

Social-Ecological History Supporting a Resilient Hampton

Approach & Social Ecological History

The Pennsylvania State University team (Team Penn State) began its work with an exploration of 12,000 years of Hampton's social ecological history to challenge racial injustice wrought by "colorblind" planning (Hardy, Dean, Milligan, and Henyan 2017) (Figure 1). We combined social ecological history with conventional approaches to resilience such as the development of a social and coastal vulnerability index.

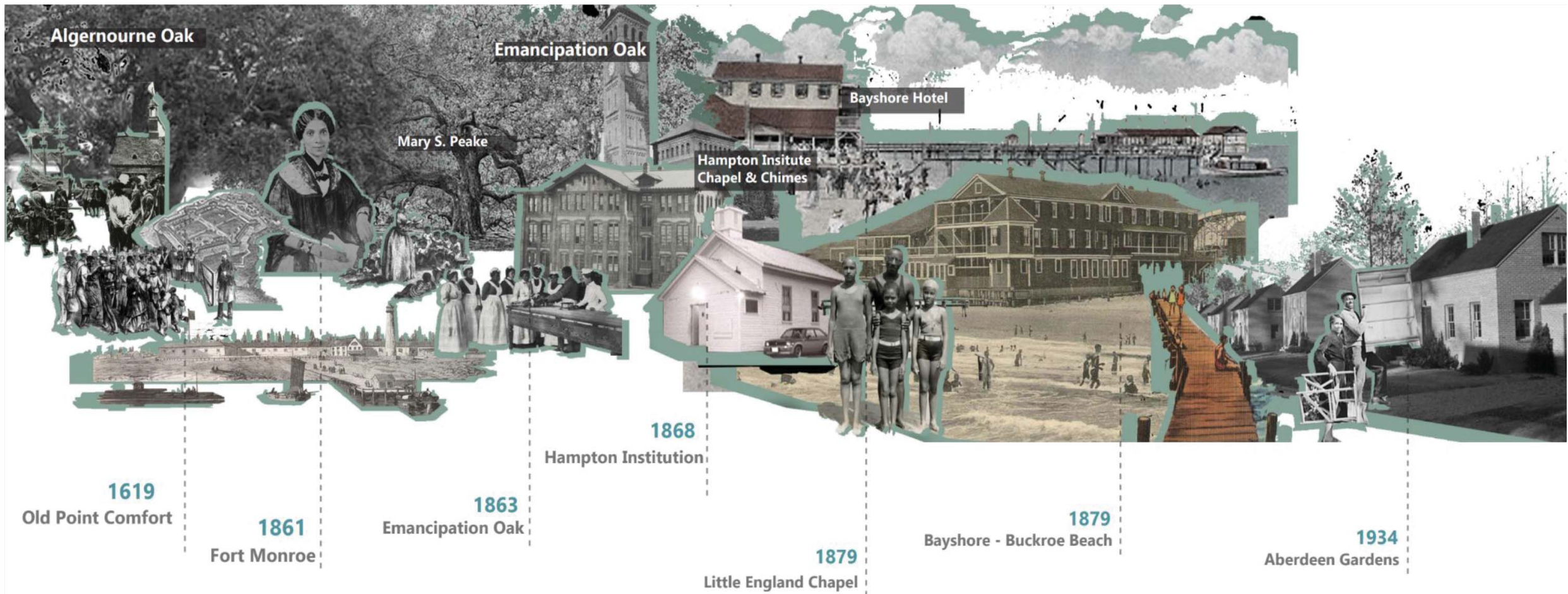


Figure 1, one of many timelines created by the team. Minh Anh Kieu

Hampton's geography positioned it as an arrival port for slaves and a center for trading timber and goods between Indigenous and European cultures, leading to the simultaneous exploitation of both people and natural resources of the Great Dismal Swamp. Formerly enslaved people found refuge in maroon colonies within the Great Dismal and formed a significant part of the region's economy up until the Civil War (Nevius 2020). Our design report shows how this altered the ecology and informs our approach to design (Figure 2). This leads us to question the programmatic occupation of spaces that will undergo sea-level adaptation as will be subsequently discussed.

