



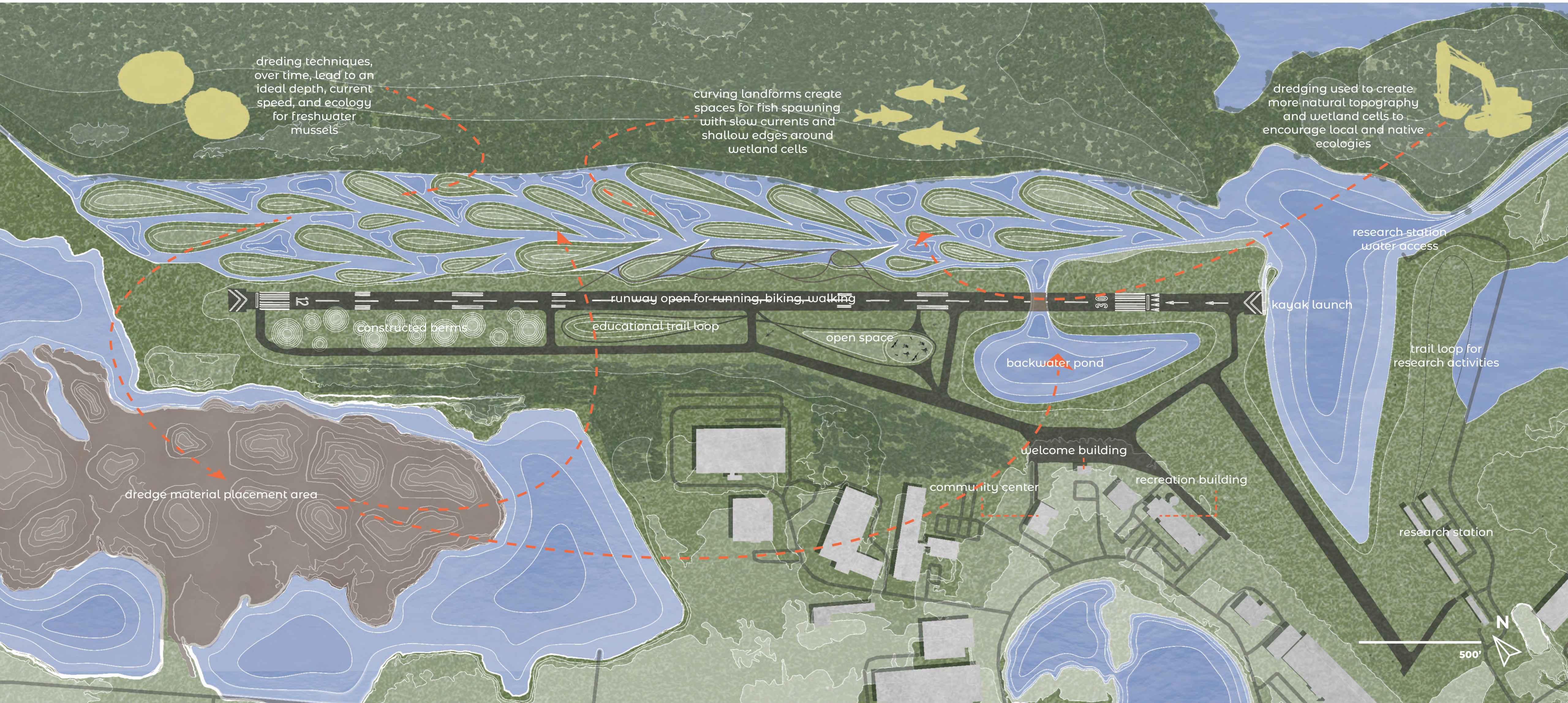
airport ecologies:

a phased ecological design approach to Winona Municipal Airport

Mary Miller | spring 2025

50 year plan

Now decommissioned, the Winona Municipal Airport site opens up for public use and supports a wide range of users and ecologies. The entire site is carefully designed to help support a diverse range of human and non-human use.



