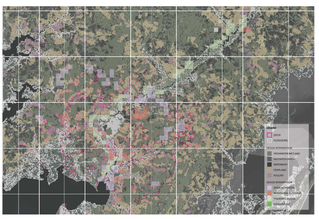
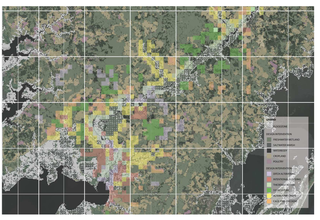
Shared Ground:
Weaving Ecology, Community, and Industry for a Resilient Future

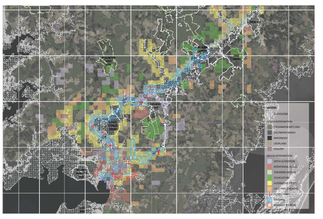
Hayoung Ju, Jack Shin, Yujie Liu

TIMELINE OF HUMAN INTERVENTION

THE PRESENT AND FUTURE OF POCOMOKE RIVER







Before 1600s

Indigenous Pocomoke people stewarded the land using seasonal settlements, canoe-based travel, fishing, hunting, and low-impact foraging. The landscape was a pristine, biodiverse wetland forest.

1700s

Small-scale ditching for agriculture began.

1900s

Expansion of poultry farming in the region; early signs of industrial-scale practices.

1920s

Government-backed drainage projects convert wetlands into farmland, radically reshaping hydrology.

1940s

Major channelization of the Pocomoke River and ditching of tributaries to improve drainage efficiency.

1960s

Widespread use of fertilizers and pesticides impacts water quality and aquatic life.

1990s

Initial efforts to restore riparian buffers to reduce runoff and improve habitat conditions.

2017

Pocomoke river restoration project launched.

2025 — PHASE1

Rotational pasture chicken farming, public trails, and cleansing buffer zones replace corn mono-culture. Land begins transition toward multi-functional use.

2075 — PHASE2

Forest expansion supports new industries (mushroom farming or agroforestry); alternative crops tested in wetter soils. Continued pasture rotation and community engagement programs.

2100 — PHASE3

Land becomes a publicly accessible forested wetland focused on tourism, education, and long-term climate resilience while farming industry migrates toward inland

2125









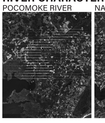




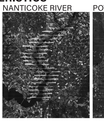


RIVER CHARACTERISTICS

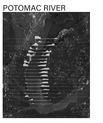
POCOMOKE RIVER



NANTICOKE RIVER



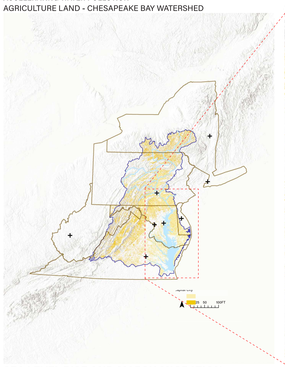
POTOMAC RIVER



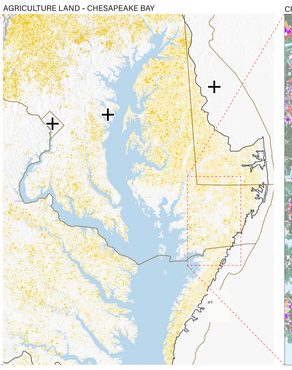
LAND USE

ACCELERATING WATER POLLUTION

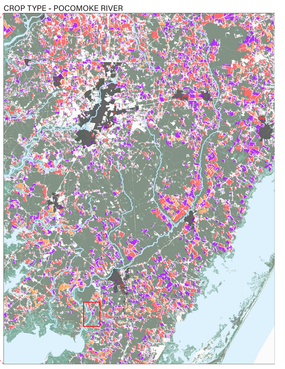
AGRICULTURE LAND - CHESAPEAKE BAY WATERSHED



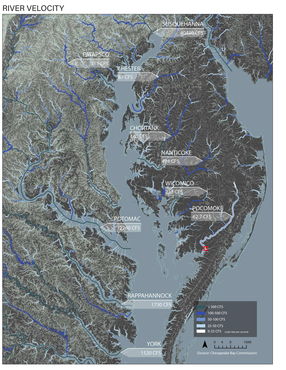
AGRICULTURE LAND - CHESAPEAKE BAY



CROP TYPE - POCOMOKE RIVER

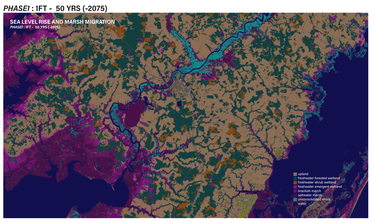


RIVER VELOCITY

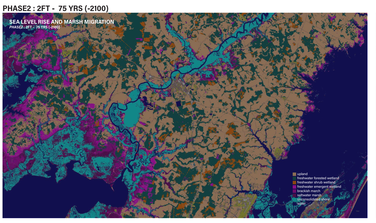


SEA LEVEL RISE AND MARSH MIGRATION

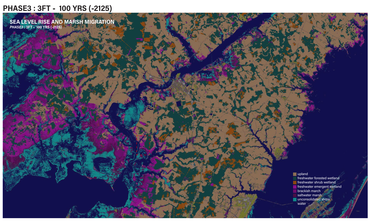
PHASE1 : 1FT - 50 YRS (-2075)



PHASE2 : 2FT - 75 YRS (-2100)



PHASE3 : 3FT - 100 YRS (-2125)



OPERATION DIAGRAM

EXISTING

INDUSTRY



WATER / POLLUTION

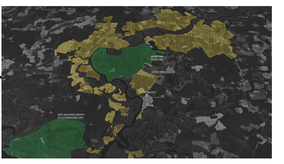


OWNERSHIP / STEWARDSHIP



ACCESS





PHASE1 : 1FT - 50 YRS

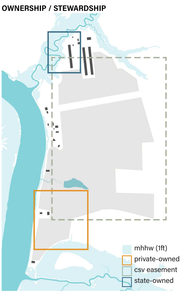
INDUSTRY



WATER / POLLUTION



OWNERSHIP / STEWARDSHIP



ACCESS



CHALLENGE / INCENTIVE

PHASE1 : 1FT - 50 YRS

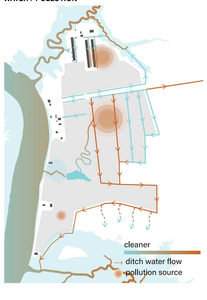


PHASE2 : 2FT - 75 YRS (-2100)

