

NCBIWA DIS Panel: DIS Design Approaches

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EMERGENCY ACCESS ISSUES



6"

loss of vehicle control
and stalling

12"

vehicle floats

Severe storm events >6"

Moderate storm events <6"



CONTEXT MATTERS

Build DIS Systems:

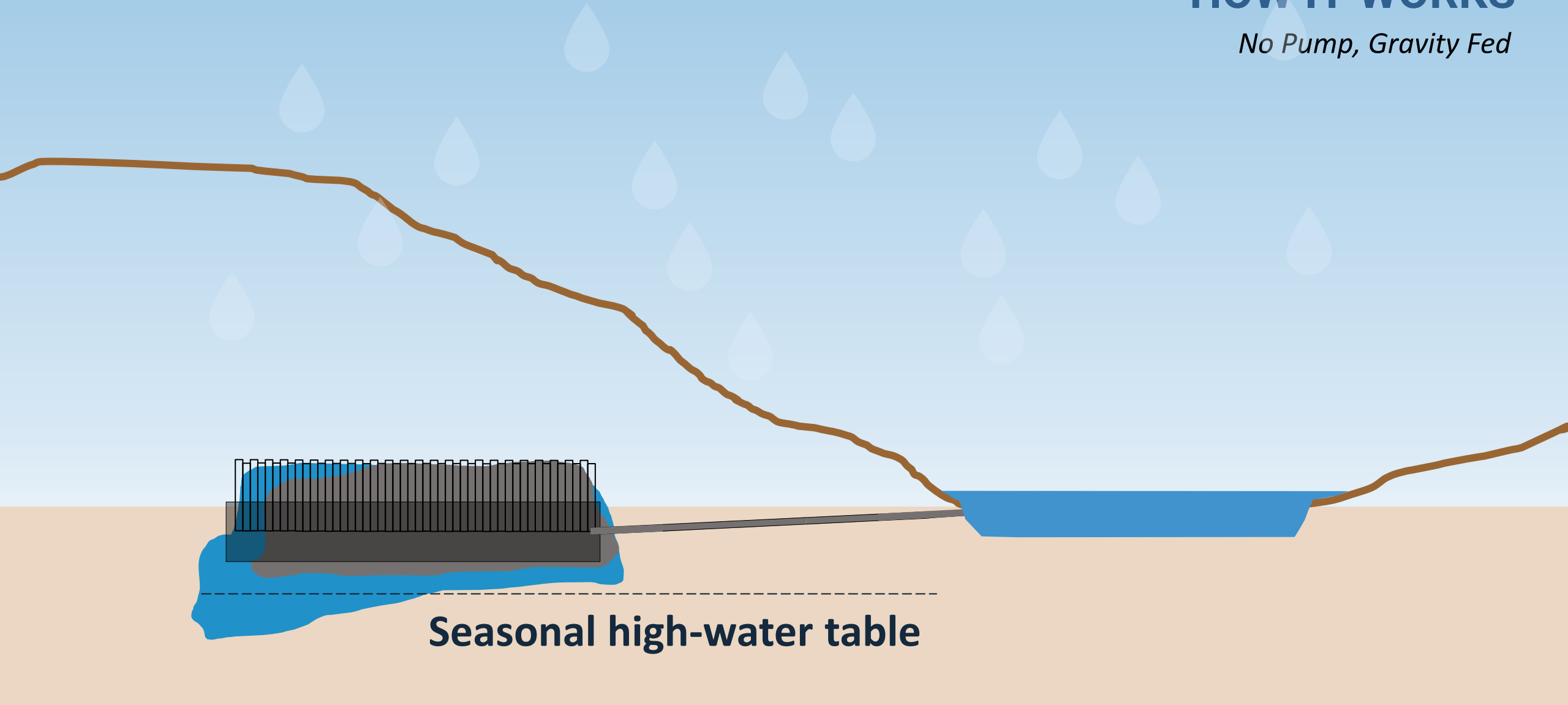
- Caswell Beach, NC: Portable Pump; Constructed in Spring 2021 – **Fully Funded** by NCDOT.*
- Oak Island, NC (801 Building): Permanent Pump; Constructed in Spring 2024 – Awarded DR-4487 funds (Paid for by Town funds).
- Surf City, NC (2201 S. Shore): Gravity; Constructed in Summer 2024 – **Fully Funded** by GoldenLeaf.
- Surf City, NC (1815 S. Shore): Permanent Pump; Constructed in Summer 2024 – **Fully Funded** by NC EM.
- Oak Island, NC (Crowell St.): Permanent Pump; Under Construction – **Fully Funded** by GoldenLeaf.
- Folly Beach, SC: Boardwalk System; Under Construction – Paid for by Town Funds

Under Design DIS Systems:

- North Topsail Beach; Permanent Pump; Under Design – **Fully Funded** by NC EM.
- Surf City, NC (Seahorse Ave.); Gravity: Under Design – **Fully Funded** by GoldenLeaf.