kayak launch

zoom in plan

planted areas

strip of land for protection of
kayak launch

ramp for easy access

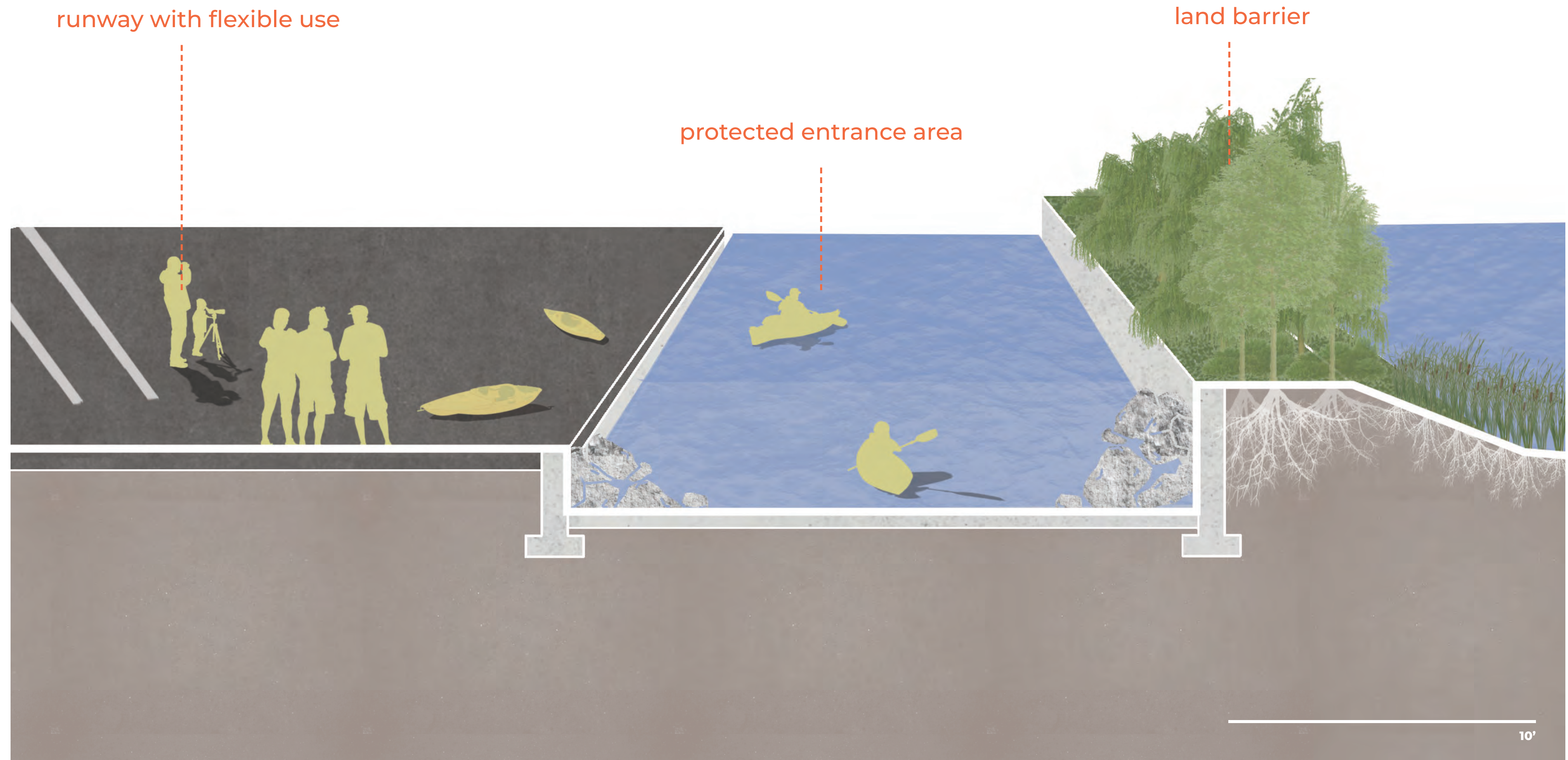
runway with flexible use



N

50'

