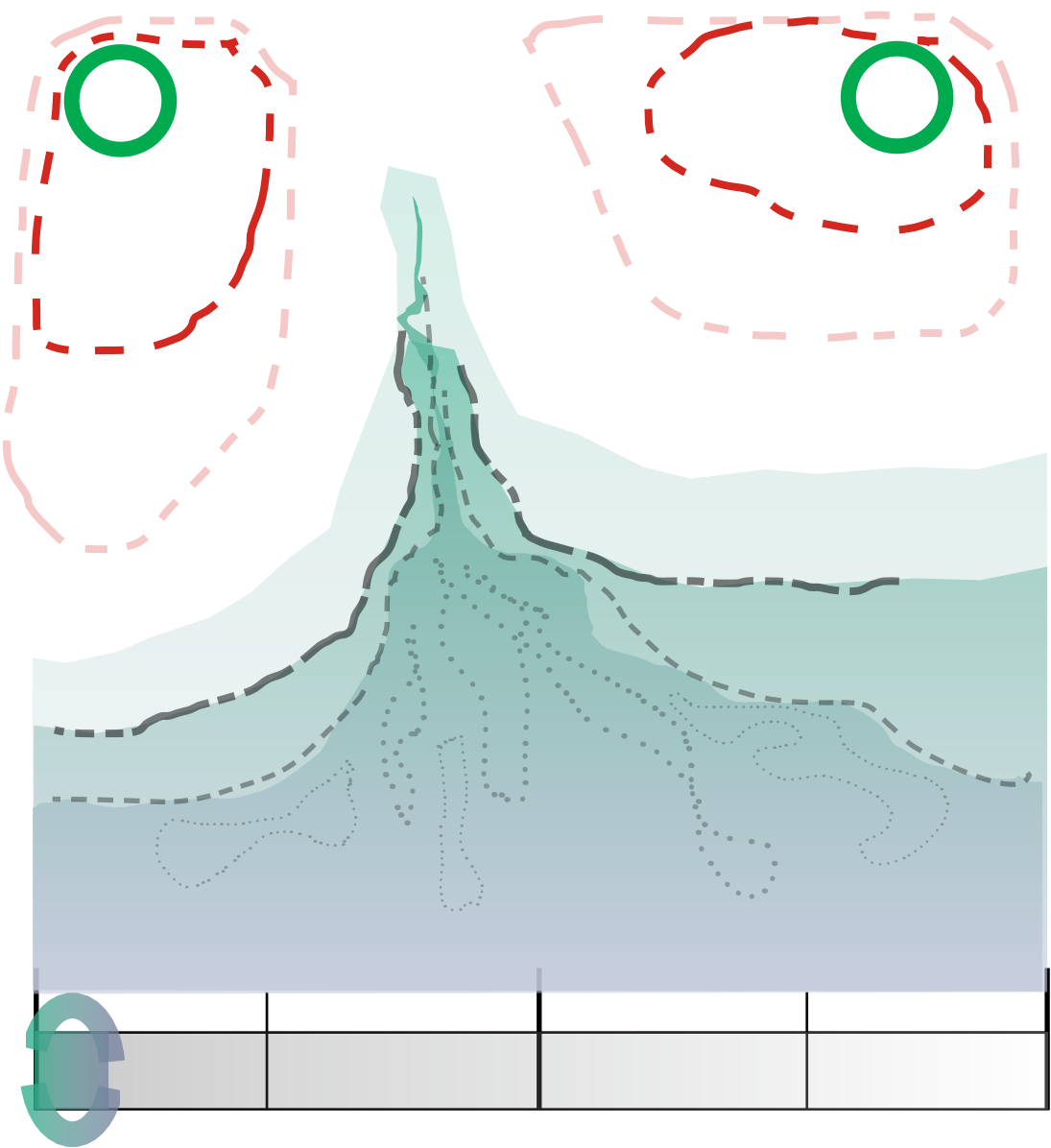
# Sighting in Response to System Dynamics

