

# Wading Bird Littoral Use Under Varying Hydrology in Lake Okeechobee

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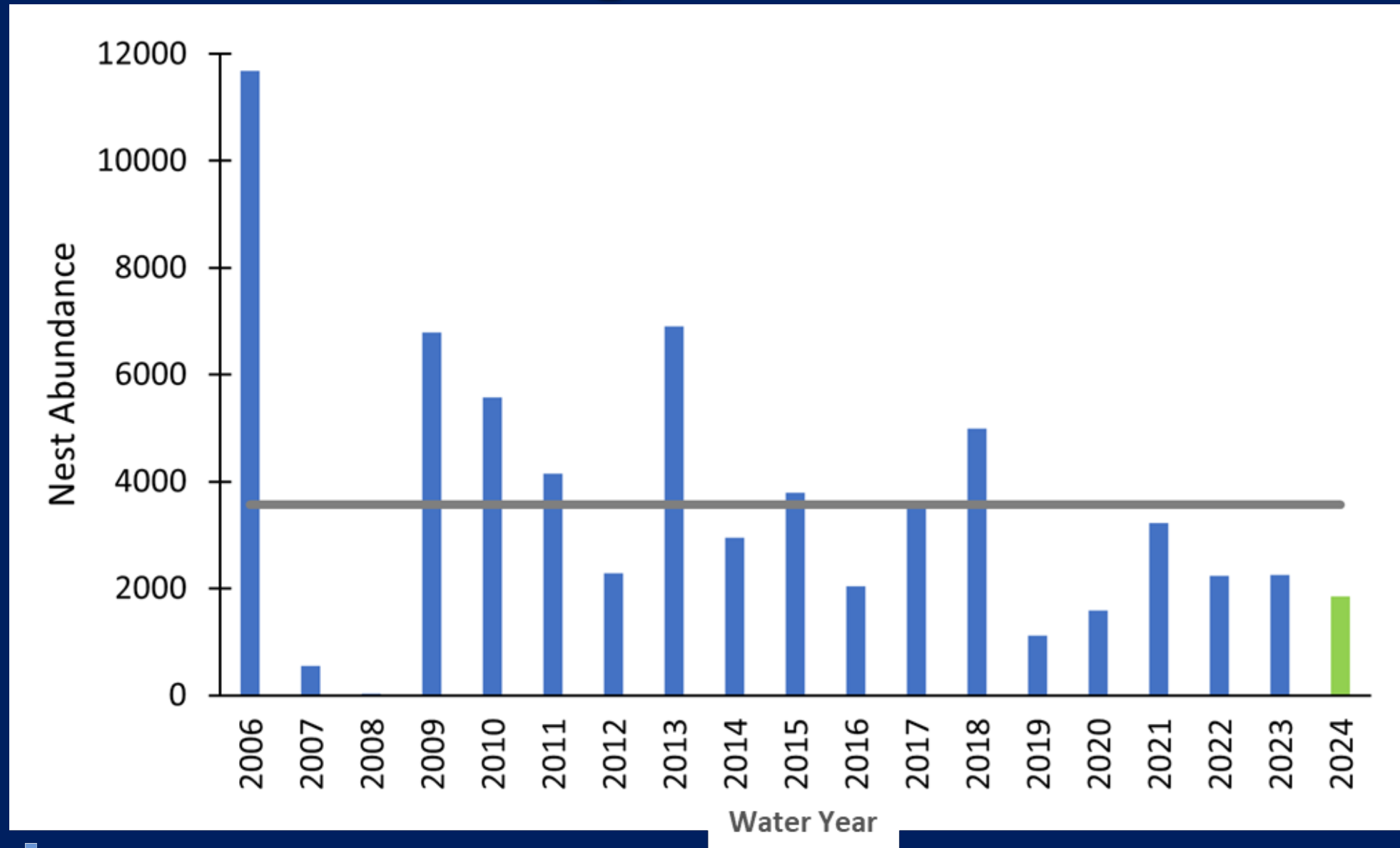
# Wading Bird Foraging Surveys