kayak launch



boardwalk

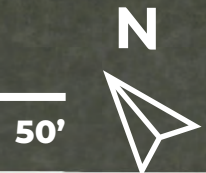
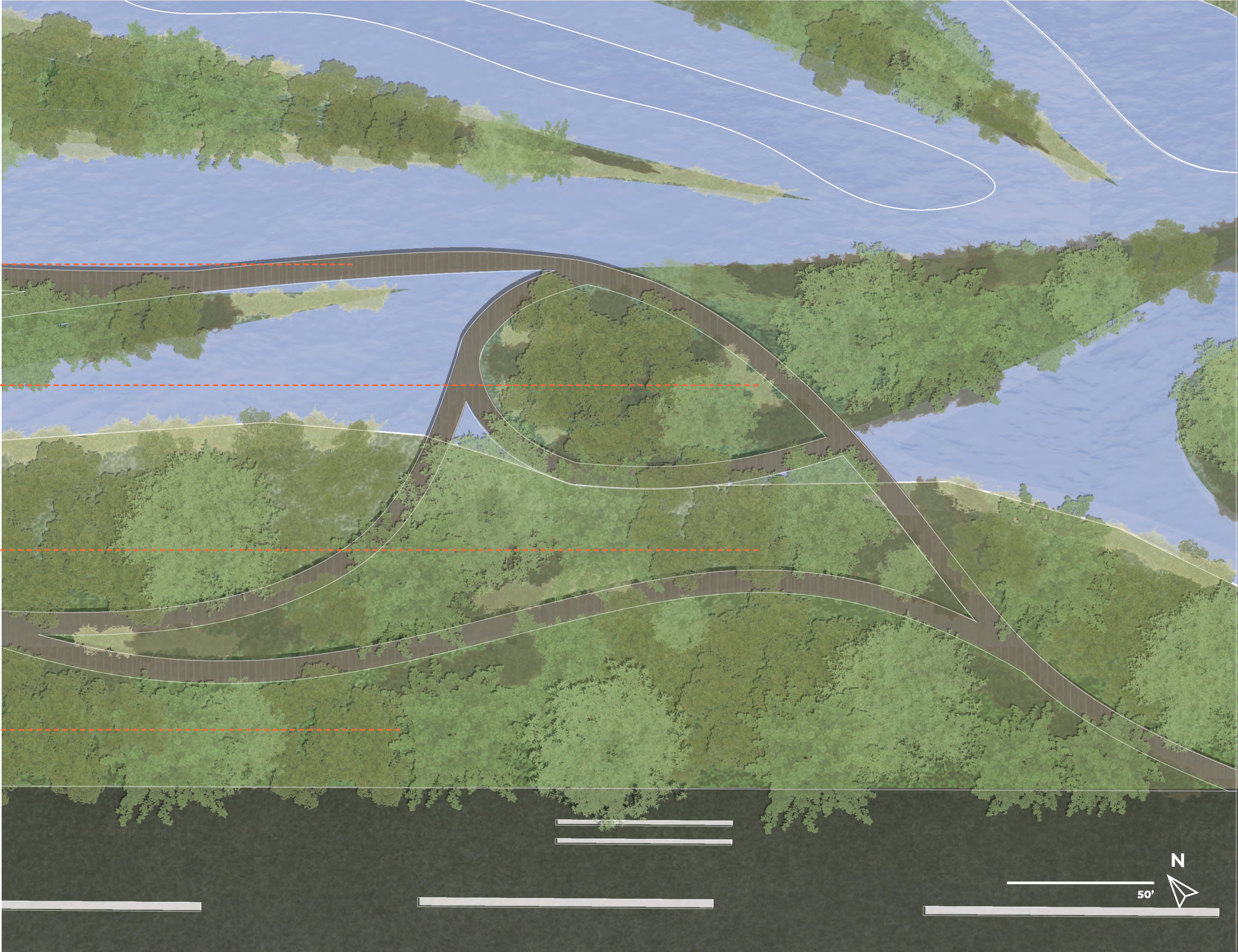
zoom in plan