HOW IT WORKS

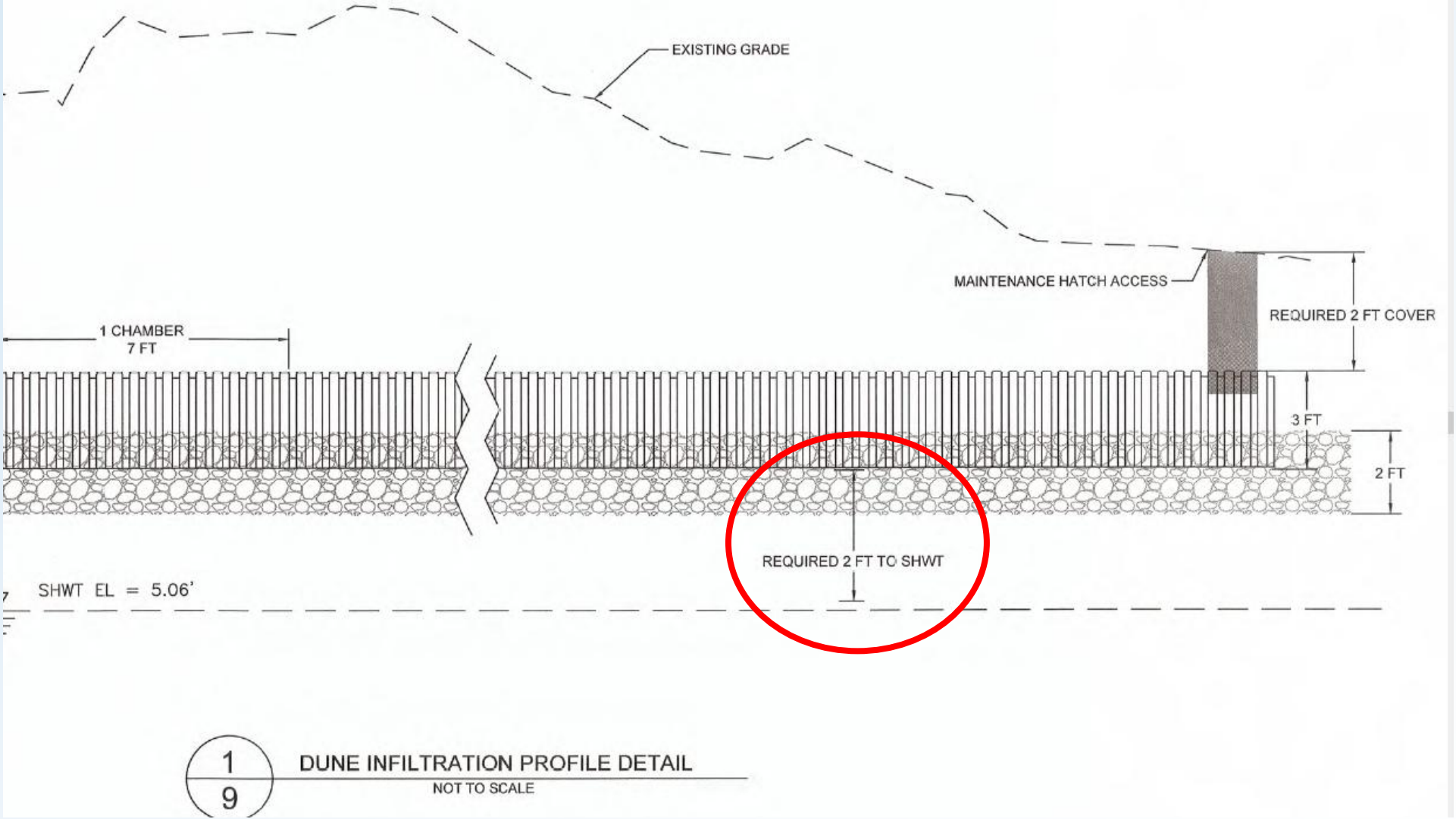
No Pump, Gravity Fed



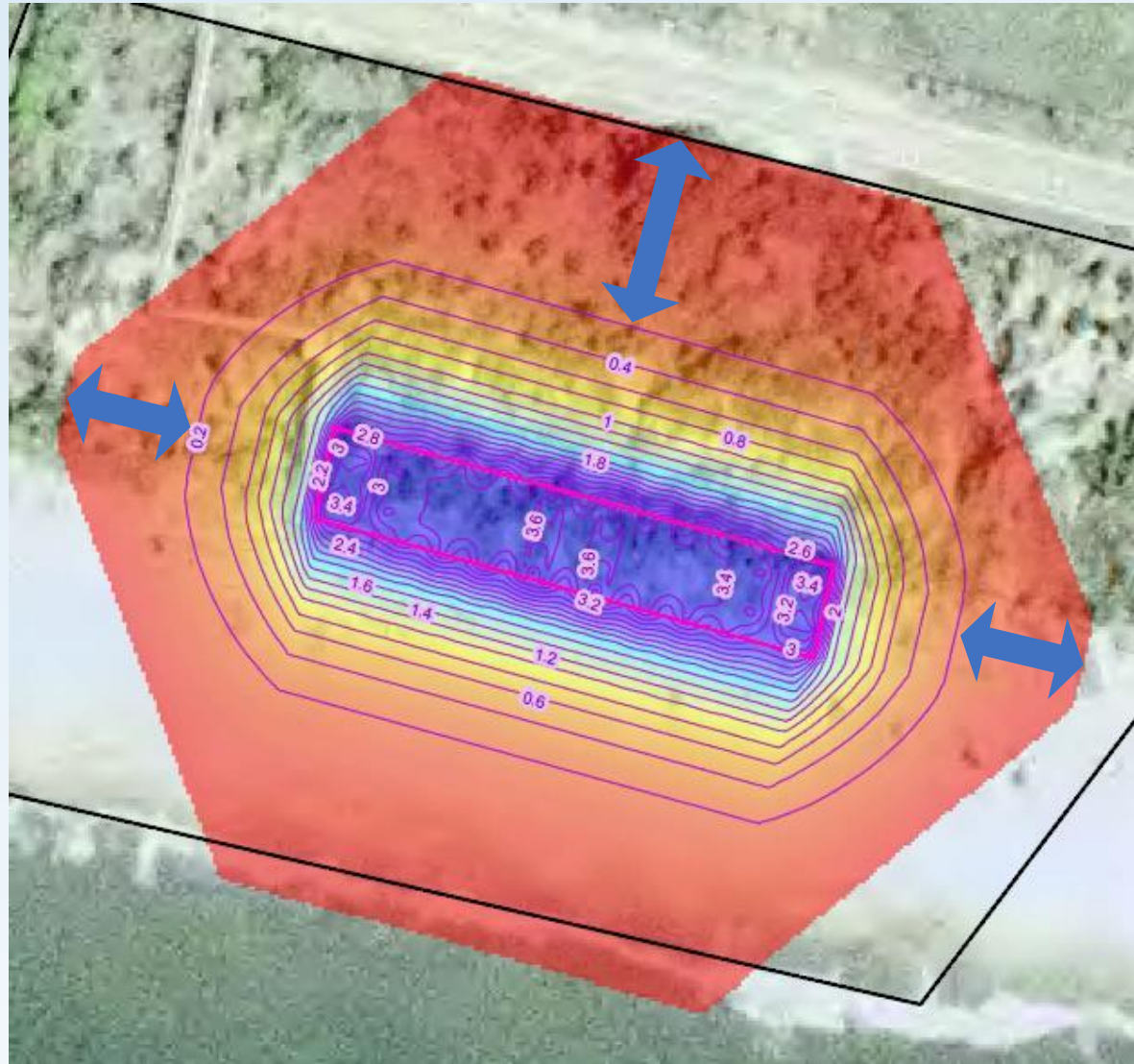
Seasonal high-water table



CONSIDERATIONS