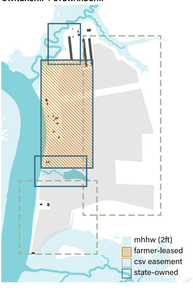
INDUSTRY



WATER / POLLUTION



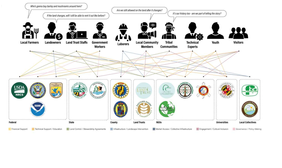
OWNERSHIP / STEWARDSHIP



ACCESS

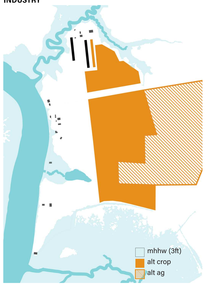


PHASE2 : 2FT - 75 YRS (-2100)



PHASE3 : 3FT - 100 YRS (-2125)

INDUSTRY



WATER / POLLUTION



OWNERSHIP / STEWARDSHIP



ACCESS



PHASE3 : 3FT - 100 YRS (-2125)

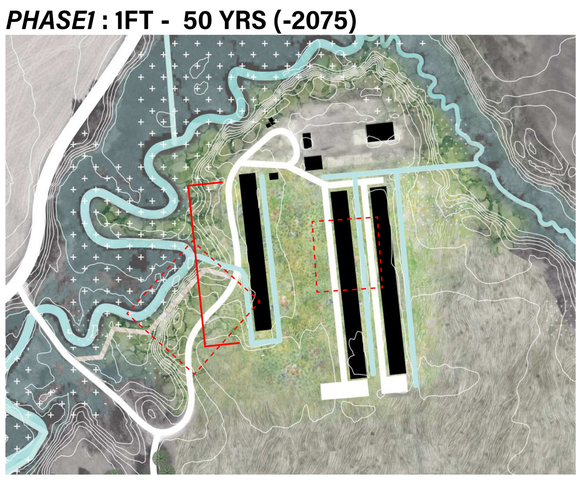


ZONE 1

PHASE3 : 3FT - 100 YRS (-2125)

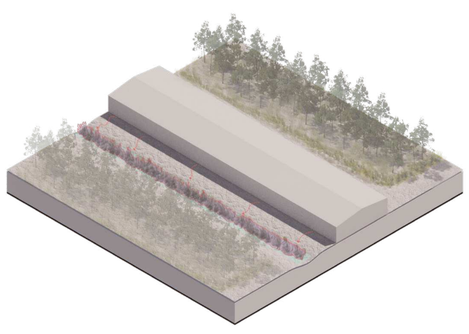


PHASE1 : 1FT - 50 YRS (-2075)



PLANTING INTO DITCHES

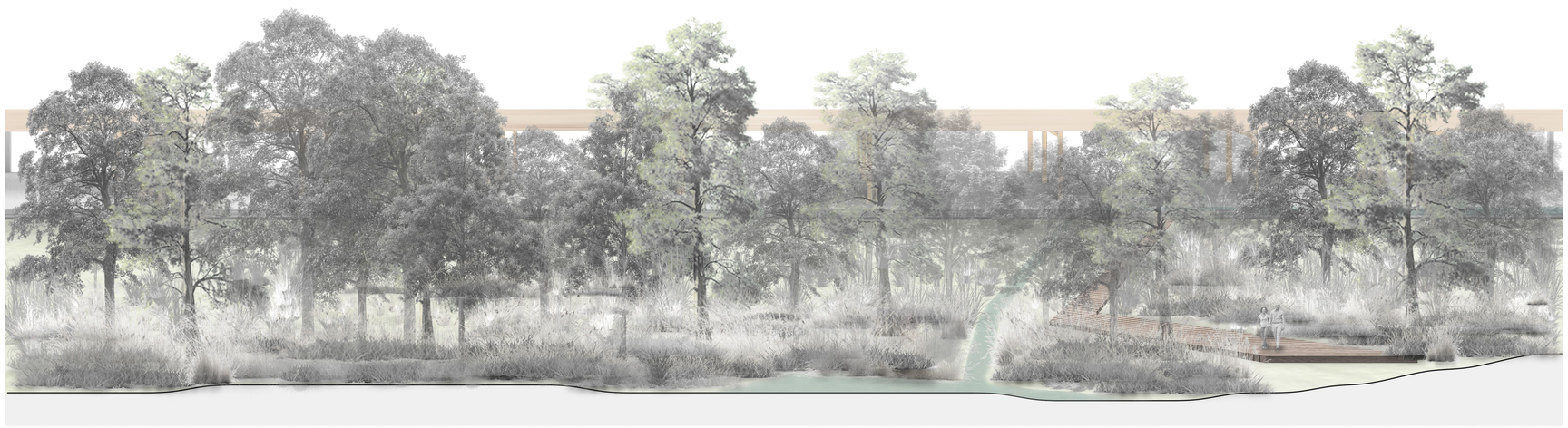
Planted ditches treats runoff from the chicken pasture and buildings, followed by an enhanced buffer that filters the water again before it reaches the stream.



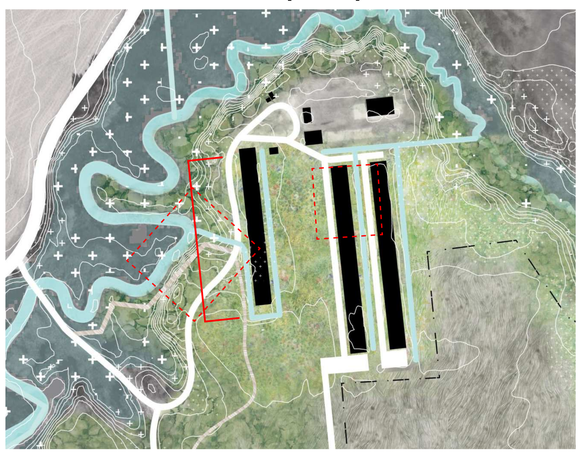
INSTALLING BOARDWALK

Boardwalk along ditch entrance shows visitors how farm runoff is filtered before reaching the stream.



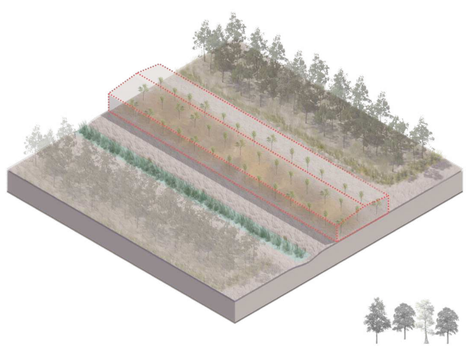


PHASE2 : 2FT - 75 YRS (-2100)



REUSING THE CHICKEN HOUSE

Planted ditches still filter runoff from the chicken farm, while the former chicken house becomes a greenhouse nursery, supporting the growth of trees for expanding forest buffer.