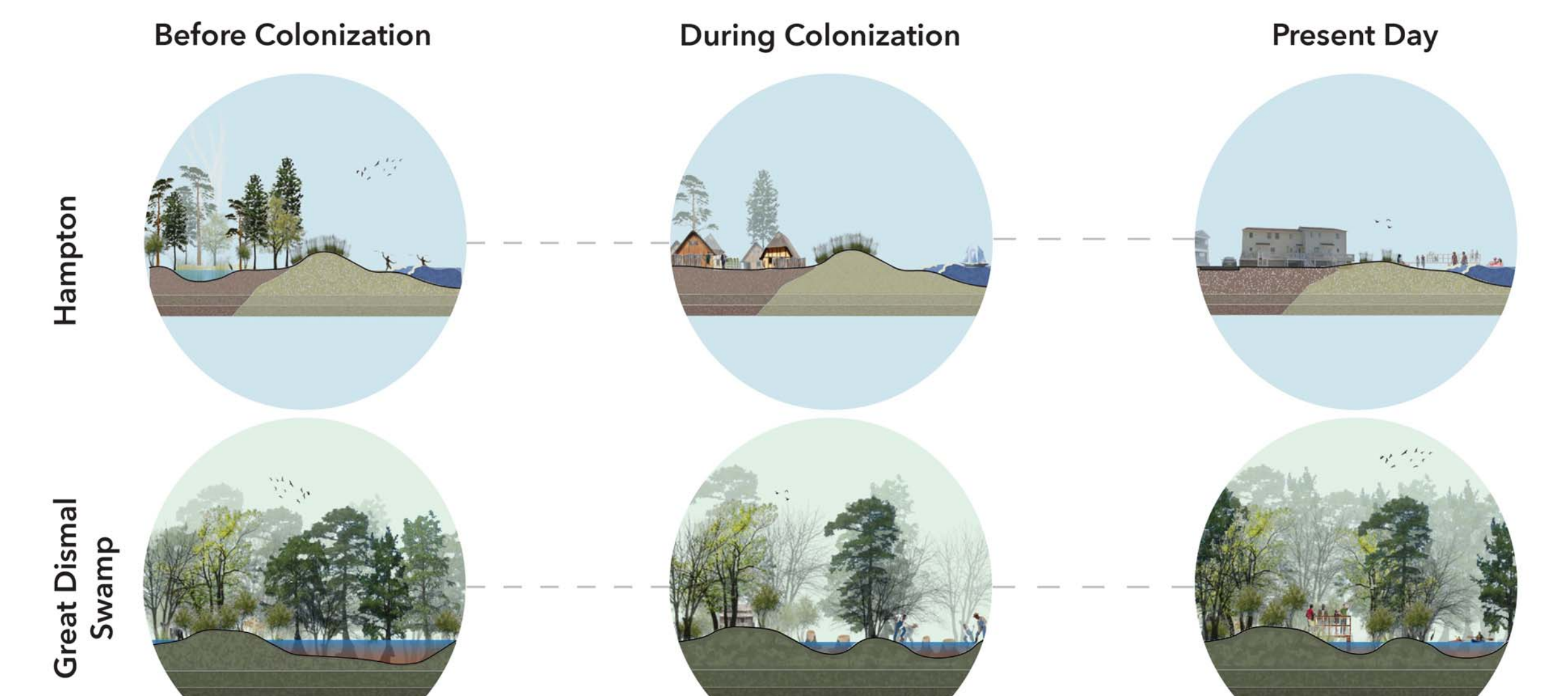


Figure 2, How changes to occupation and economy transformed the ecology. Renderings, Madison Borsos.

Re-introducing Water to the Land

Accelerating buildout of Hampton during the late 20th century coincides with relative sea level rise (RSLR) increasing the vulnerability of the city. Ecological evidence, such as reduced or non-existent marsh zonation and dead standing trees, point to the attenuation of the intertidal zone and rising water table. The efficacy of conventional strategies such as increased infiltration of runoff is thus limited. There is currently little territory for creating buffer spaces.