# Examples

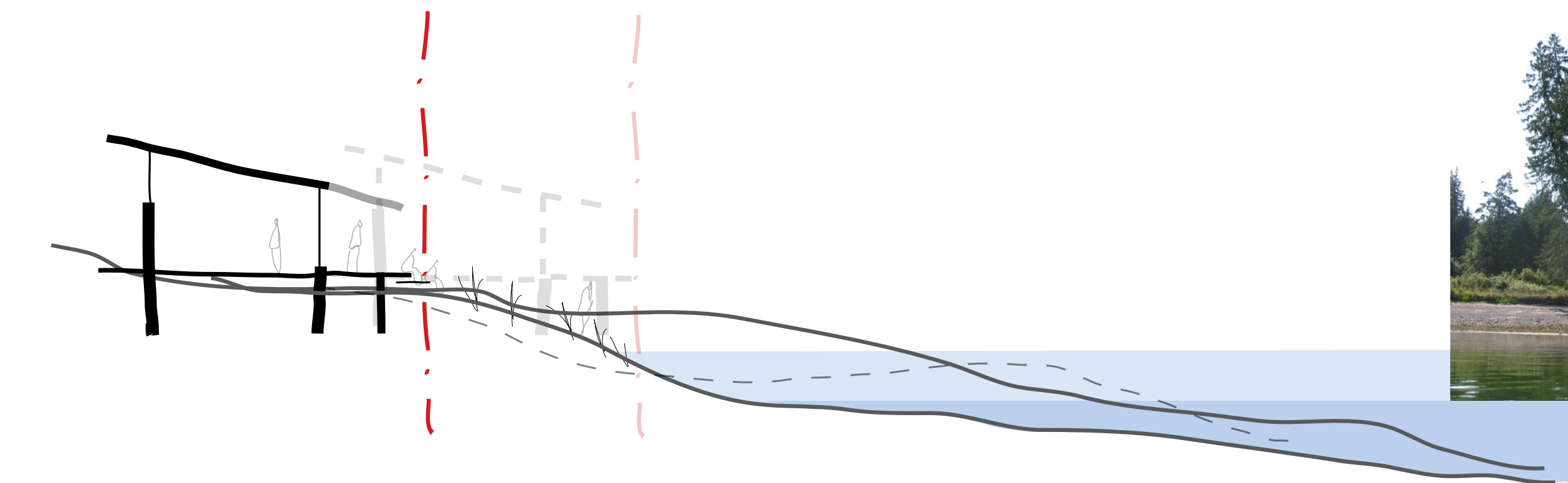
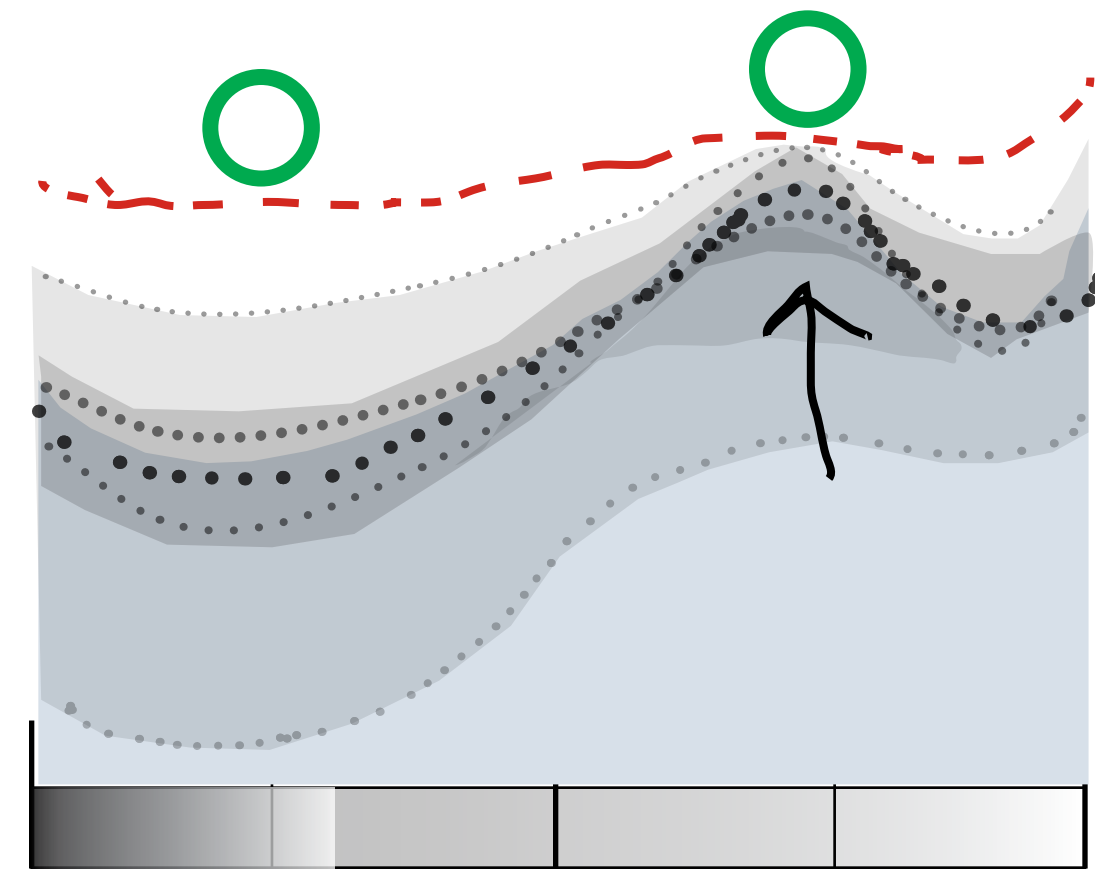
