

# CVOW Croatan Community Meeting

## March 27, 2024



**Dominion  
Energy<sup>®</sup>**

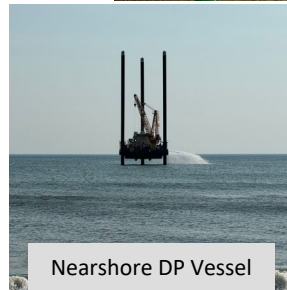
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# You Spoke, We Listened & Acted

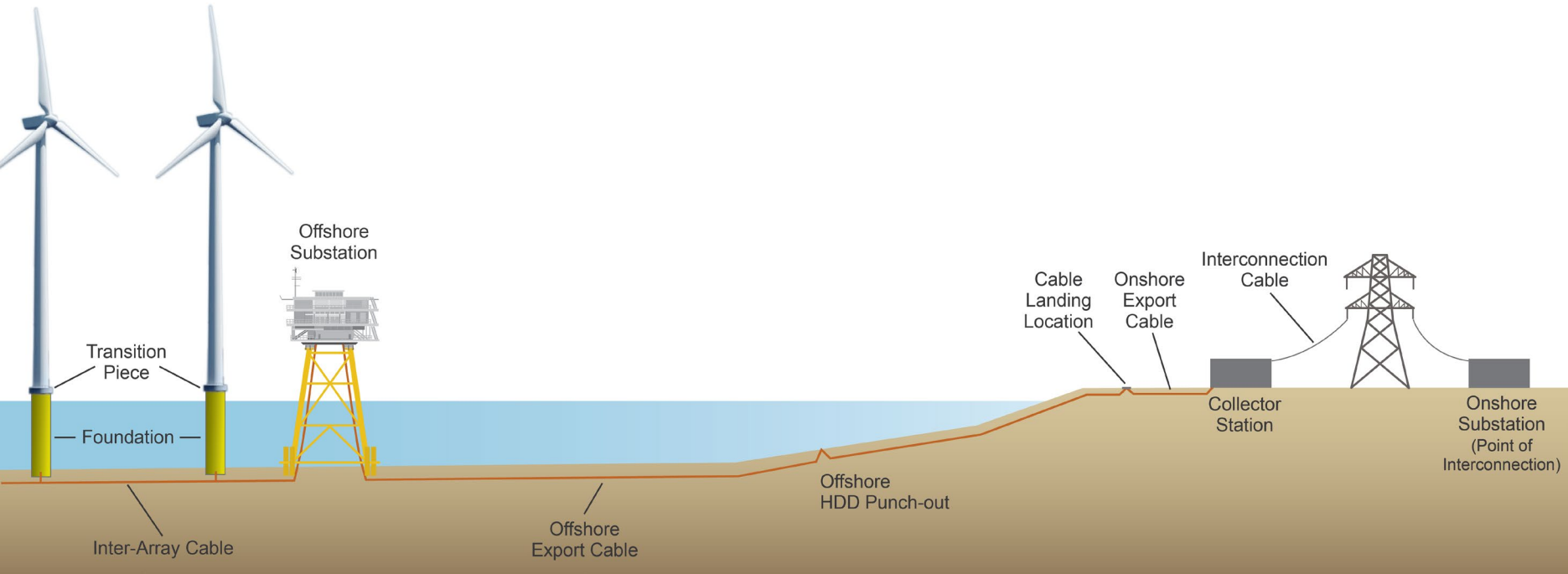
We are committed to minimizing potential impacts while we work in your community.

# Agenda

- **Overview of CVOW work at the State Military Reservation (SMR):**
  - Direct Pipe (DP)
  - Transition Joint Bay (TJB) area
  - Horizontal Directional Drilling (HDD)
  - Duct Bank
- **Review Croatan neighbor feedback and Dominion actions taken**
  - Night lights
  - Day/night noise
  - Vibrations
  - Debris
- **Look-ahead to remaining construction schedule**
  - DP construction scheduled to end Aug
  - Majority of SMR construction on schedule to end mid 2025
- **Q&A and one-on-one discussions**