Our index of social and coastal vulnerability (Figure 3) (methods described within our design report) suggests where substantial investment is best directed. Team Penn State further addressed how retreat could be effectively managed where it becomes inevitable. As uncomfortable as this topic is, addressing it is essential to preventing unmitigated losses. Our design report identifies a series of policy revisions to existing codes and ordinances such as adding sea level provisions to transferable development rights programs to facilitate their use for this purpose.

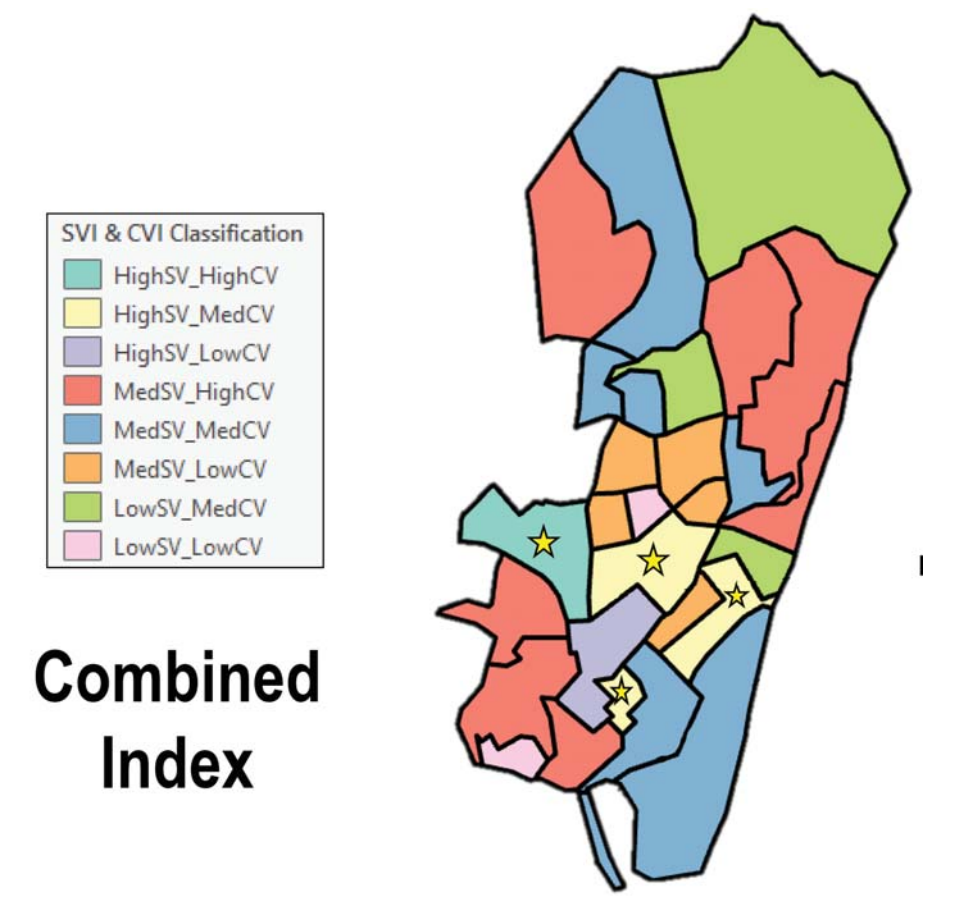


Figure 3, Excerpt from Social and Coastal Index (See Design Report for Details), Selena Hinojos

Retreat provides space for green infrastructure (Figure 4). These provisions also support the expansion of drainage areas from ditches into meaningful wetland spaces that allow water to move out of the City (for instance by expanding the capacity of the channel between Back River and Hampton River) (Figure 5). People of Hampton think of themselves as people of the water—our concept brings this identity into backyards.



Figure 4, Retreated spaces become valuable ecological buffers. Lauren Taylor.