view of water

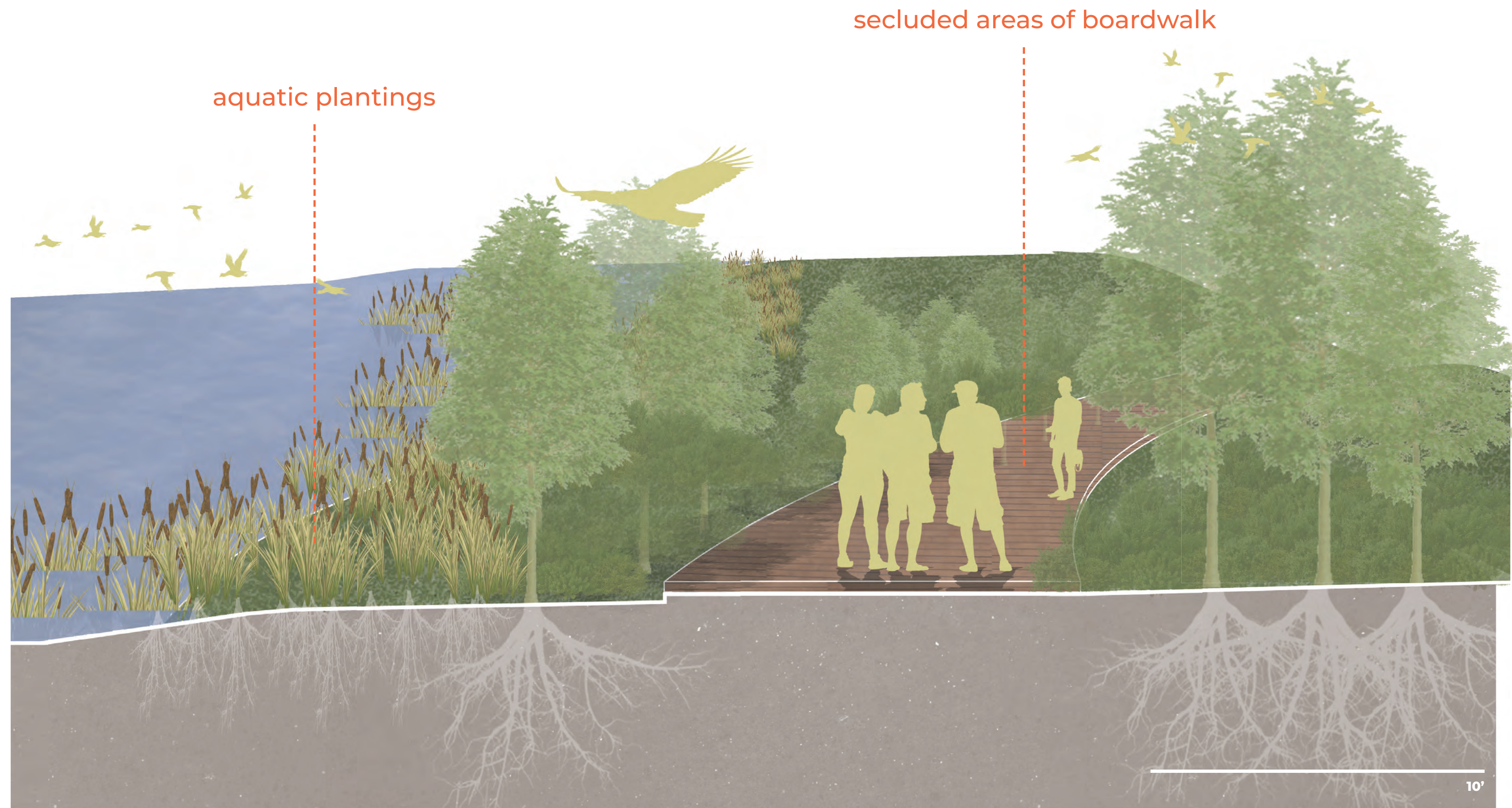
boardwalk crosses wetland
cells

various levels of foliage
coverage throughout
boardwalk

trees create a natural
barrier between types of