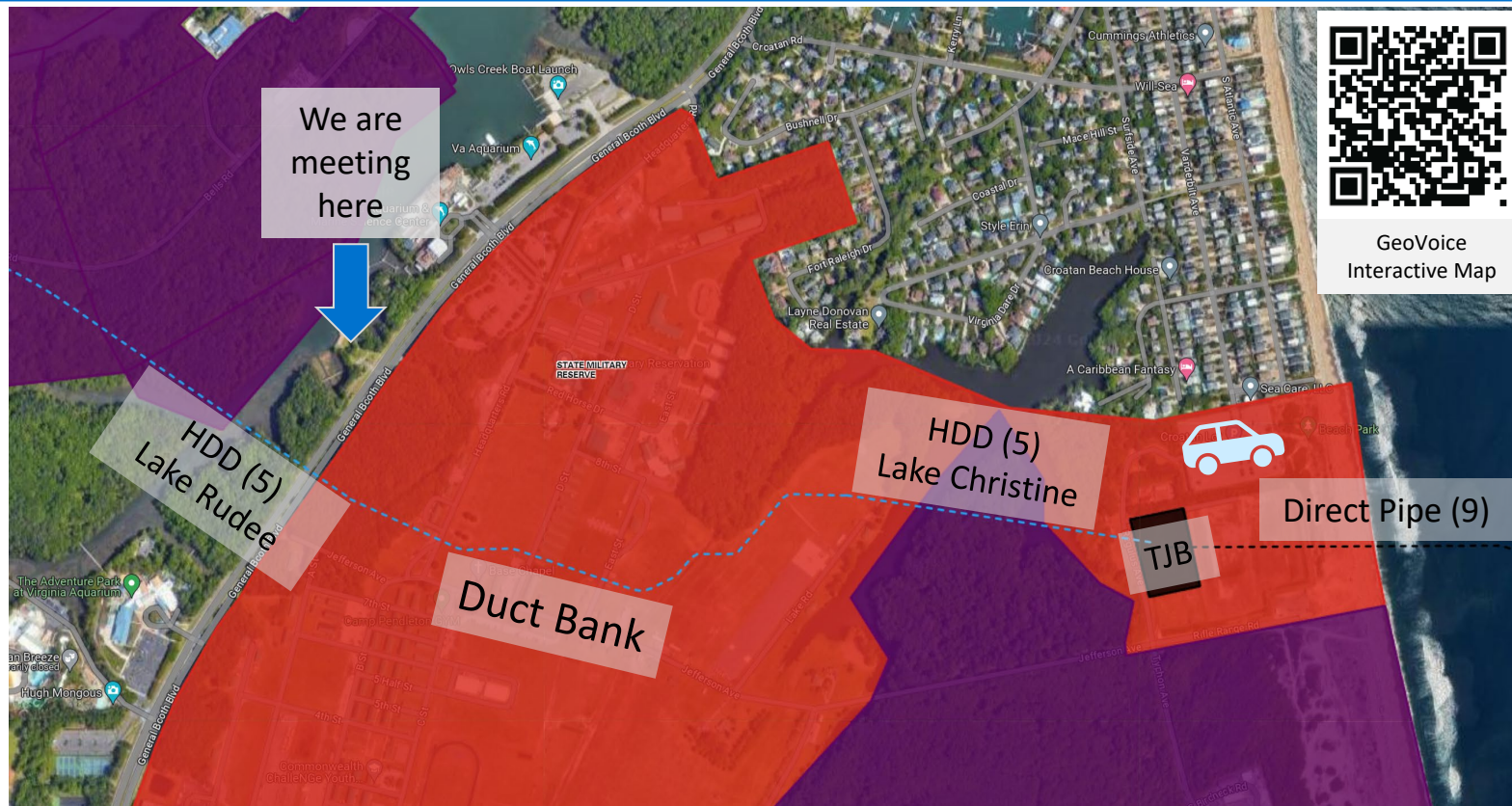
# Getting Energy Onshore





## CVOW Underground Activities

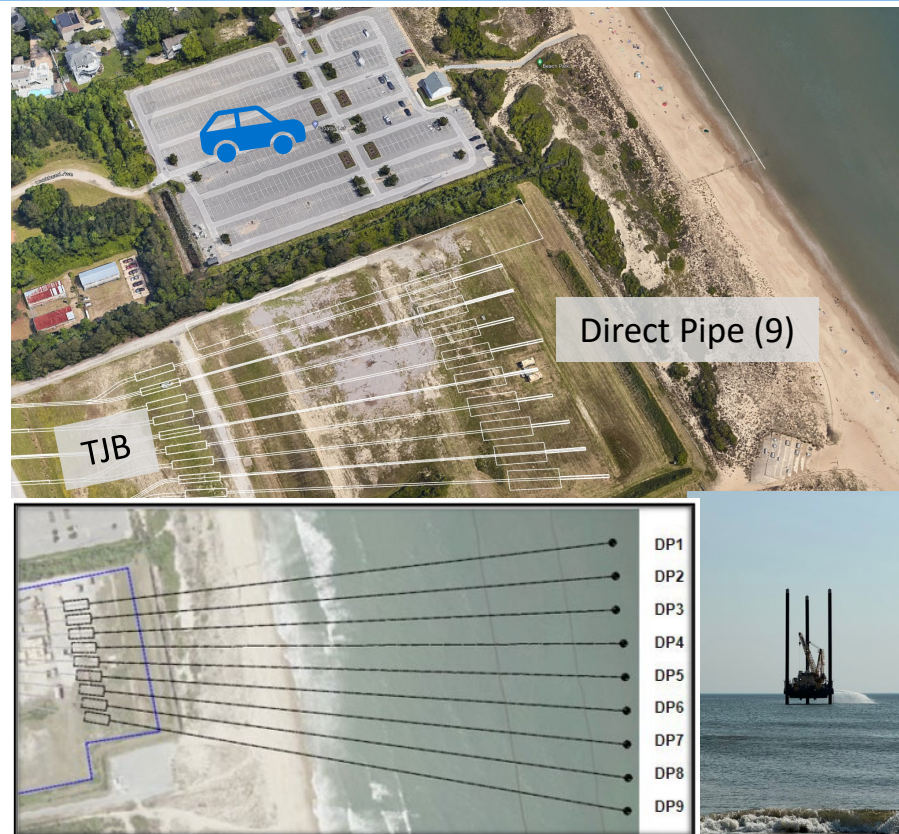
### State Military Reservation (SMR)



# Direct Pipe (DP)

Rifle Range will be refilled, recovered with grass, and restored to normal use

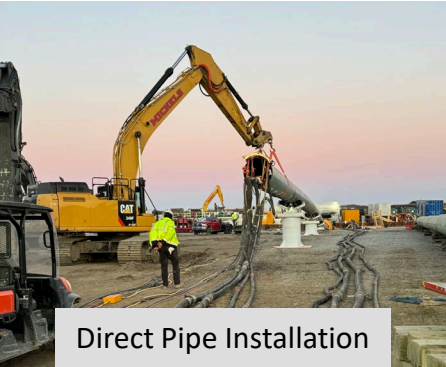
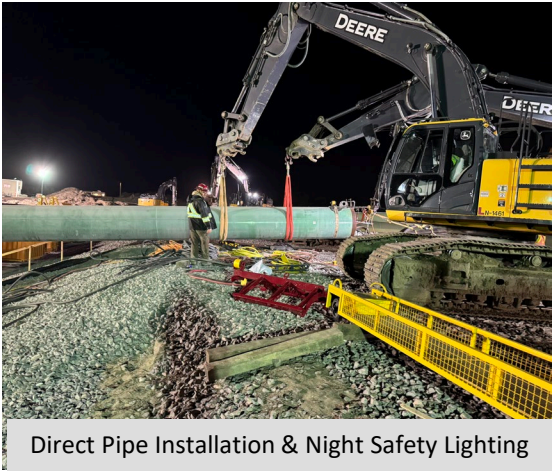
- **Nine DPs from Rifle Range to ~1,800 feet nearshore**
  - DP installation creates a tunnel as pipe is simultaneously pushed through the hole underground
  - Once the drill starts, it continues running until complete
    - *This is why some work continues into night*
  - High-Density Polyethylene (HDPE) casing is installed through the hole so that transmission cable can be run through the HDPE conduit
    - *We will talk about the HDPE debris shortly*





# Direct Pipe (DP)

## Photos from SMR



# Direct Pipe (DP)

## Schedule

- **Installation Schedule (day-night work)**
  - ✓ — Phase 1: Late February to mid-March 2024
  - Phase 2: Early June to mid-July 2024
  - Phase 3: Early July to Late August 2024
- **7 nearshore vessels support DP installations**
  - Present periodically this summer for approximately one to two-week periods
  - Scuba divers inspect nearshore undersea installation
  - Weather and tides determine best install windows



Vessel Name	RAM XII
Call Sign	WDA6919
IMO Number	8764975
MMSI	366837540
Vessel Type	Lift Boat - Primary Dive Support Vessel





# Transition Joint Bay (TJB) Area

Rifle Range will be refilled, recovered with grass, and restored to normal use

- Vault for offshore cables making landfall onshore, transitioning to onshore underground path



Daytime work



Drove test piles in November 2023

Pit excavation began on March 20, 2024

- **Schedule:**

- **TJB Group #1:**

- Excavation began late March 2024.
- Completion end of September 2024.