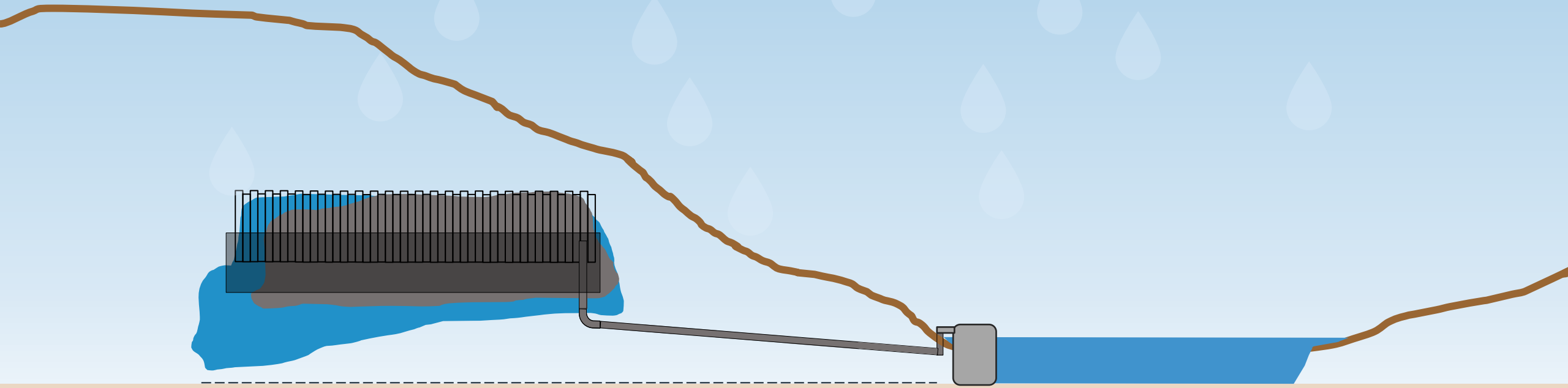


CONSIDERATIONS



HOW IT WORKS

Portable Pump



Seasonal high-water table



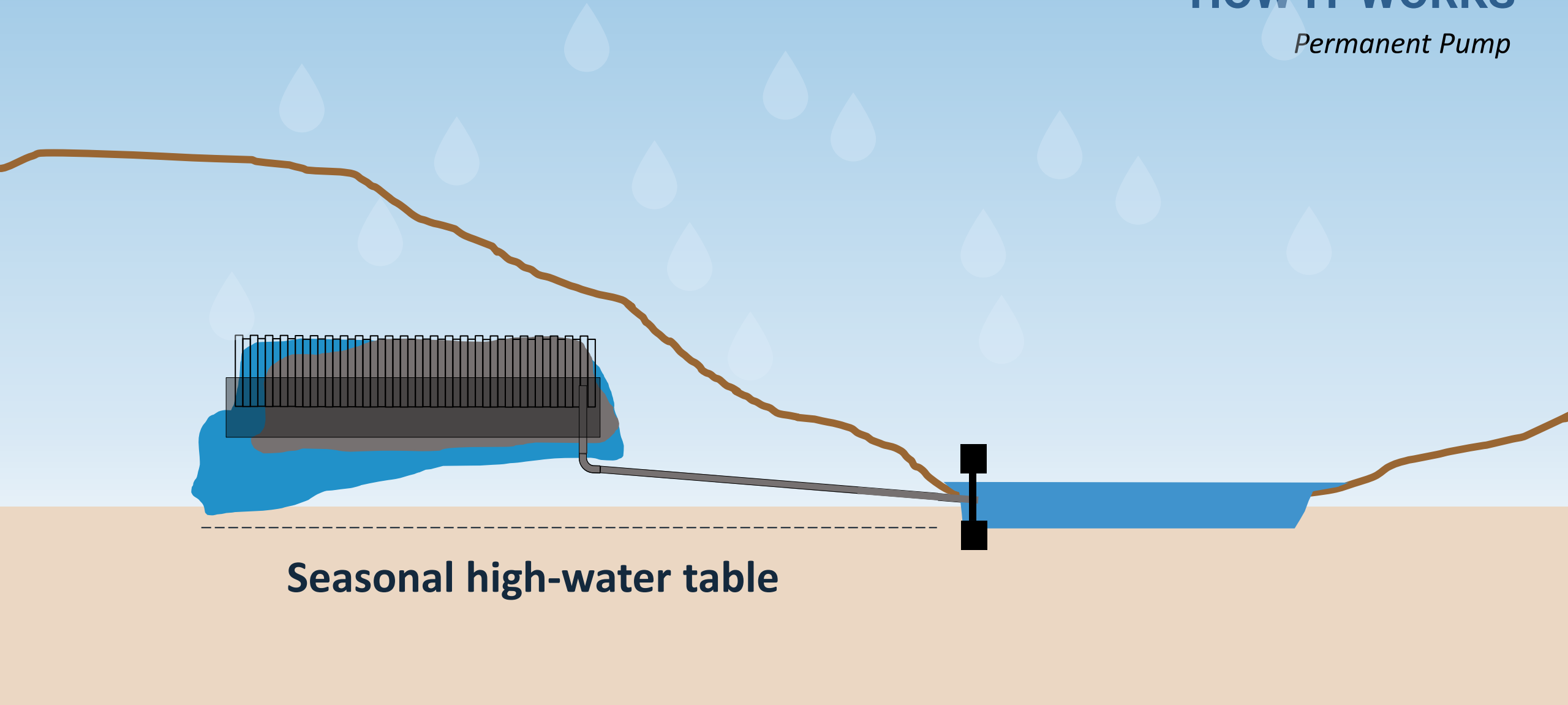