programming



boardwalk



constructed berms

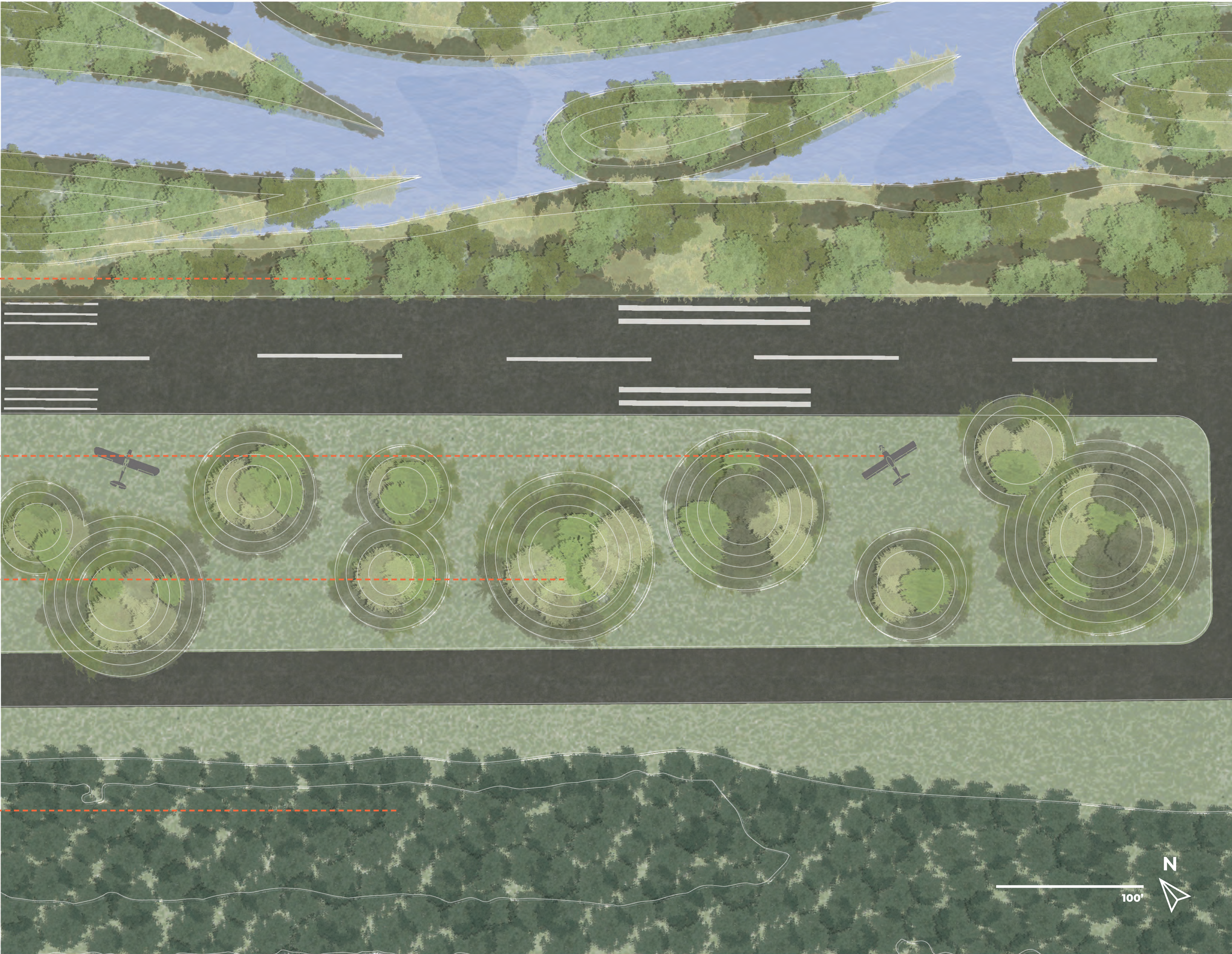
zoom in plan

runway edges
are planted

preserved airplanes to show
site history