- **TJB Group #2:**

- Completion December 2024.

- **TJB Group #3:**

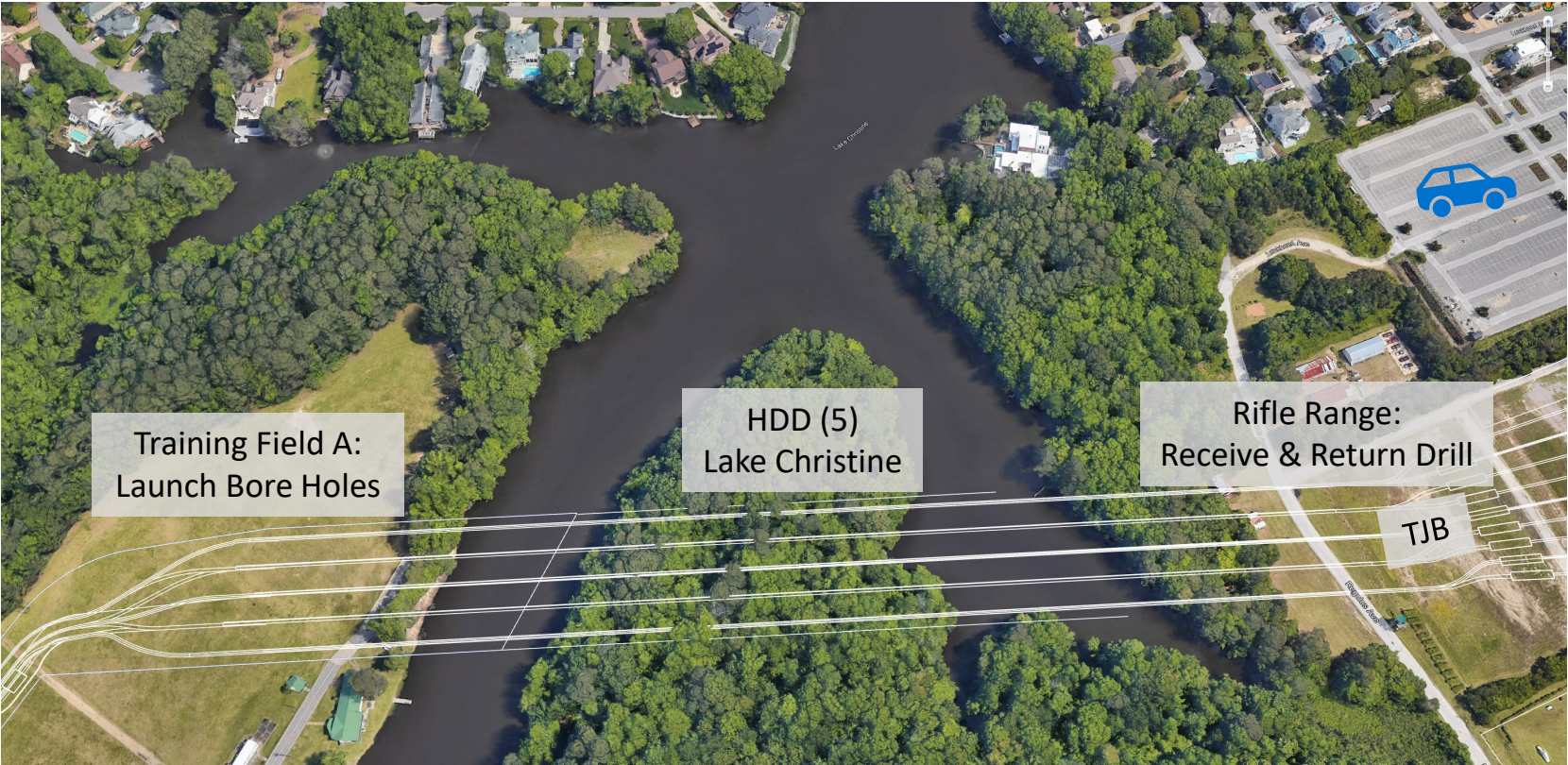
- Completion February 2025.