EXTENDING BOARDWALK

An extended boardwalk guides visitors through the public area and leads to a viewing pavilion.



PHASE3 : 3FT - 100 YRS (-2125)



REUSING THE CHICKEN HOUSE

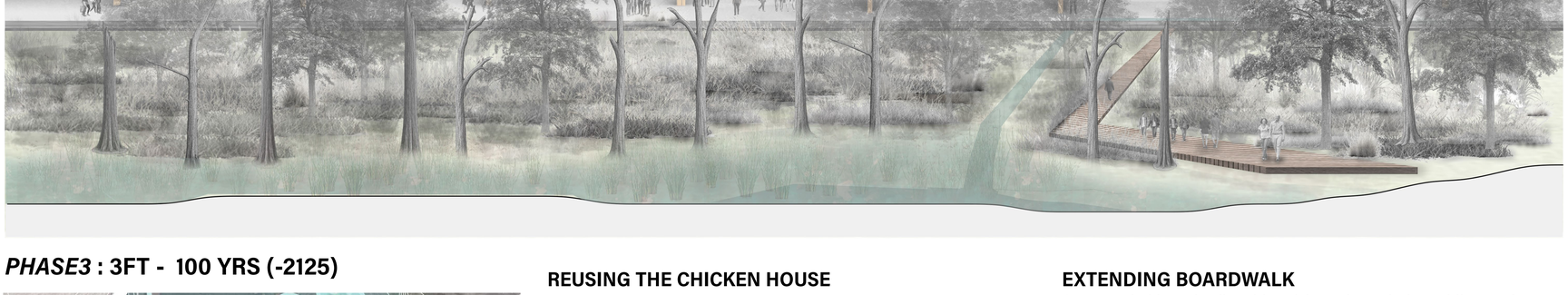
The former tree nursery becomes a gathering space, supporting various event for public.



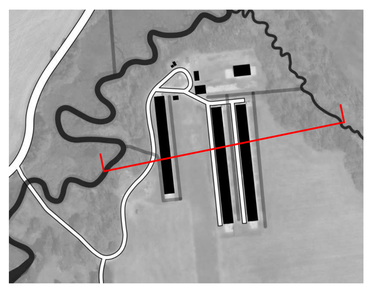
EXTENDING BOARDWALK

An extended boardwalk guides visitors through the public area it acts as a watching deck.