constructed and planted
berms

urban forest



backwater pond connection

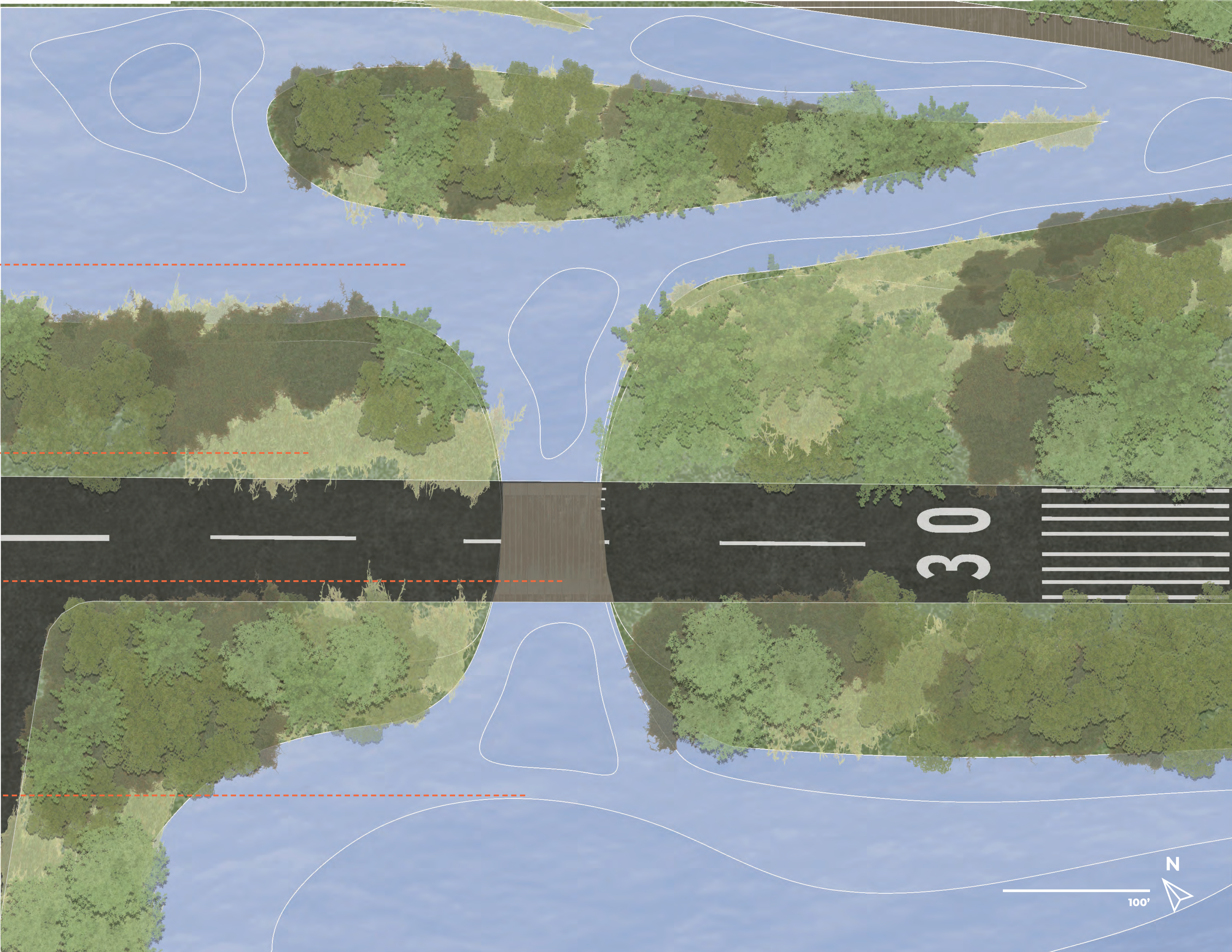
zoom in plan

water slowly
flows in and out
of backwater
pond