- **Open Cut HDPE Installation:** June 2024 – February 2025



# Horizontal Directional Drilling (HDD)

## Underneath Lake Christine





# Horizontal Directional Drilling (HDD)

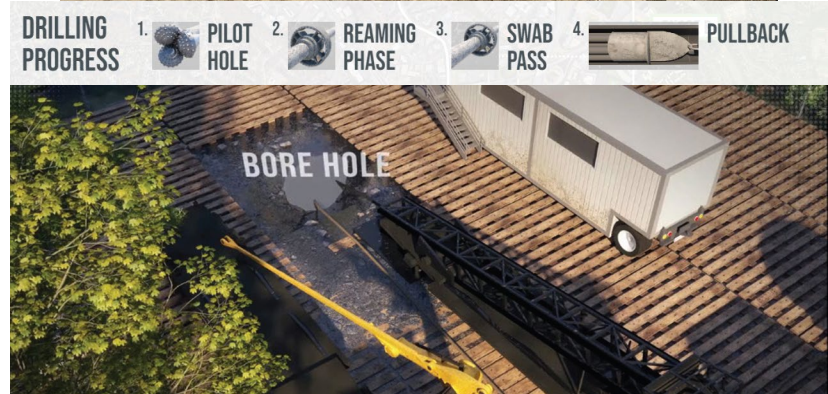
- **Horizontal Directional Drilling:**

- HDD installs transmission cable underground from one point to another with less impact to the existing ground (Lake Christine)

- The drill is launched from one end and retrieved at the other end, making numerous passes until the required diameter is reached

- **When:**

- ✓
  - Drilling occurred February to late March 2024
- ☀️🌙
  - Most work is daytime, but certain drill activities continue once started until complete



# HDD – Lake Christine

## Training Field A

HDD Drill #5 in progress



HDD Recycling Center



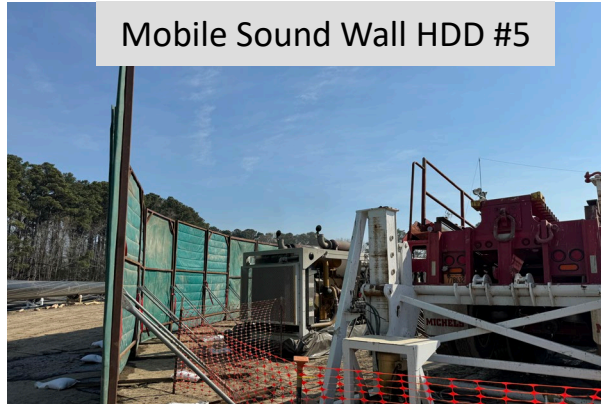
Vacuum Excavator Truck



HDD Drill Staging



Mobile Sound Wall HDD #5




HDD Fusing Tent





# Duct Bank

Trench refilled, recovered with grass, and restored to normal use

- Daytime work 
- Open trench underground installation
- After installing conduits, it is encased in concrete and buried
- Manhole vaults provide cable access



# Duct Bank

## Manhole Vaults and Restoration





# Croatan Community

## Review Feedback and Actions Taken

- **Review Croatan neighbor feedback and Dominion actions taken**
  - Night lights
  - Day/night noise
  - Vibrations
  - Debris



# Croatan Community

## Feedback and Solutions

### ■ Light (at night)

#### — Feedback:

- Construction site lighting towers broadcast light to residences

#### — Solutions:

- ✓ • Lower light height to reduce light spillage and glare – **Completed**
- ✓ • Adjust angle, direction, and position of lights for task lighting – **Completed**
- Swap lights to LED lamps to lower light intensity – **in Process**
- Turn off lights when not critical to safety and security purposes – **in Process**