HOW IT WORKS

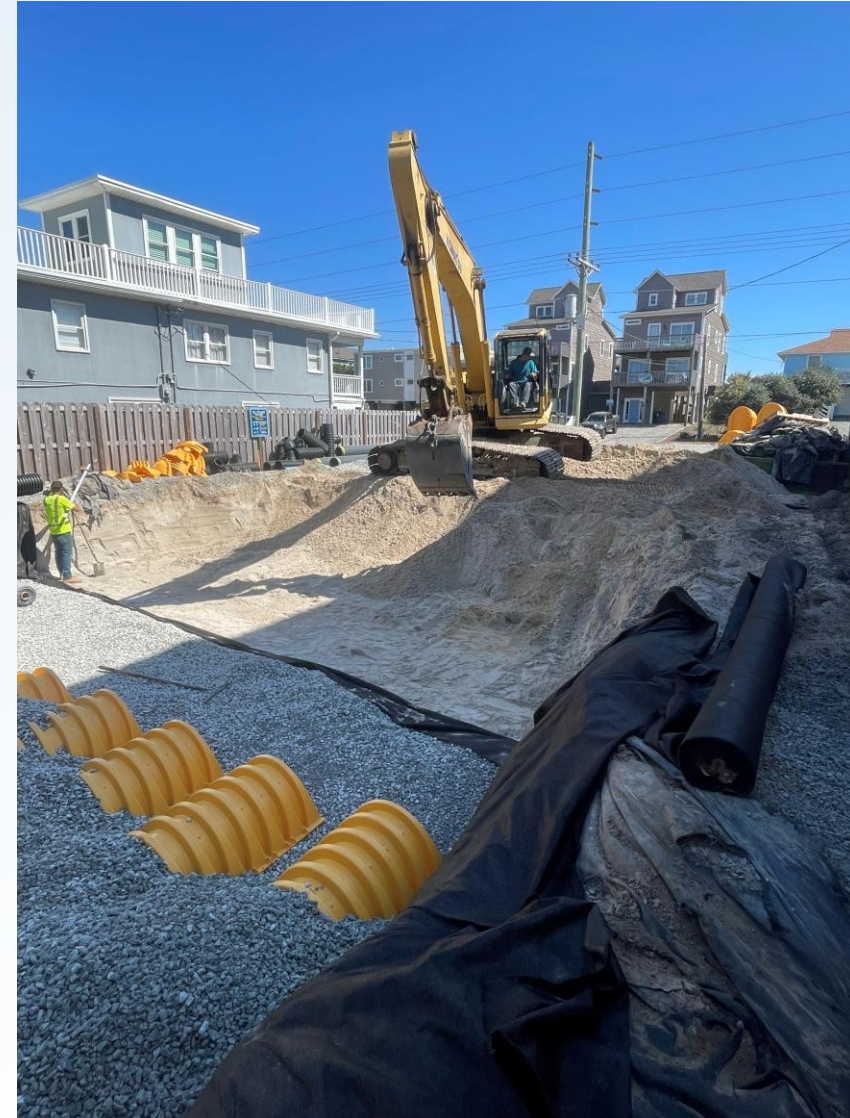
Permanent Pump



Seasonal high-water table



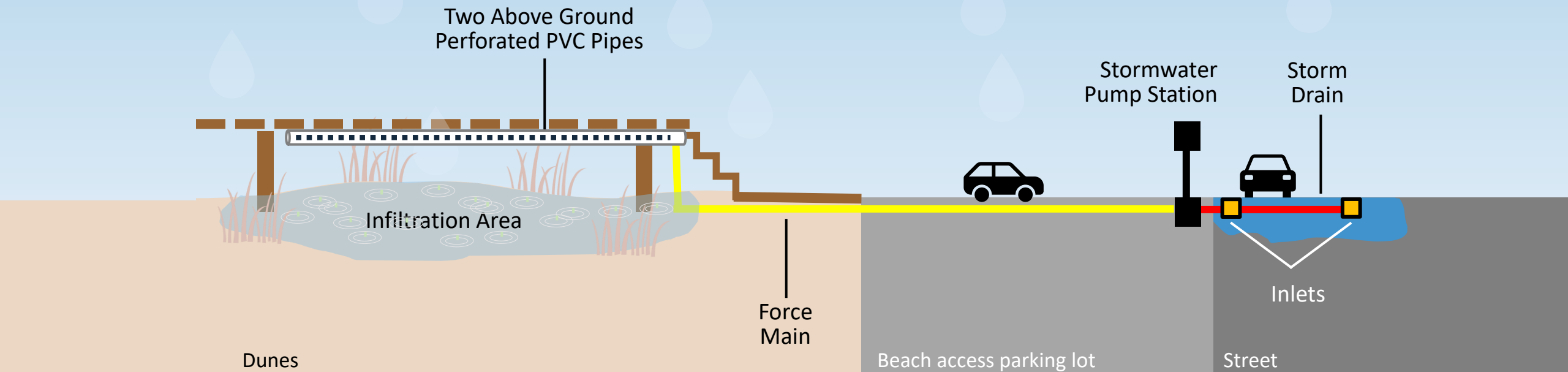