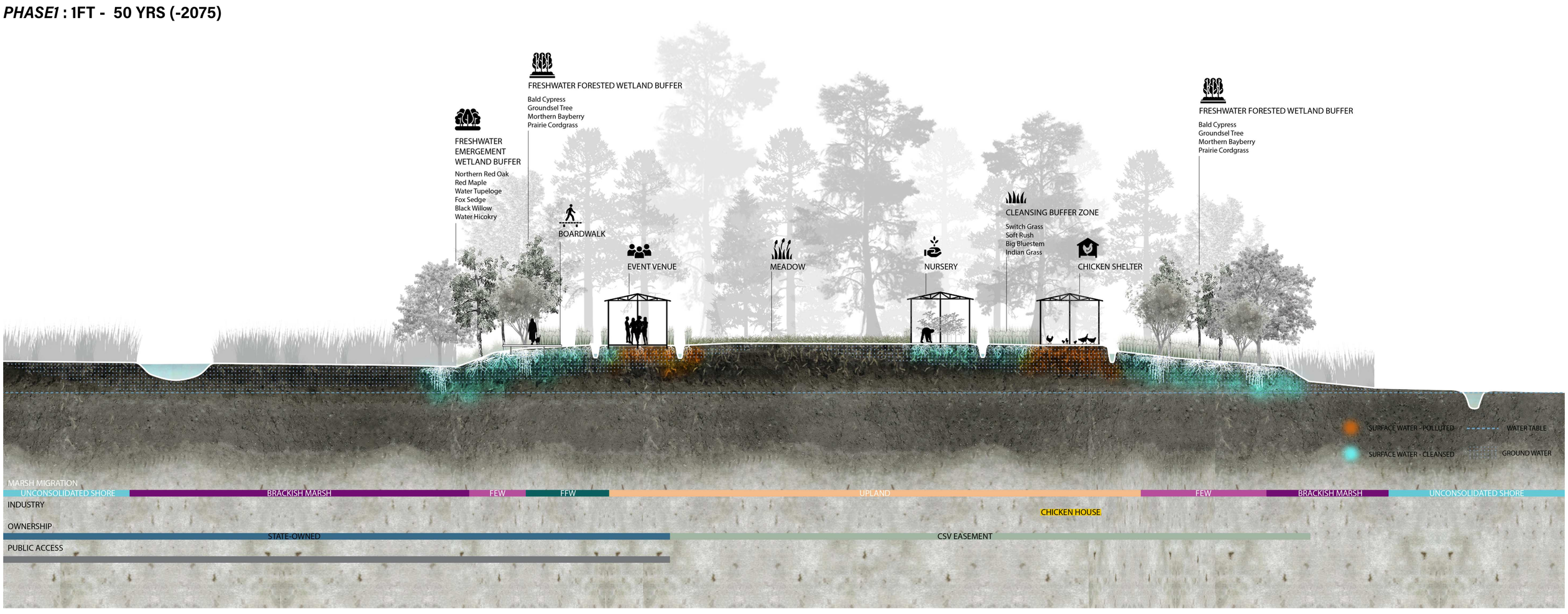




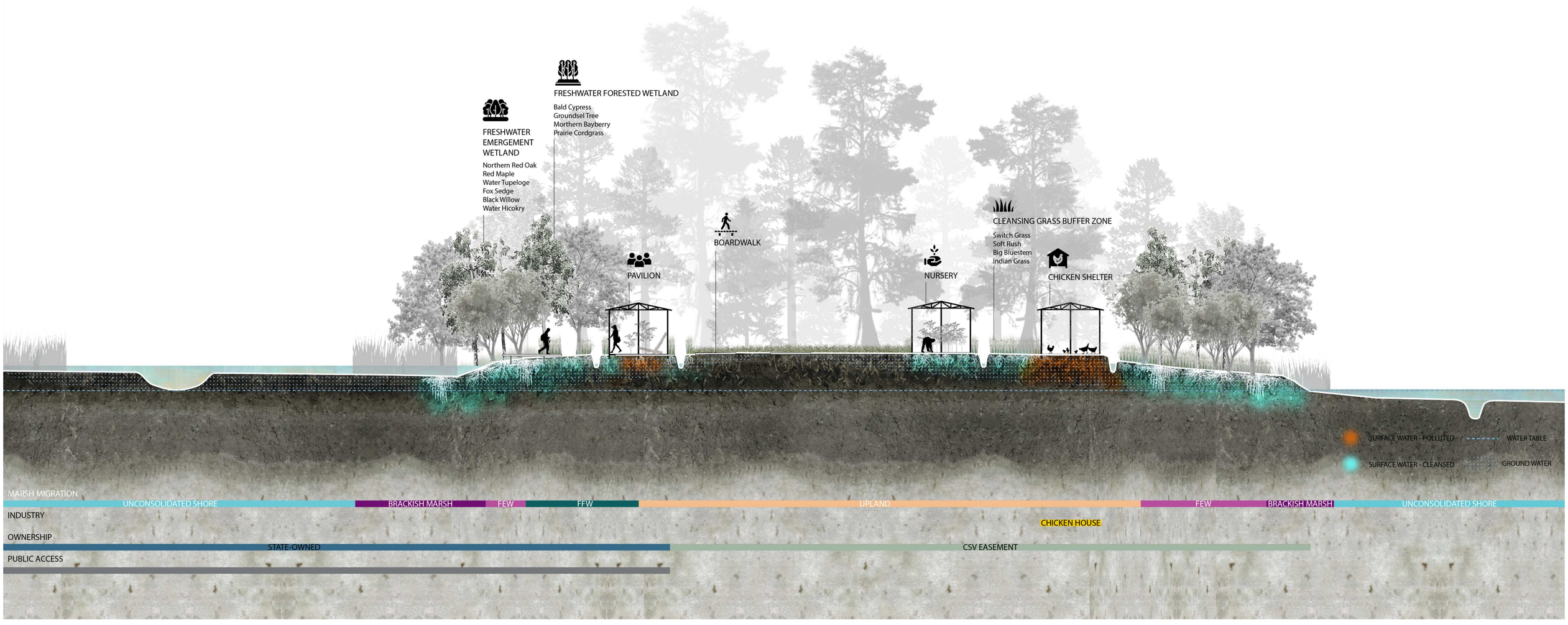
EXISTING



PHASE1 : 1FT - 50 YRS (-2075)



PHASE2 : 2FT - 75 YRS (-2100)



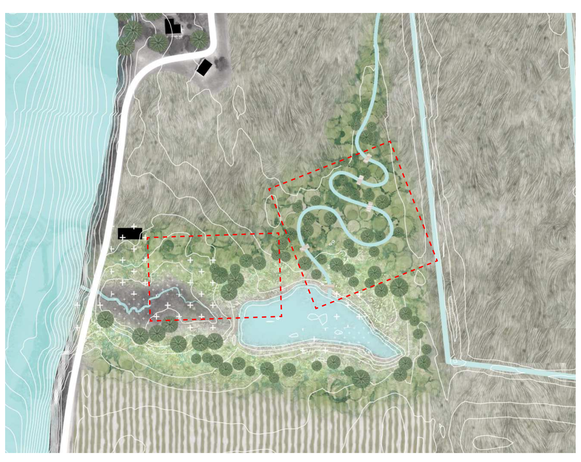
PHASE3 : 3FT - 100 YRS (-2125)

ZONE 2

PHASE3 : 3FT - 100 YRS (-2125)

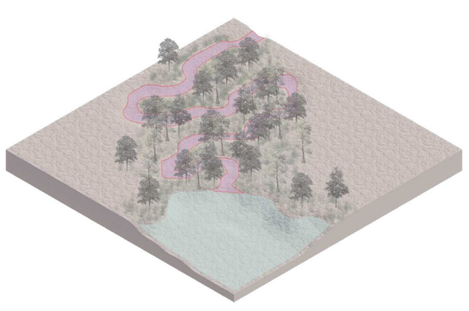


PHASE1 : 1FT - 50 YRS (-2075)



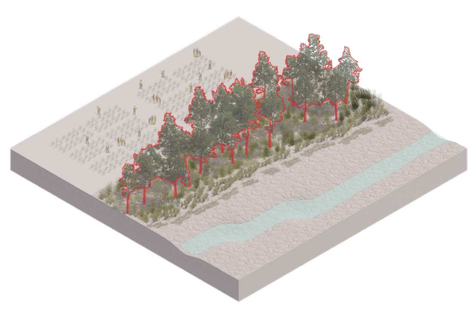
DIGGING NEW WATERWAYS

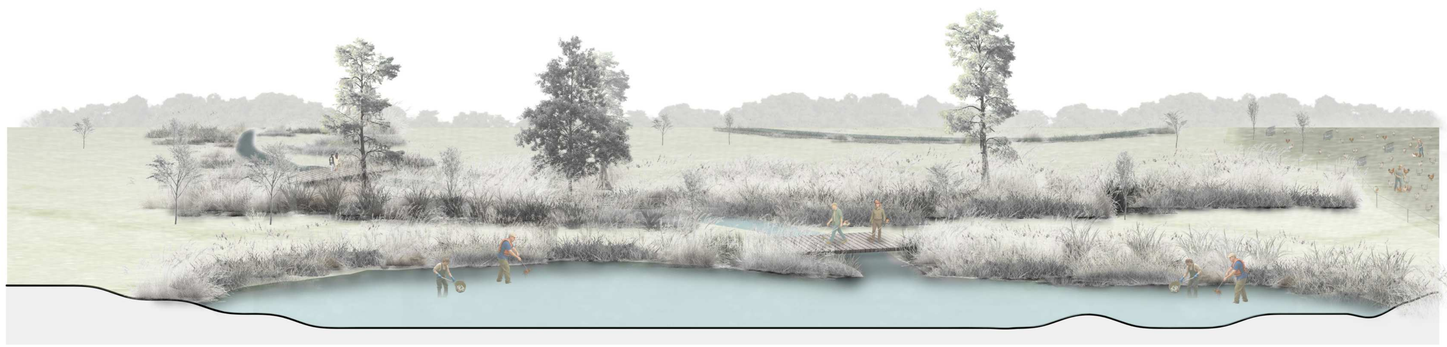
A new waterway diverts flow from existing ditches, allowing water to stay longer and be filtered before reaching the pond and river.



