

# EXAMINING NEAR TERM HYDROLOGIC FORECASTS FOR THE GREATER EVERGLADES



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## Key Takeaways

EverForecast performs best within the first 2 months of the forecast  
EverForecast shows variation in individual gage performance between wet and dry seasons and between water years  
Largest percent exceedances (EDEN falls outside EverForecast) in the upland areas of Everglades National Park

## EverForecast

Hydrologic and multi-species web tool designed to support natural resource management in the Everglades



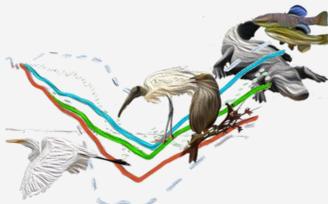
National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center's 3-month average precipitation outlooks



Historical stages from the Everglades Depth Estimation Network (EDEN)

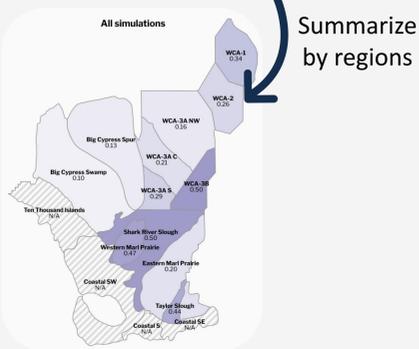
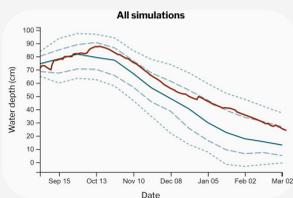


6-month water depth forecasts



suite of species models

Summarize by regions



Summarize by regions

## Objectives

Evaluate EverForecast's performance under ongoing ecosystem restoration and changing climatic conditions

Provide users with insights into the accuracy of EverForecast's predictions for different seasons and at each gage

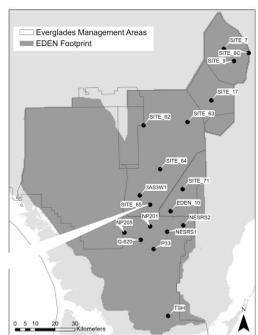
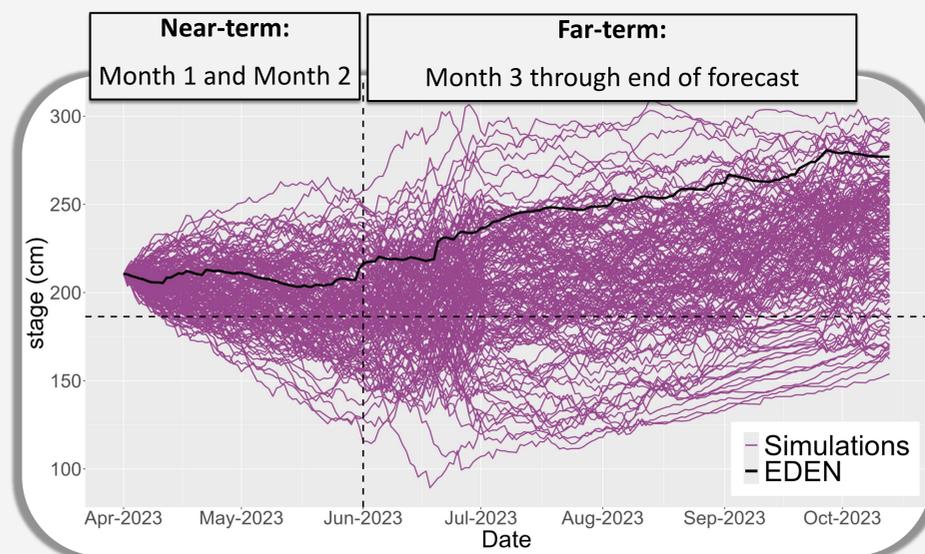
## Methods

1) Does EverForecast capture natural variation in water levels?

**Percent Exceedance** – percent EDEN falls outside forecast

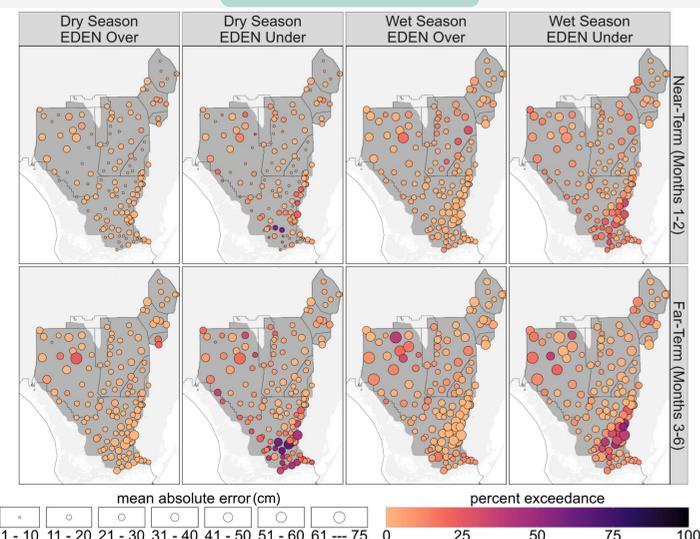
2) How closely does EverForecast predict recorded water levels?

**Mean Absolute Error** – distance between EDEN and forecast



## Results

### Water year 2023



### Season

**Dry:** November 1 – April 30  
**Wet:** May 1 – October 31

**EDEN OVER:** Recorded EDEN value is above the 90<sup>th</sup> percentile of the forecast water level

**EDEN UNDER:** Recorded EDEN value is below the 10<sup>th</sup> percentile of the forecast water level

### Water year 2024