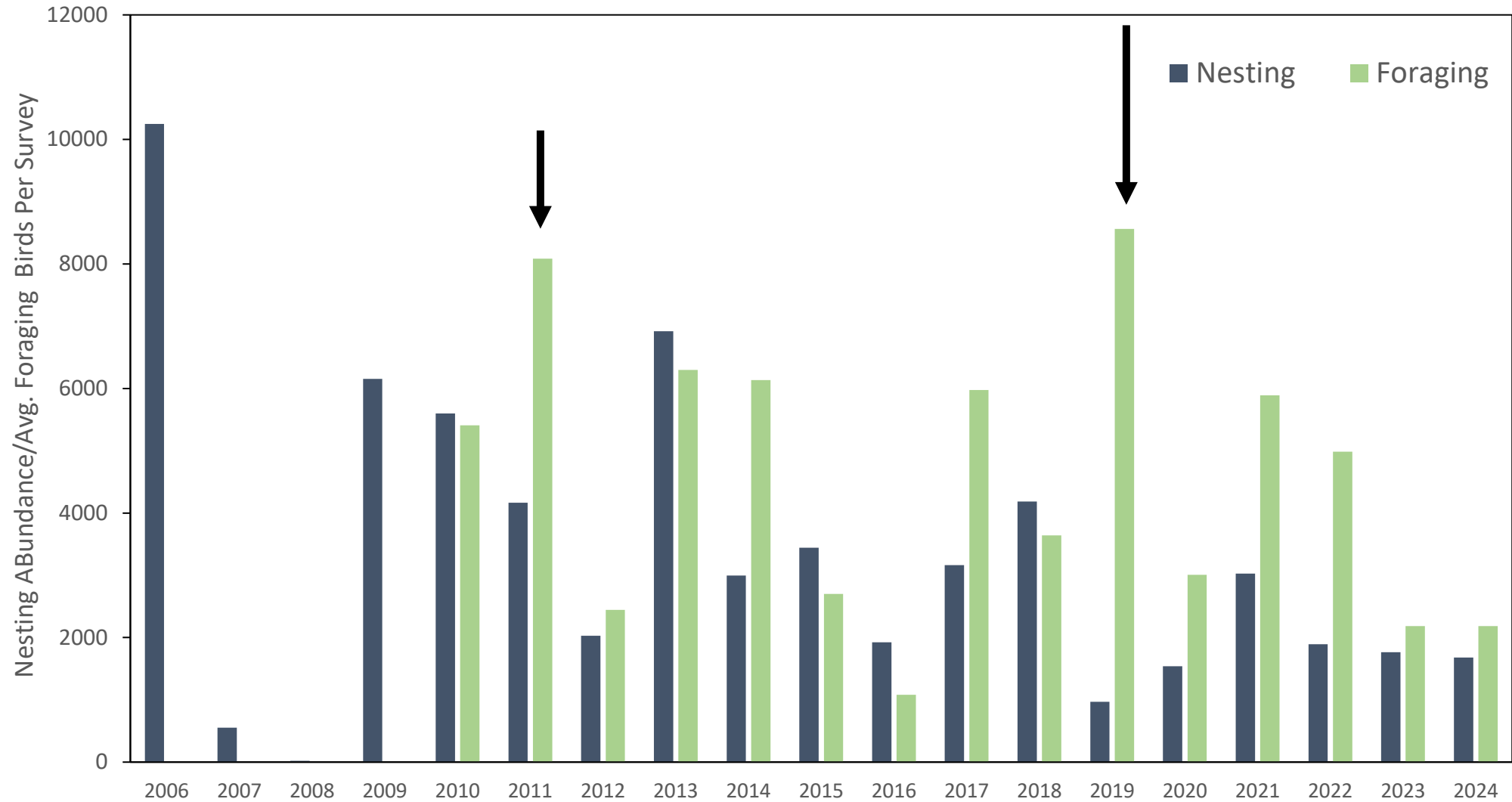
- Initiated in 2010
- Bi-weekly Surveys
- 100% Littoral Coverage
- Flocks  $\geq 50$  Birds