on Thetis

Plan View

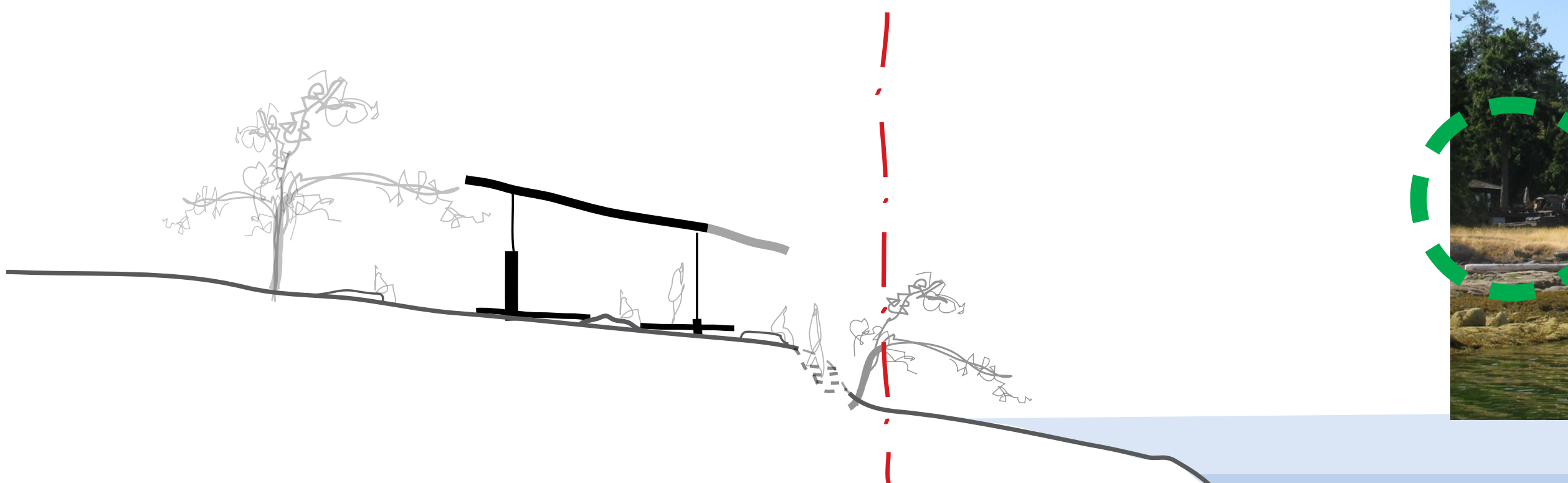
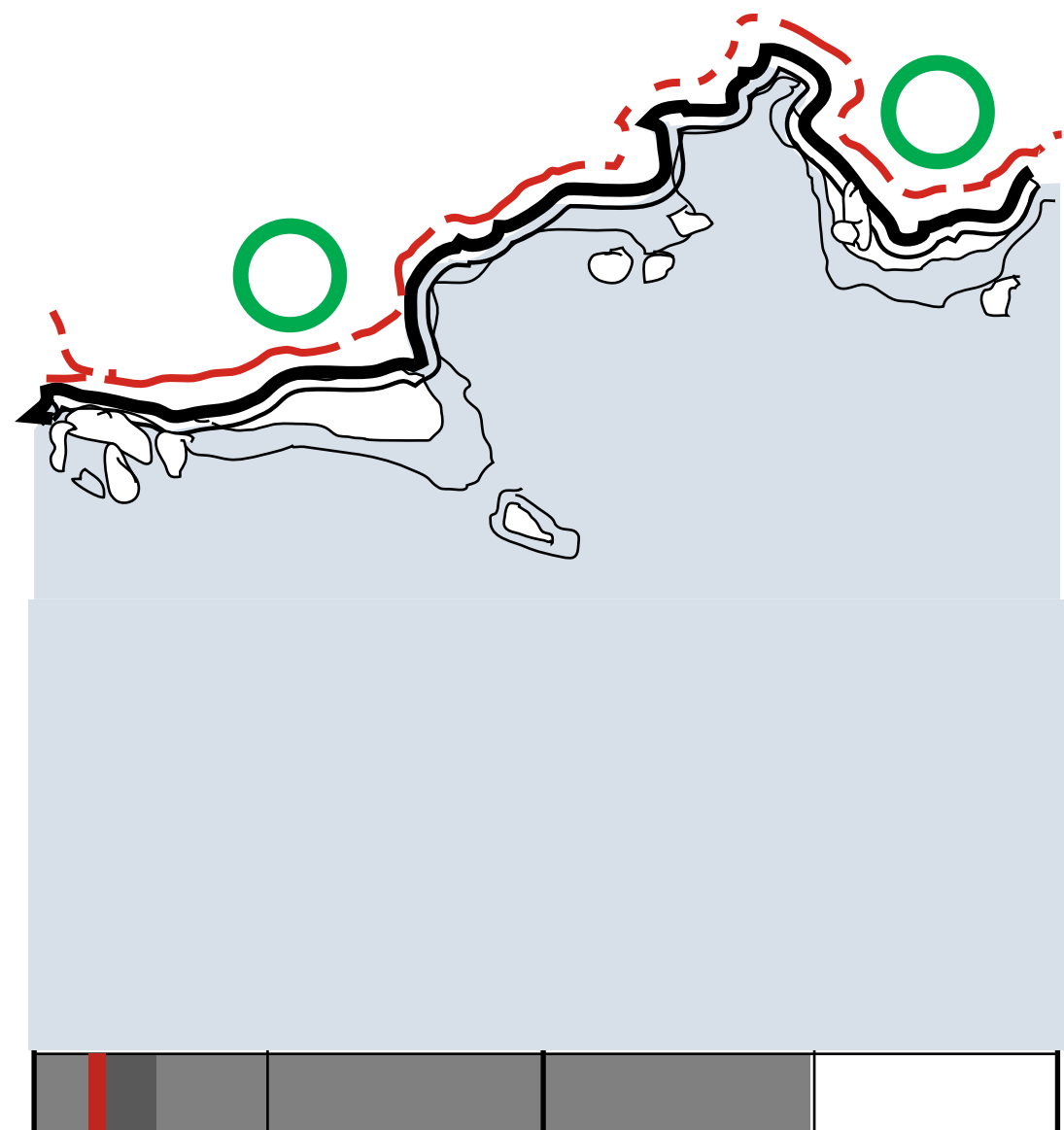