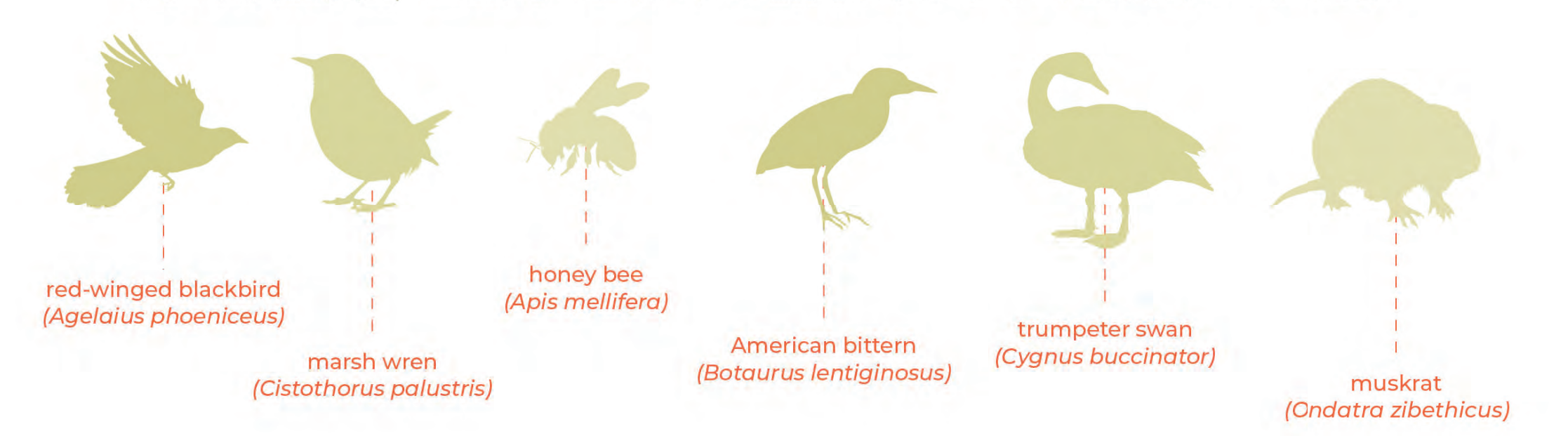
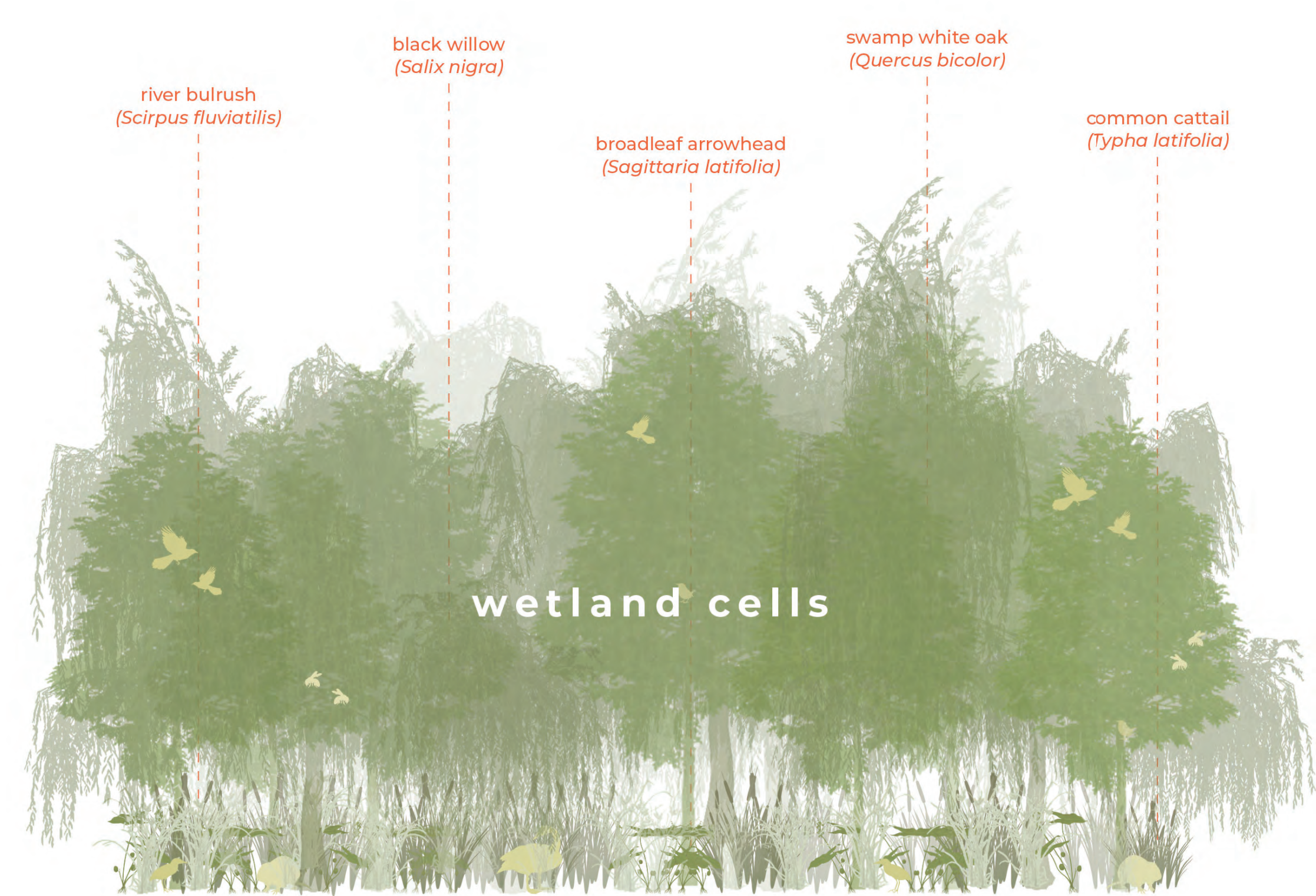
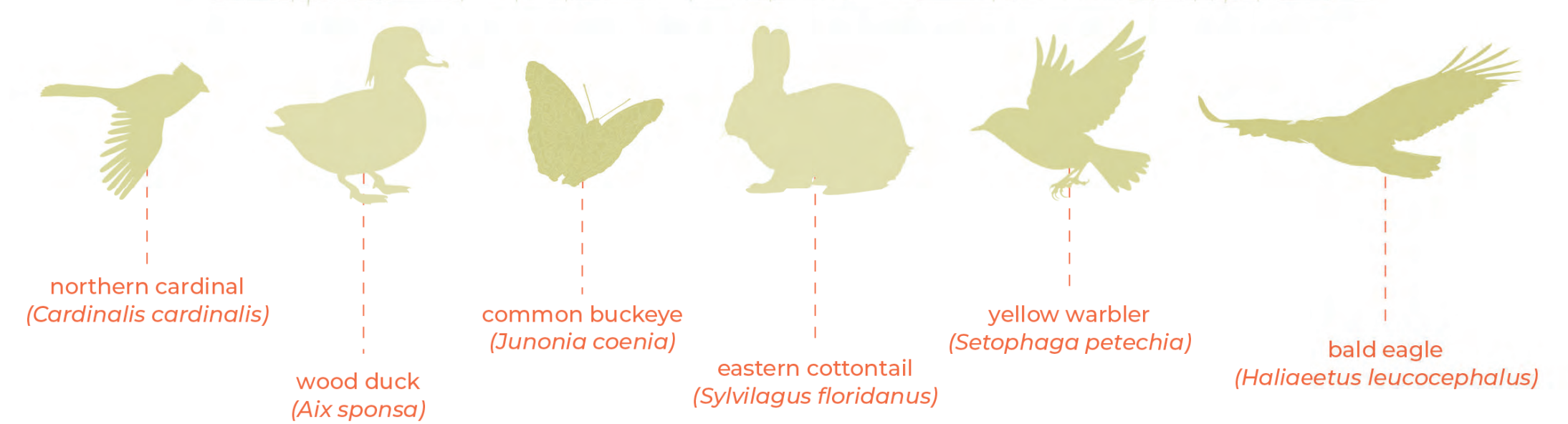
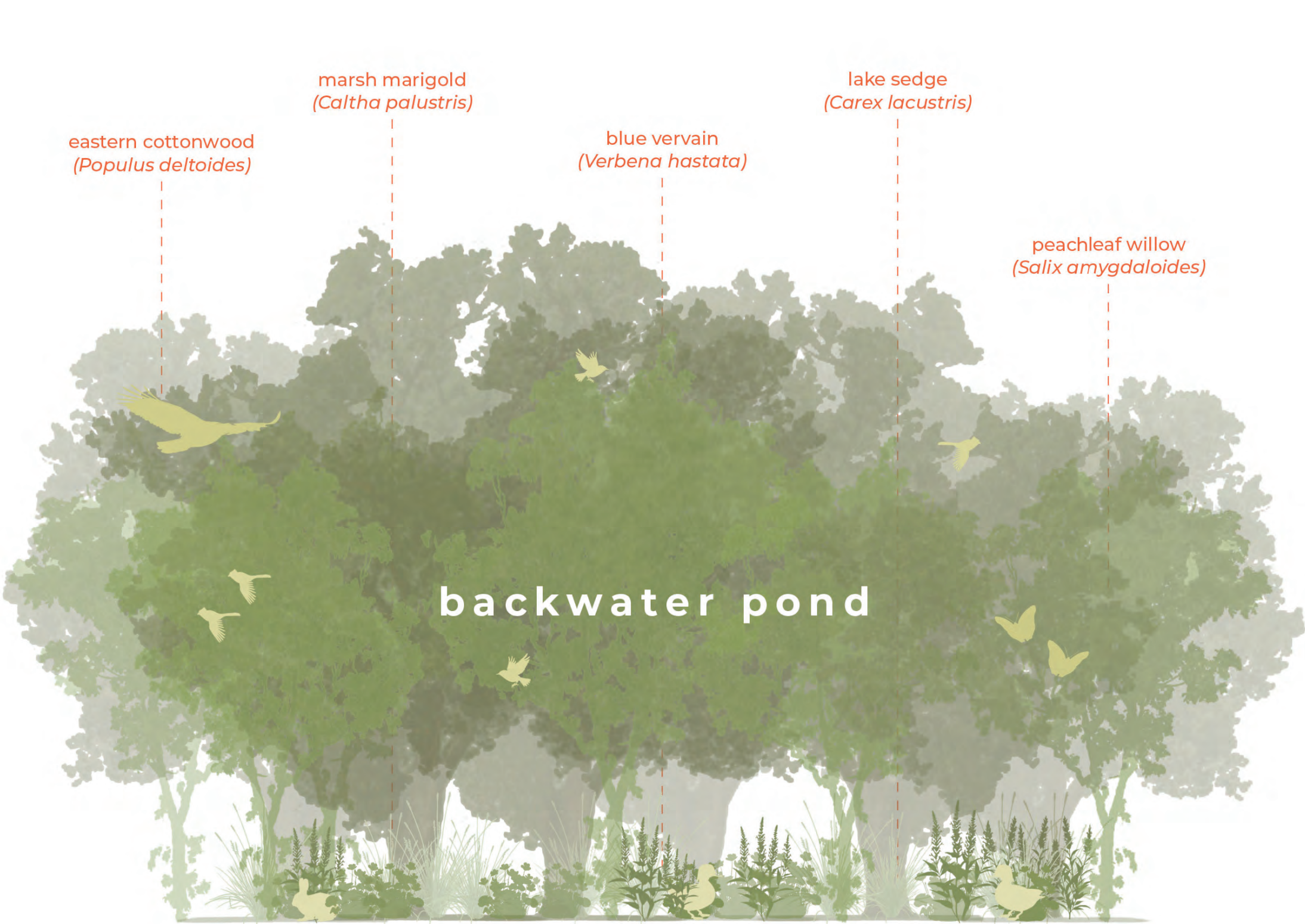
all areas are planted