# Nesting Abundance

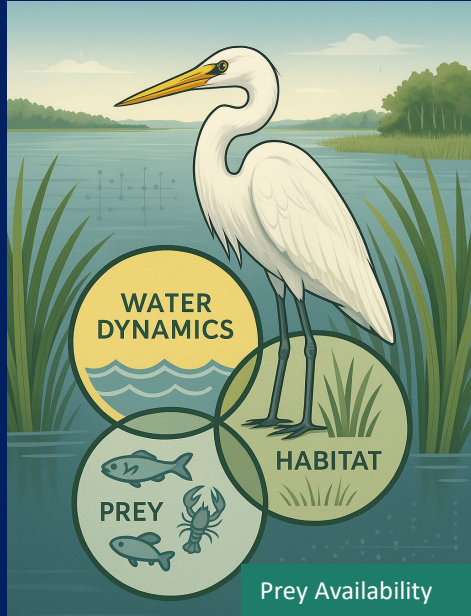


## Nesting and Foraging Abundance





# Translating Bird Behavior into Action



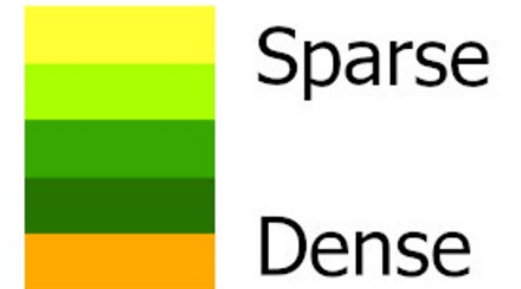
- Which areas are functionally valuable (prey-rich)?
- When are recession rates aligned with prey concentration windows
- Whether water timing aligns with nesting needs?
- How birds respond to drought/high water/restoration?
- Helps us track whether we're creating habitat birds actually use — not just what models predict.