Section View



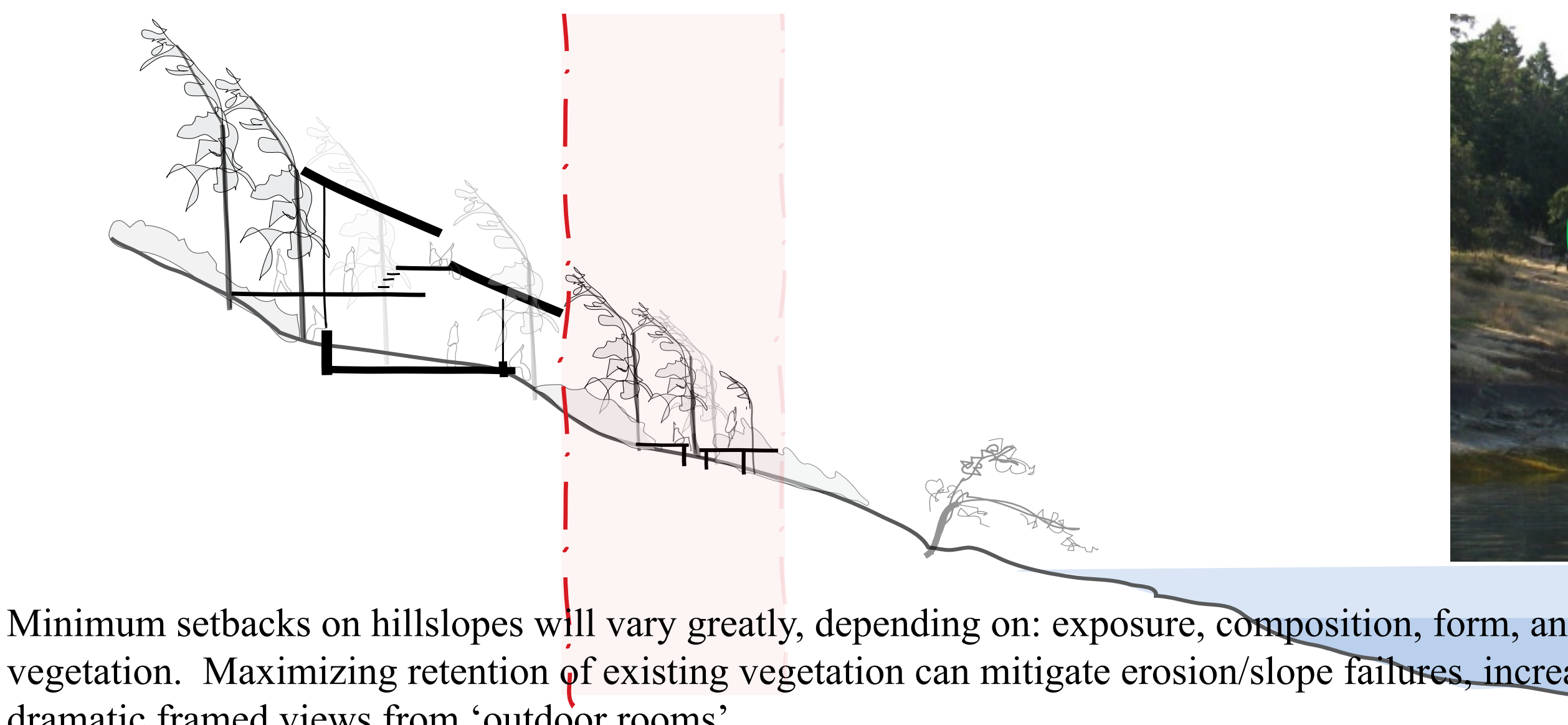