bridge over water,
connected to runway

backwater pond
construction creates
unique habitat
opportunity



ecological groups



ecological groups

indiangrass
(*Sorghastrum nutans*)

American elm
(*Ulmus americana*)

goldenrod
(*Solidago nemoralis*)

grayhead coneflower
(*Ratibida pinnata*)

silver maple
(*Acer saccharinum*)

constructed berms

North American beaver
(*Castor canadensis*)

eastern gray squirrel
(*Sciurus carolinensis*)

monarch butterfly
(*Danaus plexippus*)

American goldfinch
(*Spinus tristis*)

velvet-striped grasshopper
(*Eritettix simplex*)

rose-breasted goldbeak
(*Pheucticus ludovicianus*)

bur oak
(*Quercus macrocarpa*)

paper birch
(*Betula papyrifera*)

northern pin oak
(*Quercus ellipsoidalis*)

sugar maple
(*Acer saccharum*)

black walnut
(*Juglans nigra*)

oak forest

white-tailed deer
(*Odocoileus virginianus*)

eastern chipmunk
(*Tamias striatus*)

eastern tiger swallowtail
(*Papilio glaucus*)

pileated woodpecker
(*Dryocopus pileatus*)

wild turkey
(*Meleagris gallopavo*)

North American porcupine
(*Erethizon dorsatum*)