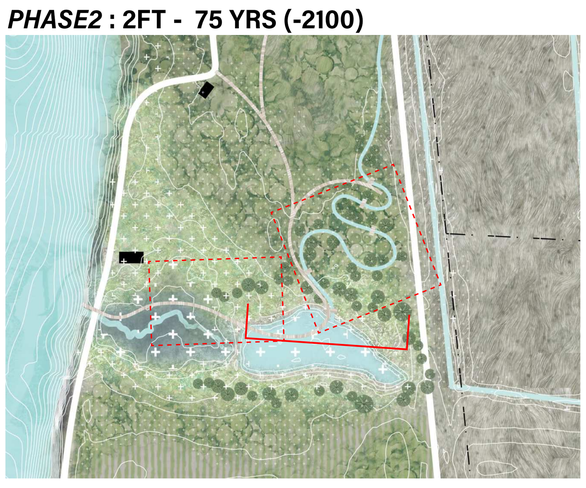
EXPANDING FORESTED BUFFER

he expanded buffer cleanses agricultural runoff, slows water flow, and increase infiltration.



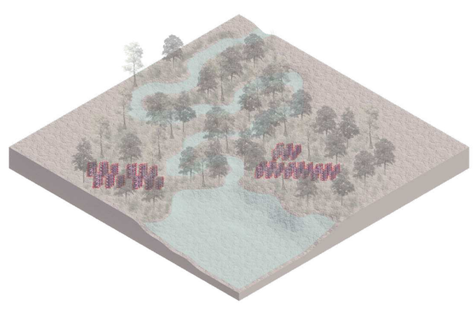


PHASE2 : 2FT - 75 YRS (-2100)



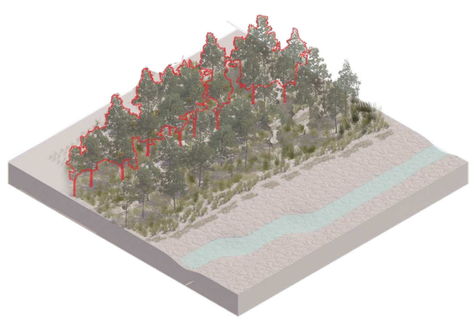
MULTI-USED CLEANSING ZONE

The cleansing zone becomes a multi-use area, integrating new industries such as mushroom farm and agroforestry, and public recreation.



EXPANDING FORESTED BUFFER

The expanded buffer cleanses agricultural runoff, slows water flow, and creates space for new industry.



PHASE3 : 3FT - 100 YRS (-2125)



MULTI-USED CLEANSING ZONE

The cleansing zone becomes a public space where people can enjoy water activities and the forest.



EXPANDING FORESTED BUFFER

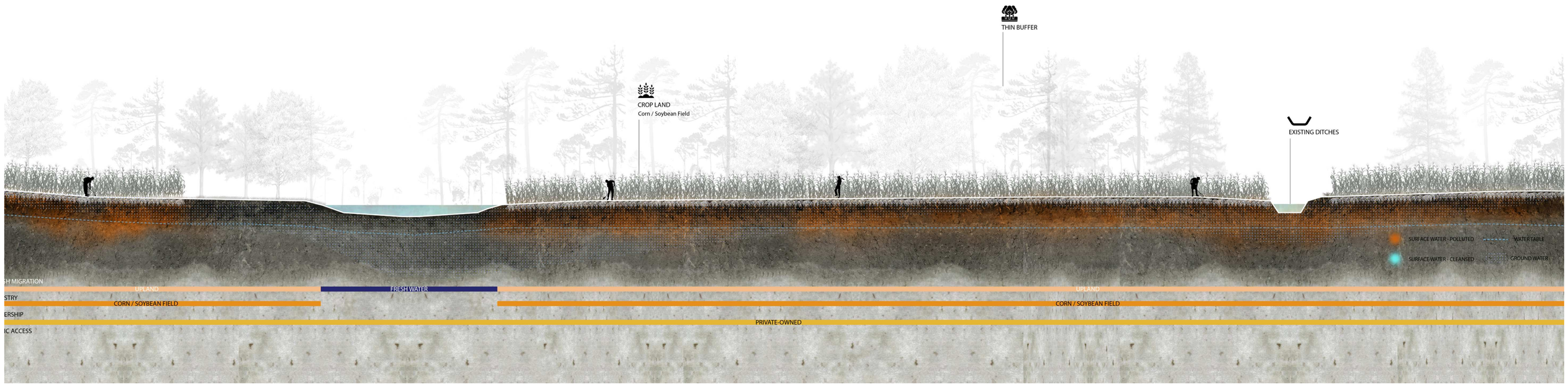
The expanded buffer becomes a corridor that connects people to the river, and surrounding public spaces.