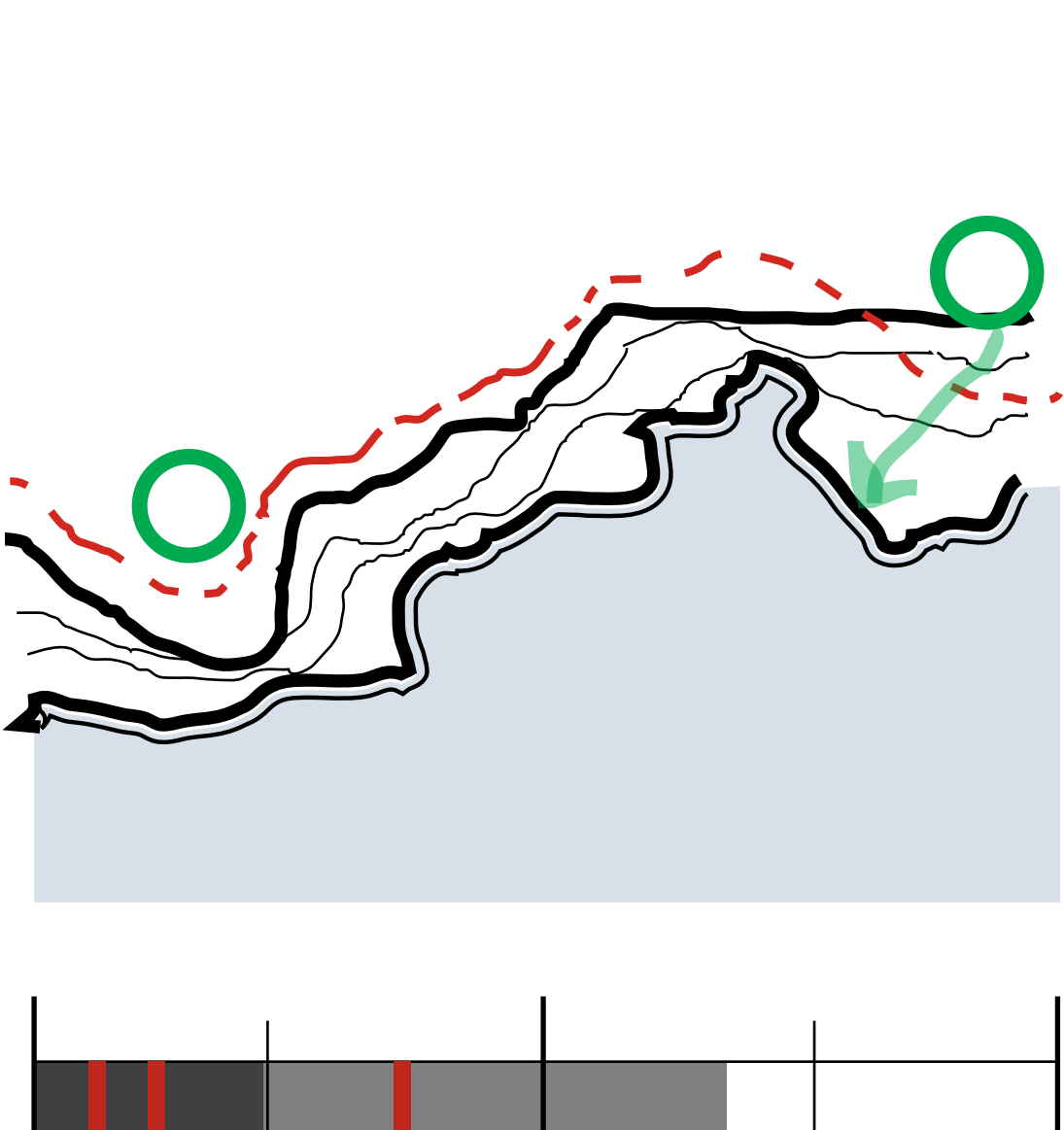
- Provide significant setbacks for built structures and intensive land uses
- Provide moderate setbacks for other land uses (i.e. farming, etc.)