# Croatan Community

## Feedback and Solutions

### ■ Noise (acoustic)

#### — Feedback:

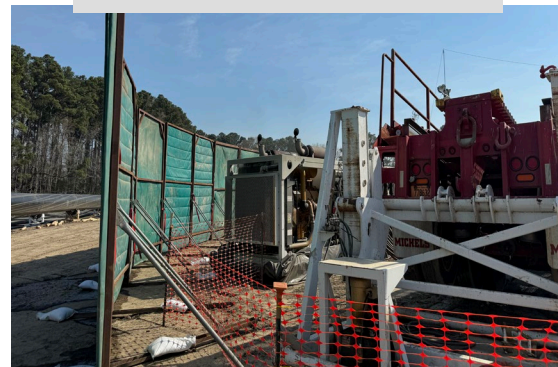
- Hydrovac excavator trucks – likely source of loudest equipment
- Vehicles beeping when backing (safety)
- Diesel generators and dewatering pumps (day and night) – contribute to noise

#### — Solutions:

- Replace truck models with newer, quieter systems – in Process
- ✓ • Install noise buffering panels around equipment – Completed & in Process
- Where feasible, equipment operators avoid reversing (circle or loop) – in Process
- Supplement diesel generators with solar powered / battery options to reduce noise – in Process



March 15, 2024





# Acoustic and Vibration Monitoring At SMR and Croatan Beach Public Parking Lot

Added independent monitoring unit at Croatan on March 5, 2024

- Units operate 24/7
  - Batteries checked every two weeks
- Measure seismic activity (vibrations via geophone) at surface level
- Measure acoustic activity (sound via microphone pressure)
- Approved to monitor during remaining construction



# Croatan Community

## Feedback and Solutions

### ■ Vibrations (shaking)

#### — Feedback:

- More noticeable on top floors
- Reports of cosmetic cracks (interior) and decking (exterior) damage
- Construction site uses heavy equipment and machinery, including excavators, loaders, dump trucks, cranes, and compactors

#### — Solutions:

- ✓ • Continue monitoring vibrations close to residences at the Croatan Beach Public Parking Lot – **Ongoing**
  - Measured vibrations remain well below threshold to cause cosmetic impacts
  - We have a claims process
- ✓ • Use vibration mitigation measures (isolation pads, mats, cushions) – **implemented where possible**



February - March 2024



# Croatan Community

## Issues and Solutions

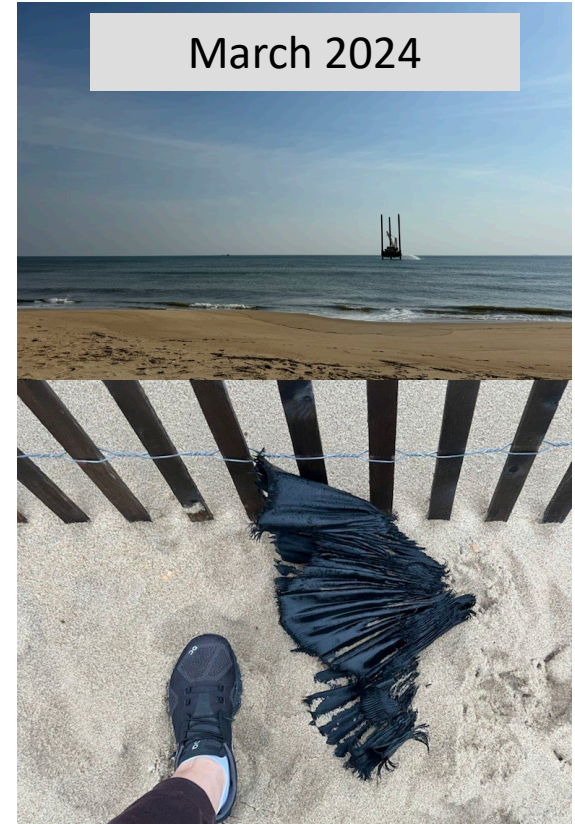
### ■ Beach debris

#### — Feedback:

- Black material, resulting from Direct Pipe HDPE installation, escaped site to float on the water and wash up on shore
- Concerns about risk to marine ecosystem and public beach

#### — Solutions:

- ✓ • Twice daily inspection and clean up of any debris from beach – **Ongoing**
- Develop engineered solution to prevent debris issue from occurring prior to next Direct Pipe installations this summer – **in process**





A large white offshore wind turbine stands in the middle of a deep blue ocean under a clear blue sky. The turbine has three long, slender blades. On the side of the nacelle, there is a small red box with white text. The word "Questions" is superimposed in a large, dark grey font over the center of the image.

# Questions

## Contact us



Scan the QR code or  
visit CoastalVAWind.com  
to learn more

¿Habla español?  
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