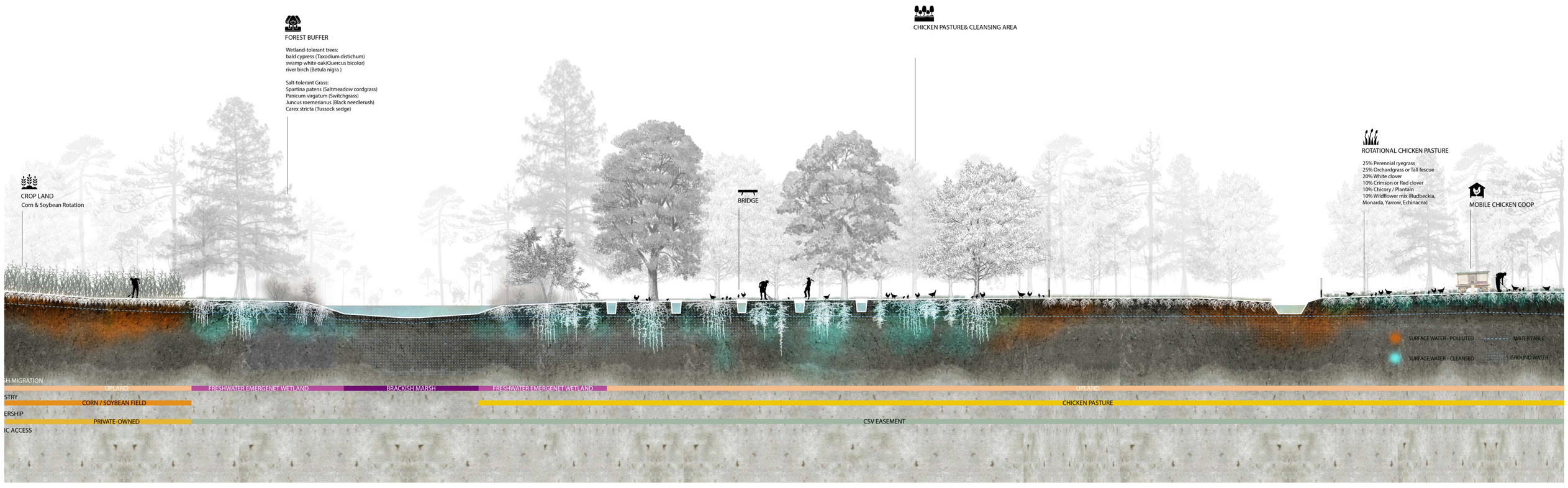


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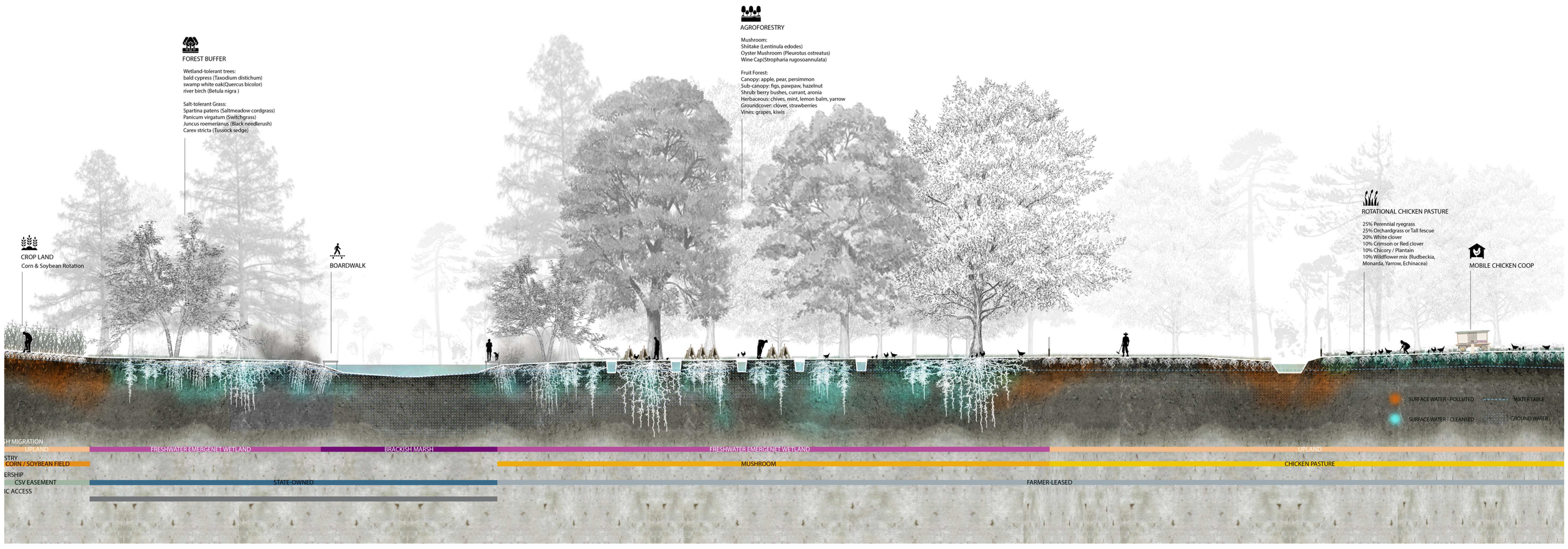




PHASE1 : 1FT - 50 YRS (-2075)



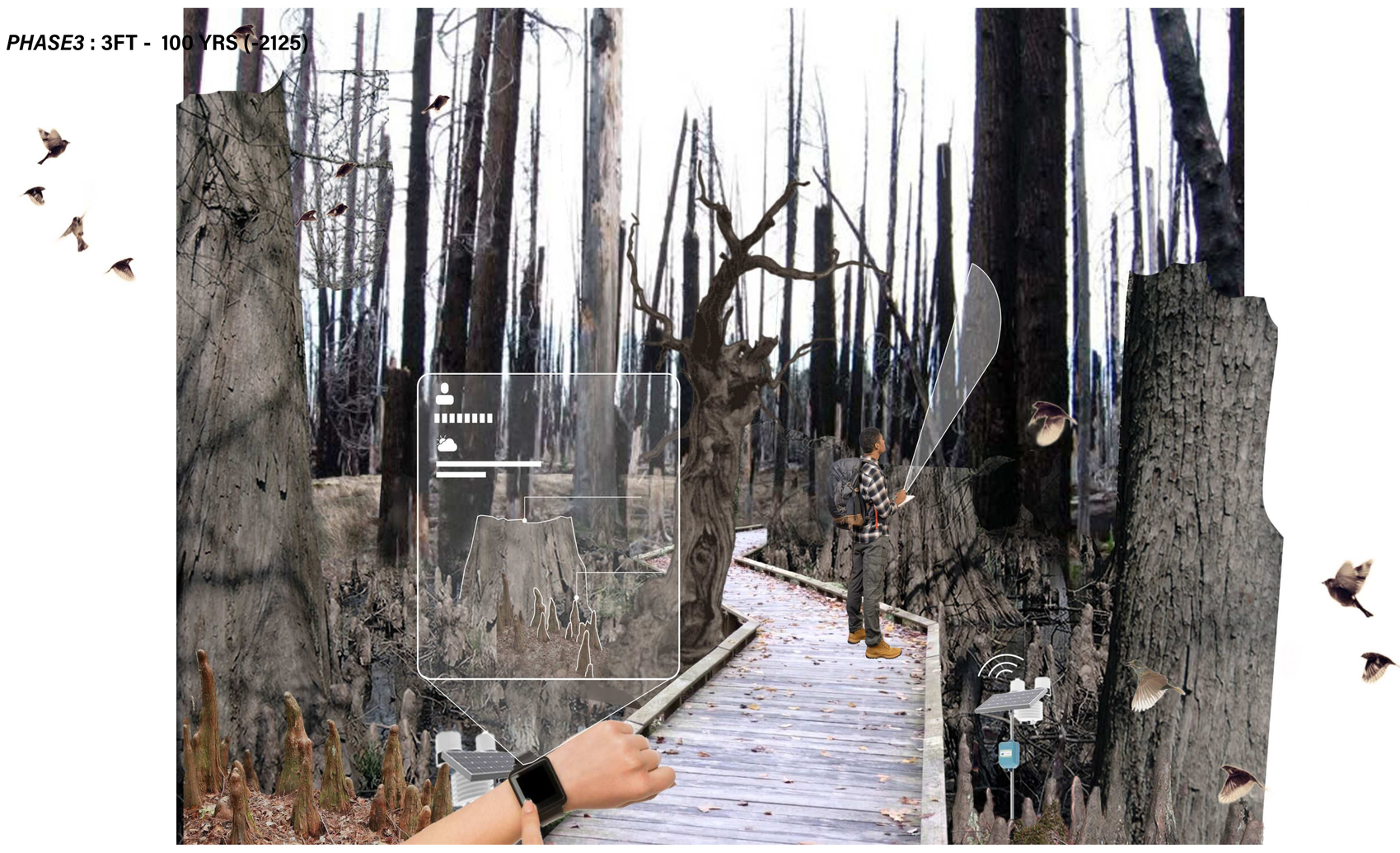
PHASE2 : 2FT - 75 YRS (-2100)