# Let The Birds Be Our Guide

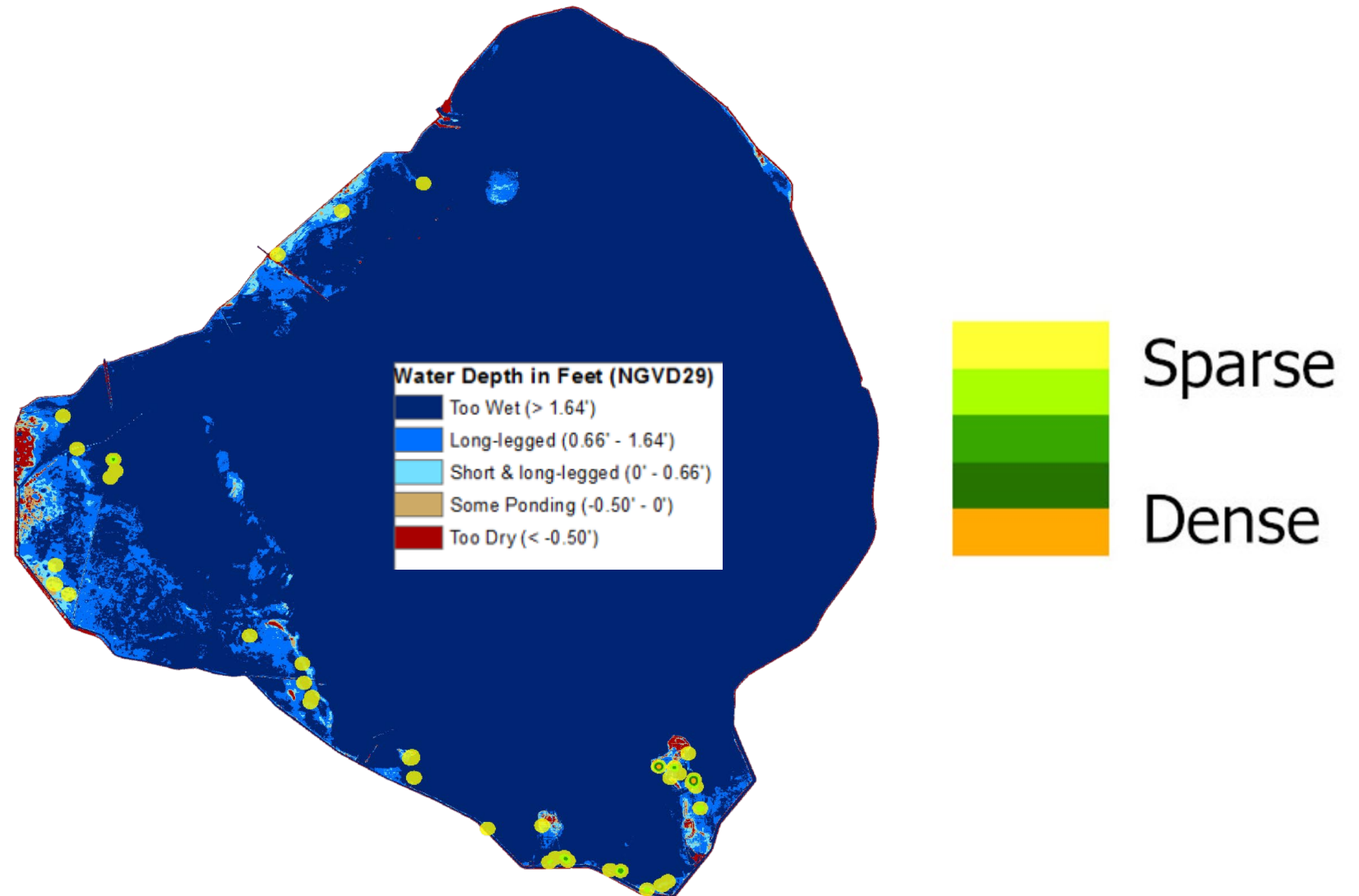


- To proper hydrology
- To functional habitat
- To pattern persistence