- AND ensure the activities do not negatively impact critical system processes
- Consider designs/structures that respond dynamically to the site's system dynamics (i.e. 'Site Adaptive Design')



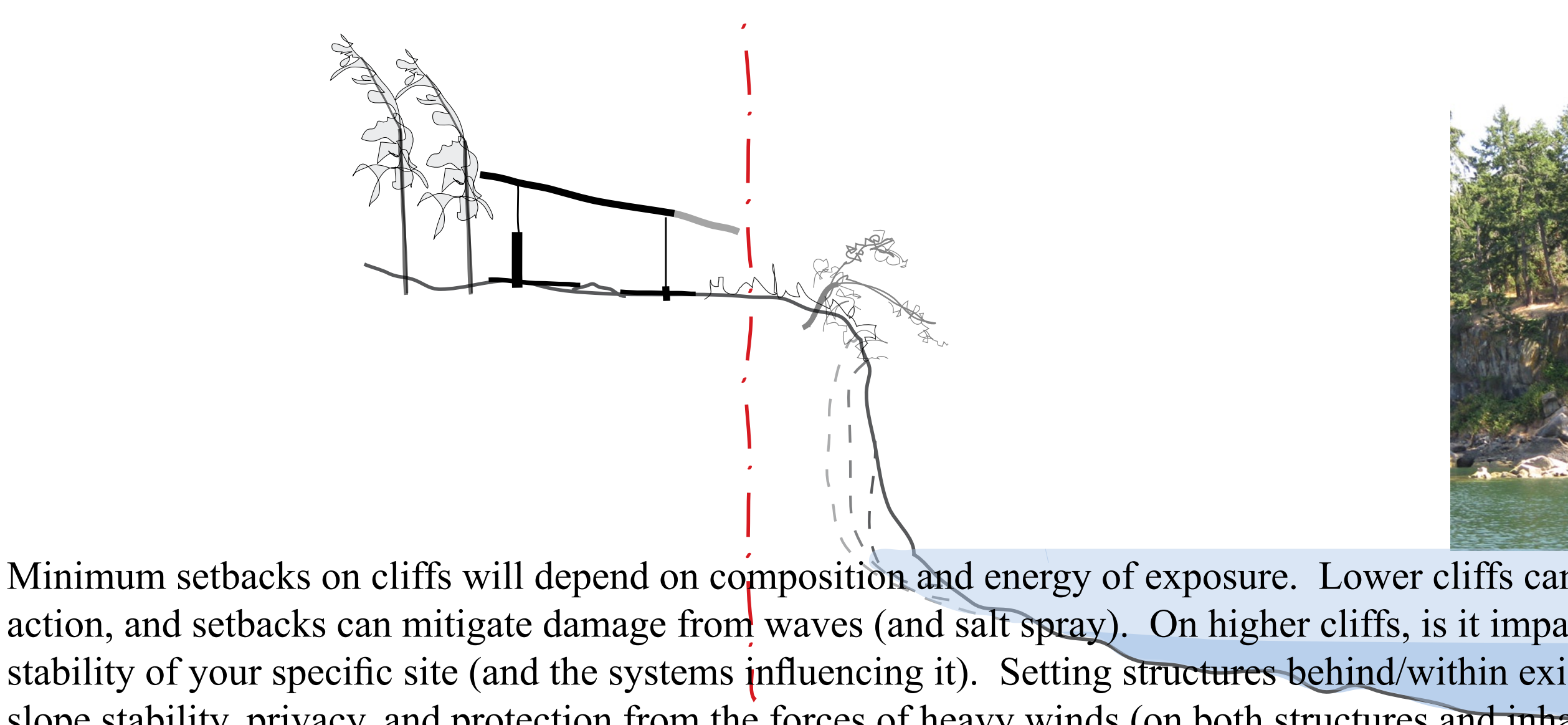
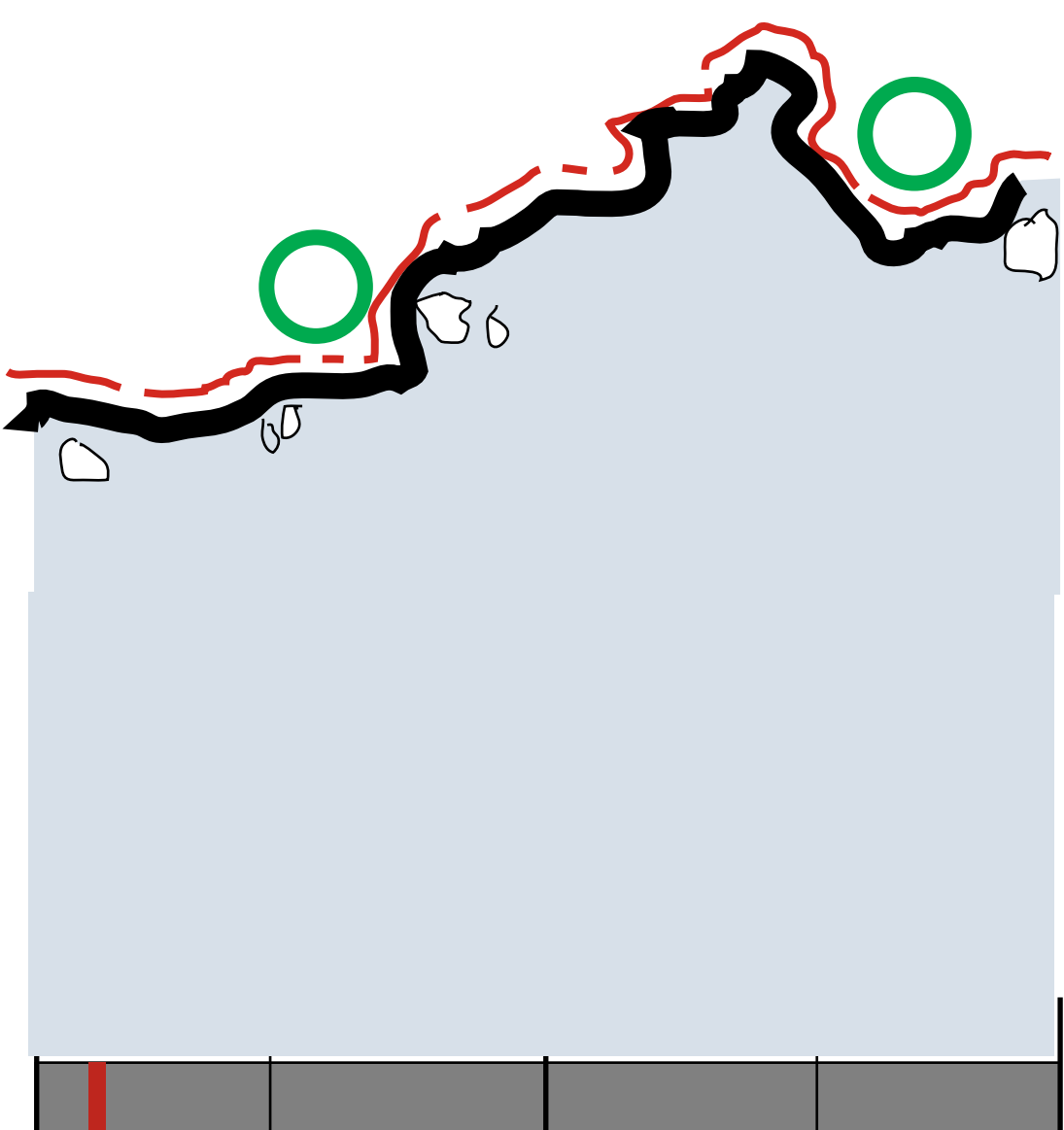
Minimum setback distance will depend on the degree of exposure (to wind/wave energy) AND trends in sediment dynamics -- patterns of erosion/accretion over time. Building permanent structures well back from these dynamic shorelines can significantly increase durability, and ecosystem health; while drastically reducing costs, maintenance, and potentially devastating impacts on critical natural systems.



Because these shorelines are generally fairly stable, minimum setbacks are possible. However, one should consider the specific degree of exposure (to wind/wave energy) - as high energy sites can be subject to large debris carried (far) beyond the high tide line. Maintaining existing vegetation, and incorporating unique trees, and/or rock features into the design can greatly enhance natural aesthetics, privacy and property values; while minimizing visual and ecological intrusion.



Minimum setbacks on hillslopes will vary greatly, depending on: exposure, composition, form, and amount of existing vegetation. Maximizing retention of existing vegetation can mitigate erosion/slope failures, increase privacy, and create dramatic framed views from 'outdoor rooms'.



Minimum setbacks on cliffs will depend on composition and energy of exposure. Lower cliffs can be subject to increased wave action, and setbacks can mitigate damage from waves (and salt spray). On higher cliffs, it is imperative to understand the stability of your specific site (and the systems influencing it). Setting structures behind/within existing vegetation will increase slope stability, privacy, and protection from the forces of heavy winds (on both structures and inhabitants).

# THETIS ISLAND Coastline Types & Sighting in Response to Systems