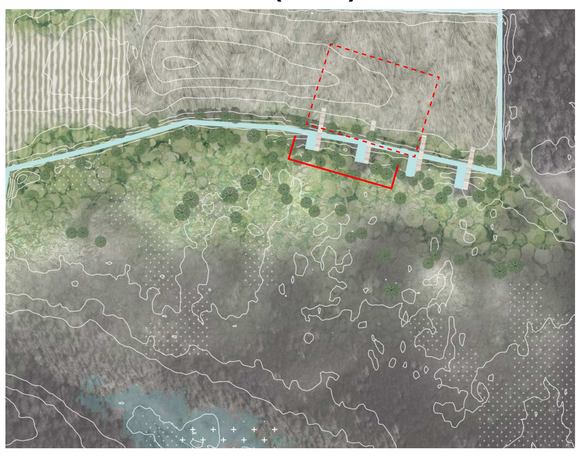
PHASE3 : 3FT - 100 YRS (-2125)

ZONE 3

PHASE3 : 3FT - 100 YRS (-2125)

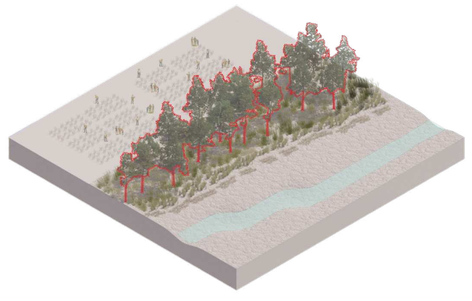


PHASE1 : 1FT - 50 YRS (-2075)



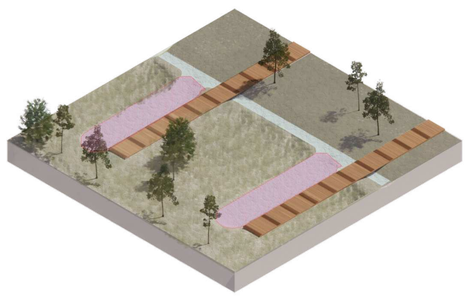
DESIGNING A MULTI-LAYERED BUFFER

Manage trees to allow more light in, encouraging understory growth and diverse root systems that enhance water filtration.



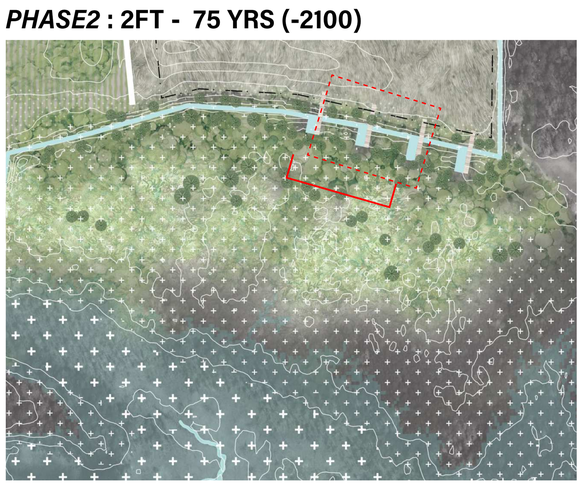
NOTCHING LEVEES / INFILTRATION POND

A notched levee diverts water into an infiltration pond, slowing its flow and allowing it to stay longer before reaching the stream.





PHASE2 : 2FT - 75 YRS (-2100)



ADAPTING TO NEW ENVIRONMENT

Adapting to marsh migration, where it starts to form an unique transitioning landscape.

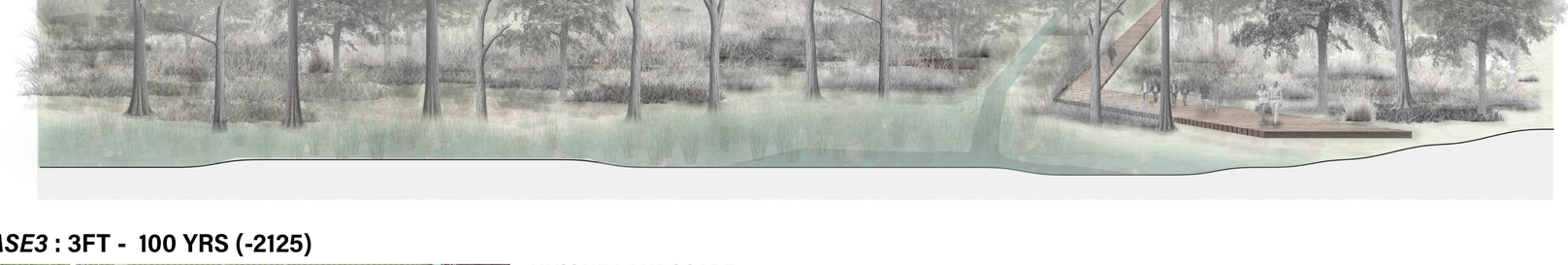




PHASE3 : 3FT - 100 YRS (-2125)