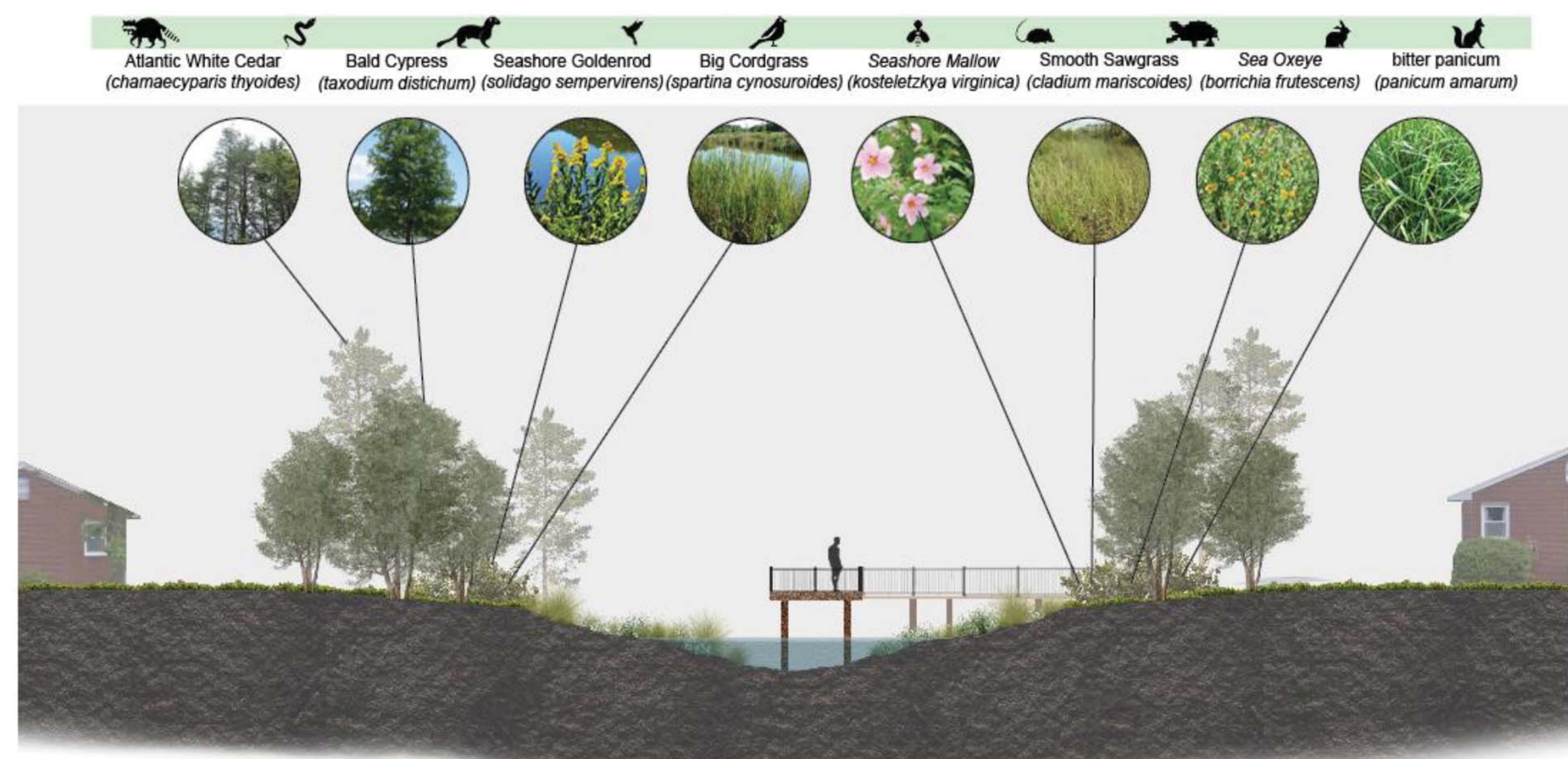


Figure 5, New backyard ecologies where there were once only ditches. Seth Esterly.

Opportunities for Justice

Lastly, and perhaps most importantly, we recognize that RSLR provides an important opportunity to reconsider the use of spaces that are being adapted. For instance, areas of the former Grand Contraband Camp, a place of escape and refuge created in the wake of the Civil War, are presently occupied by the Hampton Jail and other infrastructure of incarceration (Figure 6). We propose that a conversation should be had about the meaning of spaces such as the area of the former Grand Contraband Camp. Considering our Nation's current racial reckoning, the conception of historical spaces needs to be expanded to recognize these places so that RSLR adaptation may directly address questions of justice without being blinded by practical considerations.