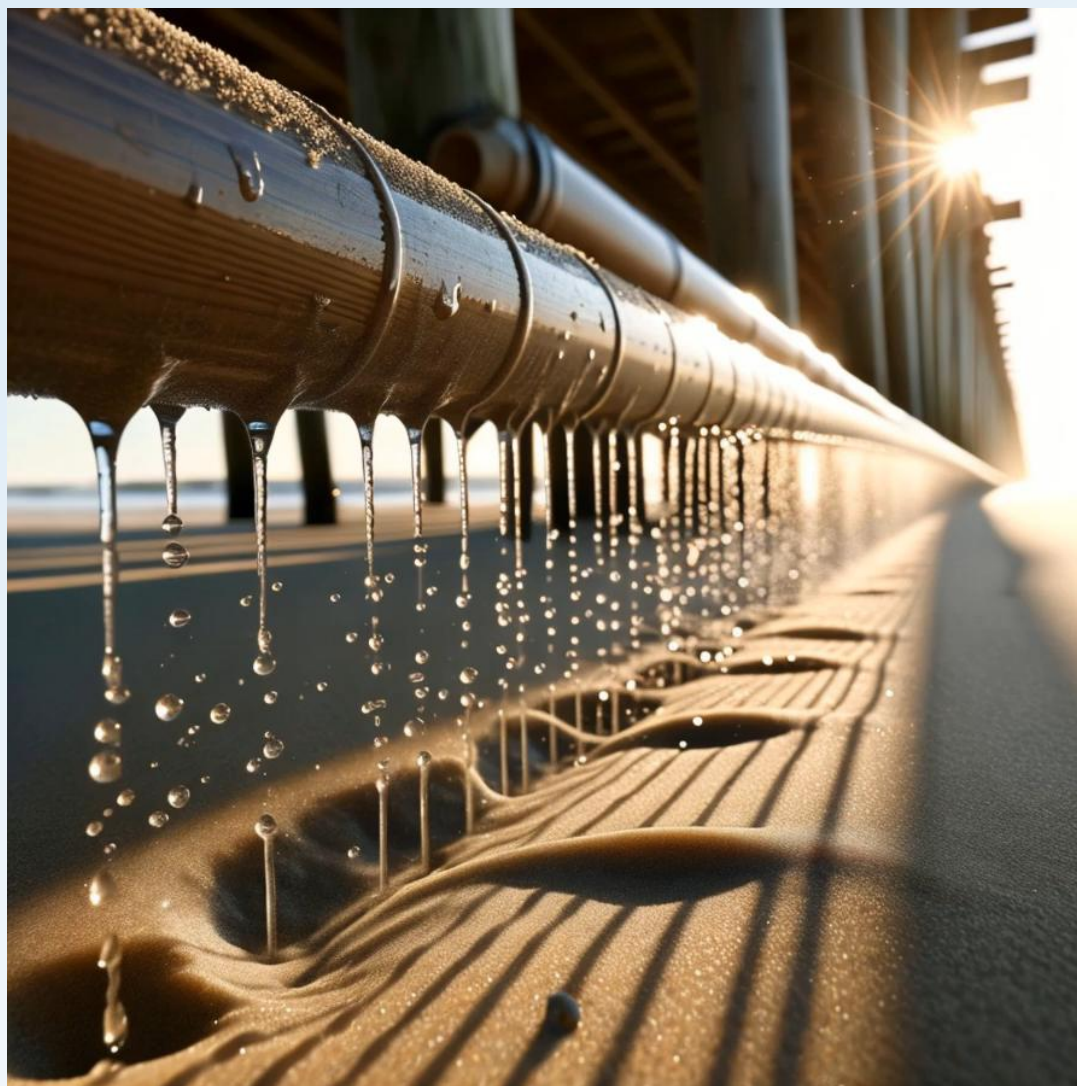




HOW IT WORKS

Permanent Pump





SHARED VISION:

**ENTELECHY -> PRACTICAL USEFULNESS COMPARED TO
THEORETICAL ELEGANCE.**



NCBIWA DIS Panel: Oak Island Field Test

Brice Taylor

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Located in
Brunswick County

Population:

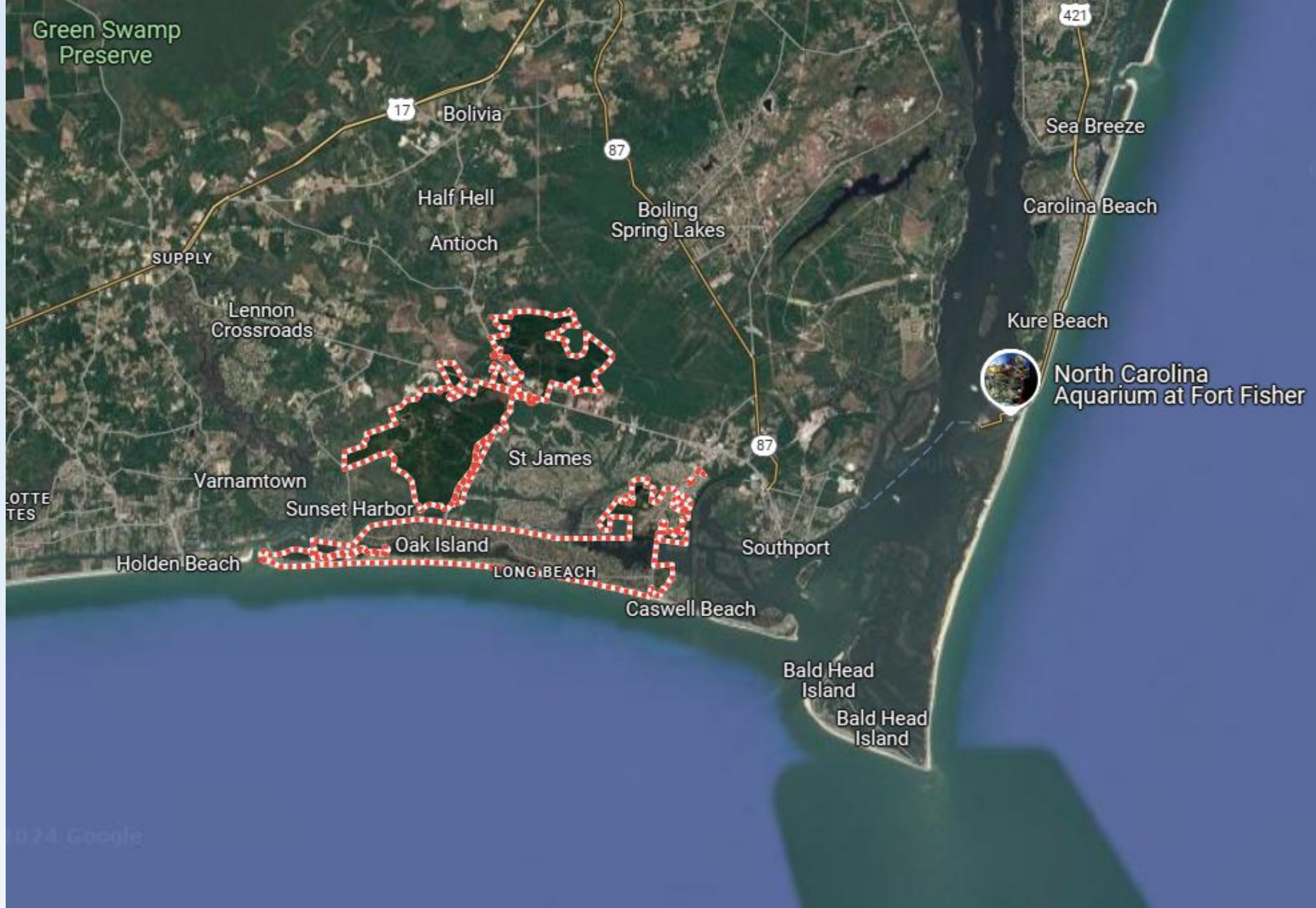
9,700

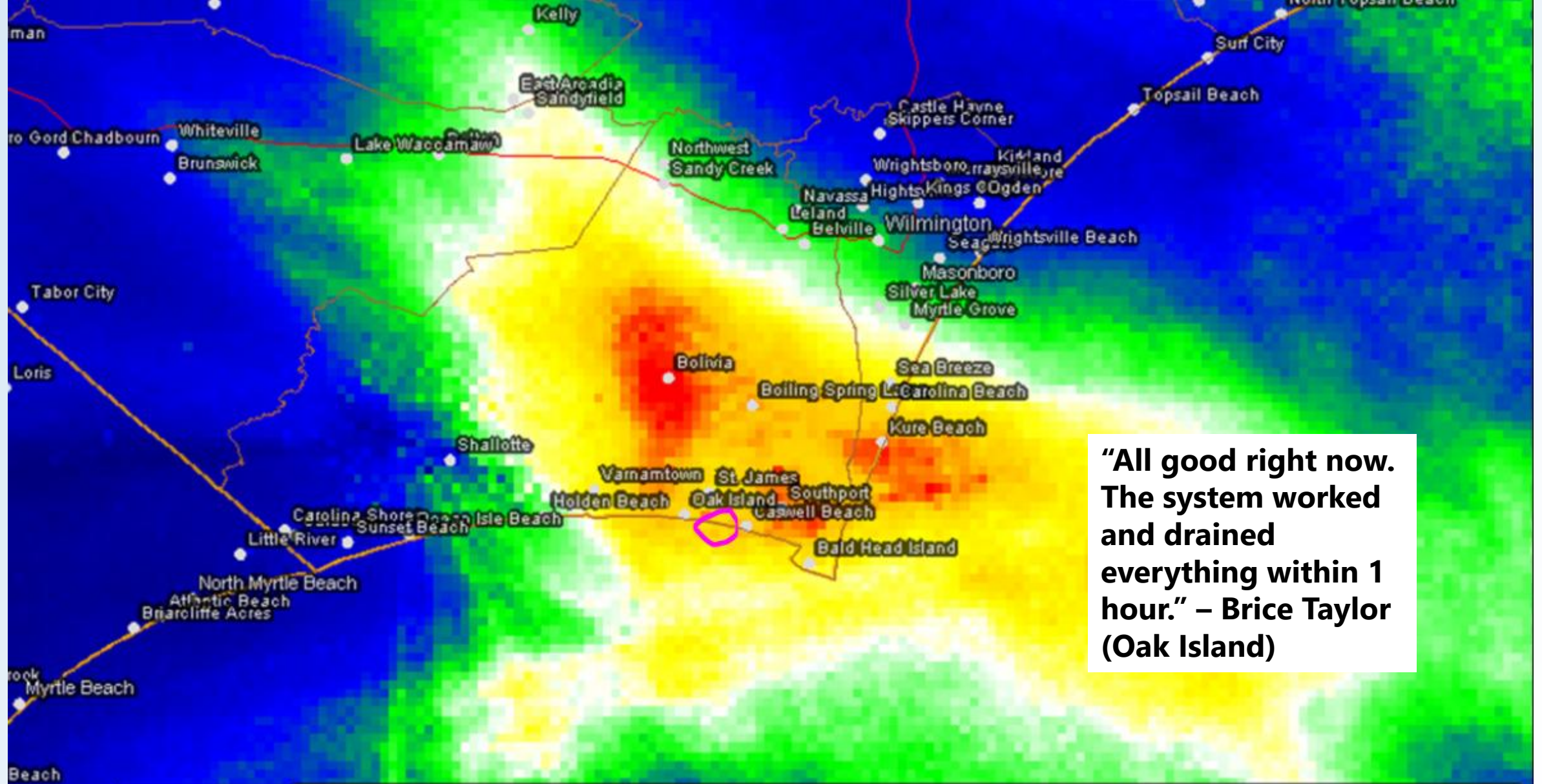
Year-round

~50,000

Peak Seasonal

Home of the Oak Island Nature Center,
Oak Island Pier, and 801 Ocean Event Center





**"All good right now.
The system worked
and drained
everything within 1
hour." – Brice Taylor
(Oak Island)**

Inches

2.0

3.5

5.0

6.5

8.0

9.5

11.0

12.5

14.0

15.5

17.0

18.5

20.0

millimeters

50.00

86.00

122.00

158.00

194.00

230.00

266.00

302.00

338.00

374.00

410.00

446.00

482.00



0:02:10

0:06:30

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WATCH FOR
BEACH WARNING LIGHTS

LUCES DE ADVERTENCIA DE PLAYA

Red - High Hazard

Strong Currents and/or High Waves
Rojo - Peligro Alto, Corrientes Fuertes o Olas Altas

Yellow - Medium Hazard

Moderate Currents and/or Waves
Amarillo - Peligro Medio, Corrientes Moderadas o Olas

Green - Low Hazard

Calm Conditions, Exercise Caution
Verde - Peligro Bajo, Condiciones Tranquilas, Precaución Del Ejercicio

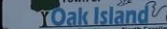
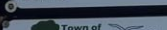
Purple - Stinging Marine Life

Man o' War and/or Jellyfish and/or Stingrays
Púrpura - Vida Marina Punzante, Fragata Portuguesa o Medusas o Rayas

Double Red - Water Closed

No Swimming Allowed, Water Closed to Public
Doble Rojo - No Se Permite Nadar, Agua Cerrada al Público

Absence of Lights Does Not Indicate Safe Waters
La Ausencia de Luces No Indica Aguas Seguras



Beach Safety Information At:
OakIslandNC.gov/SAFETY