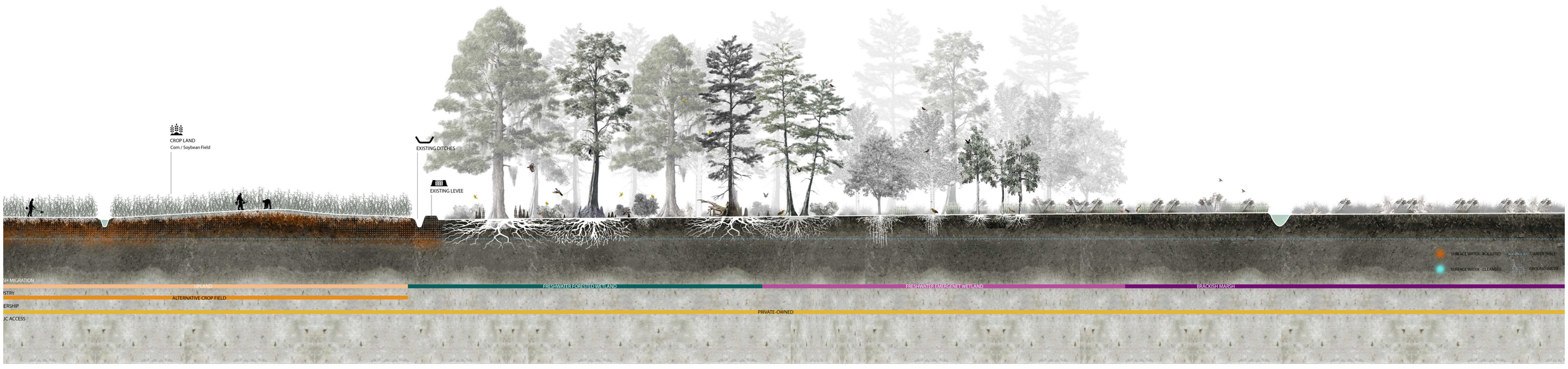
UNIQUE LANDSCAPE

As marshes migrate and soil salinity rises, ghost forests emerge—creating a unique landscape and an opportunity to extend the boardwalk and invite people in.

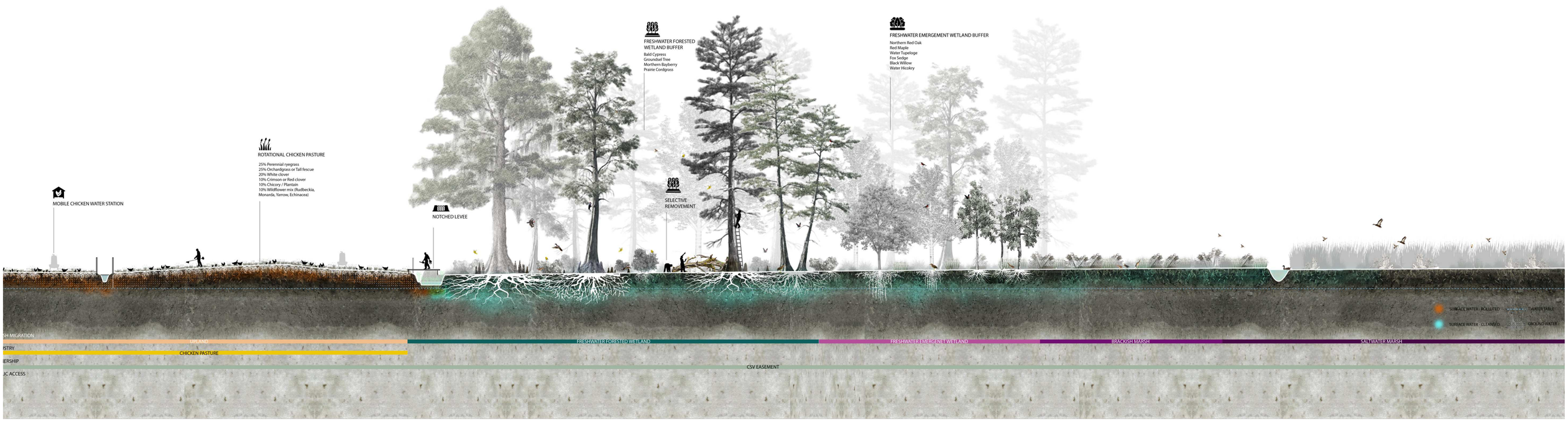


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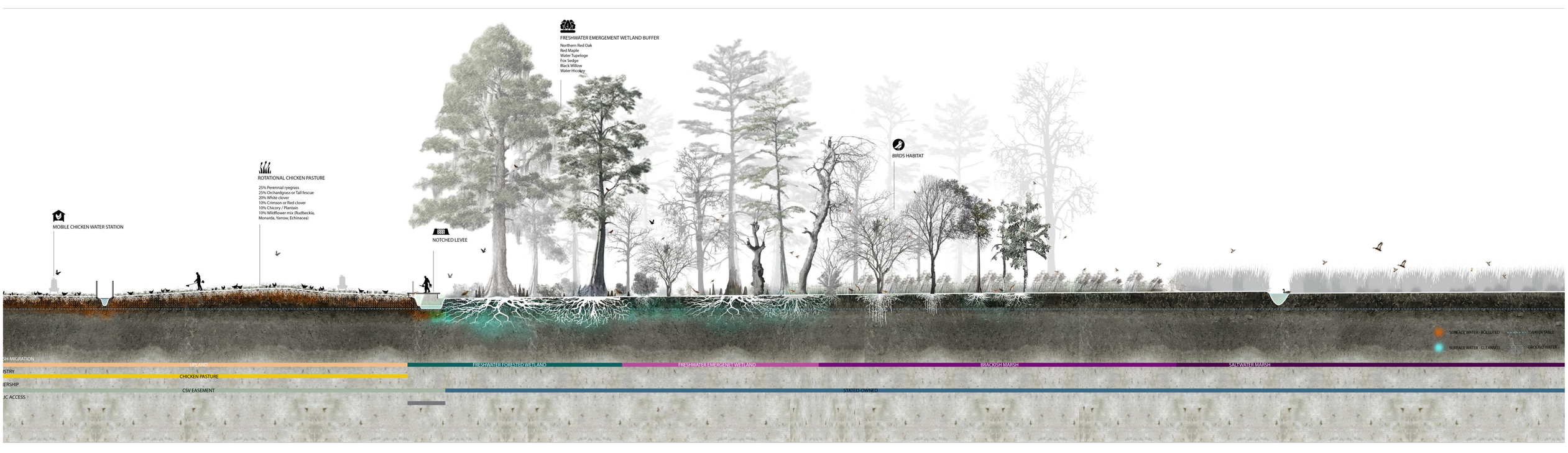




PHASE1 : 1FT - 50 YRS (-2075)



PHASE2 : 2FT - 75 YRS (-2100)



PHASE3 : 3FT - 100 YRS (-2125)