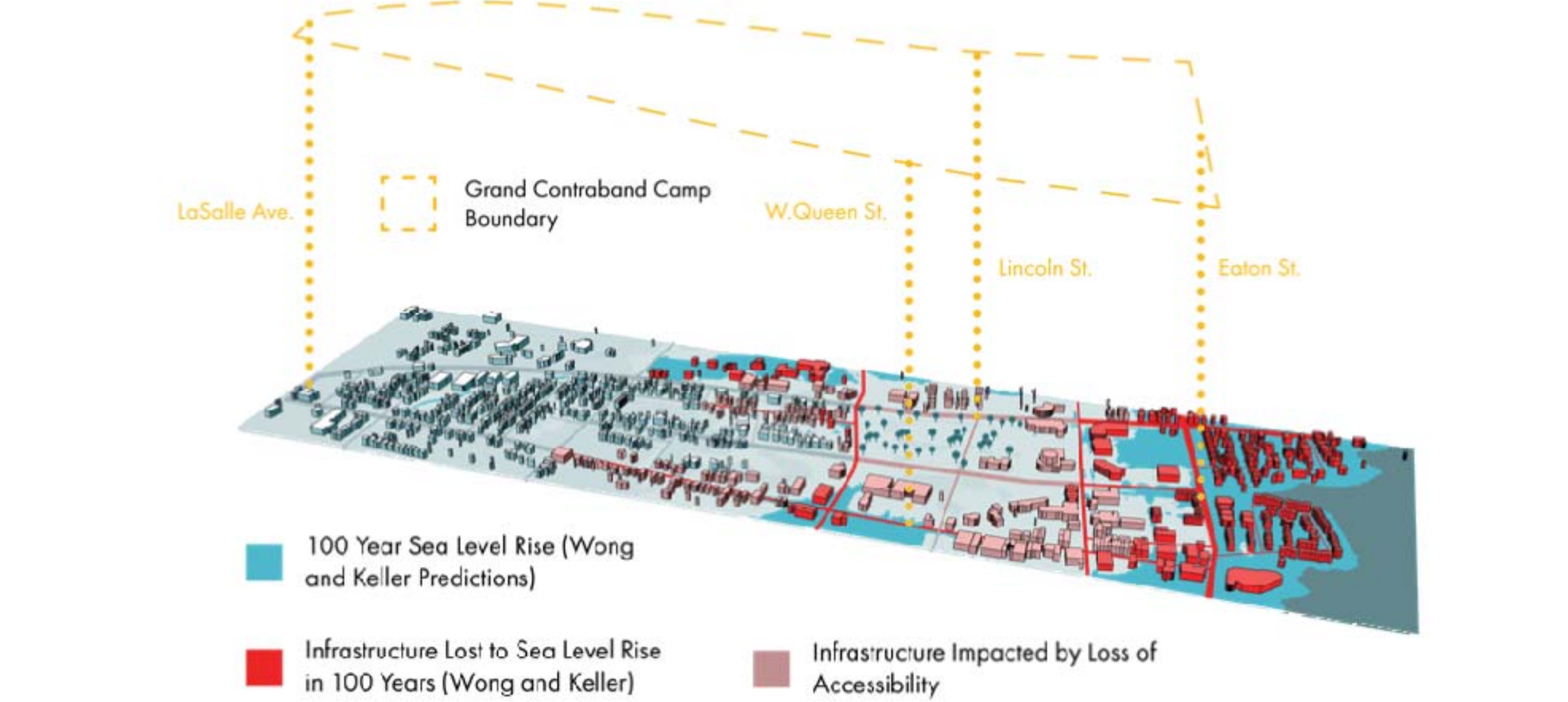


Figure 6, Overlaps between RSLR, Grand Contraband Camp, and uses that may be reconsidered. Jake Tiernan.