# Lake Stage 16+ ft

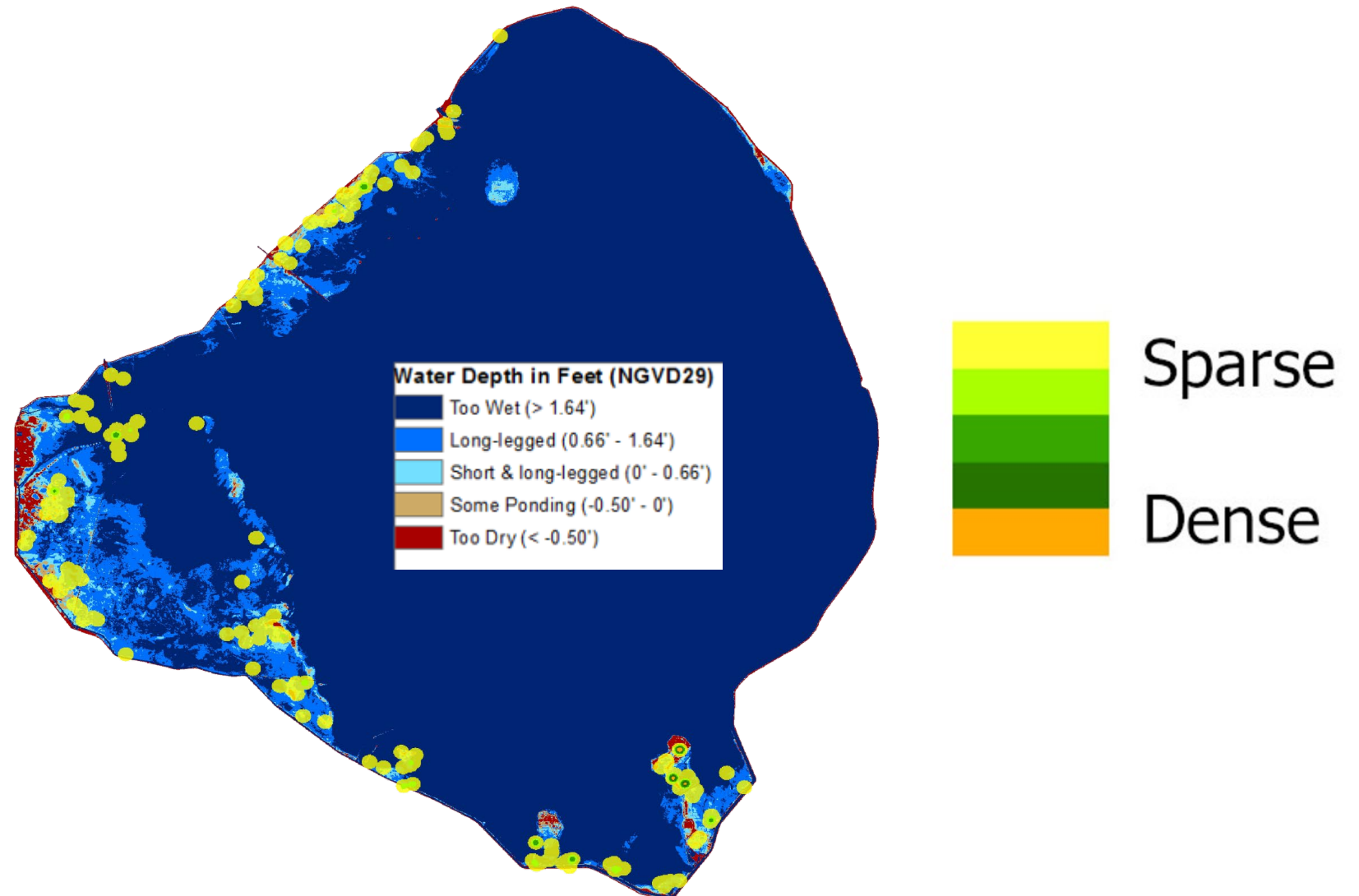


# Lake Stage 16 – 15.5

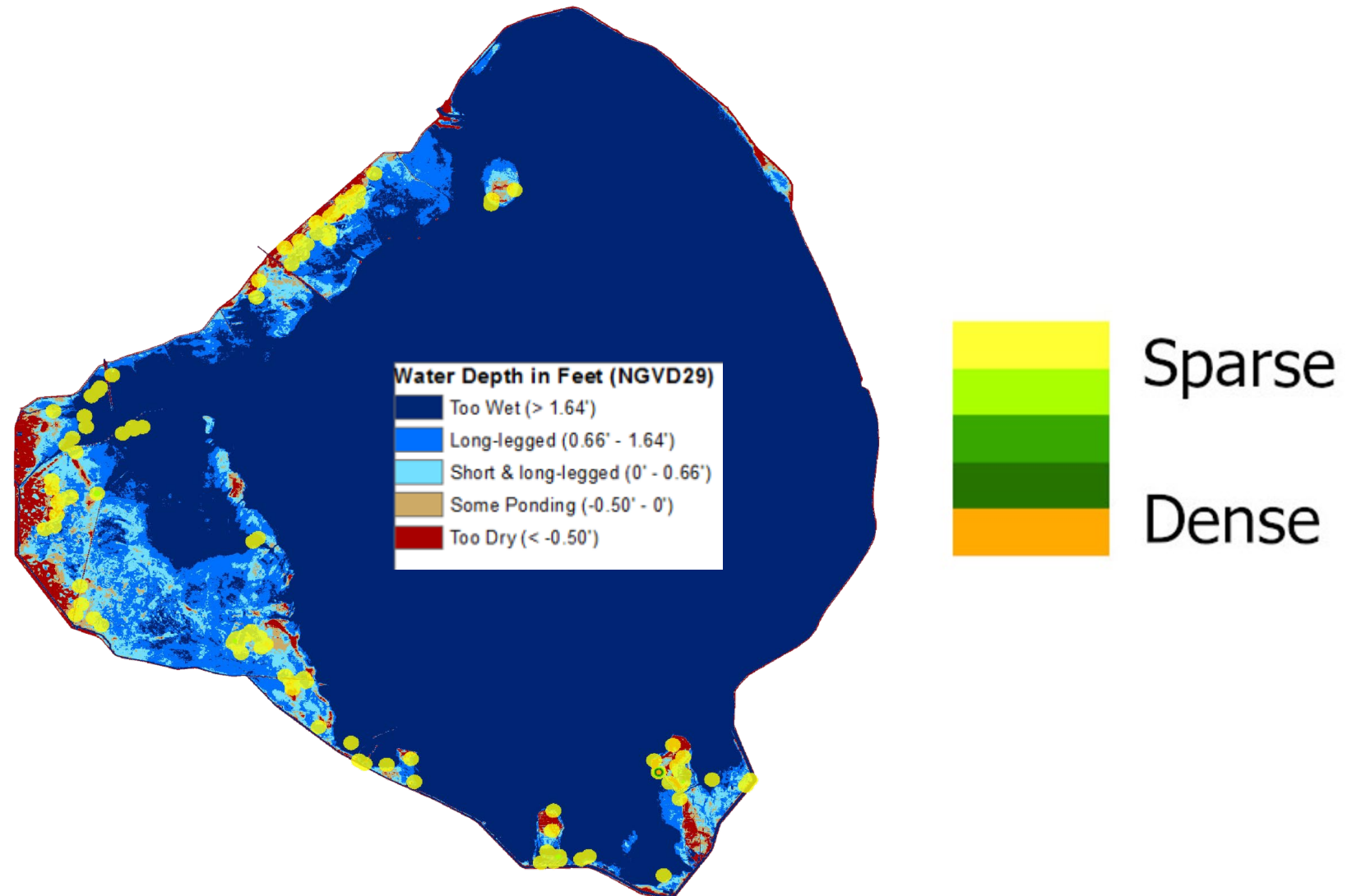




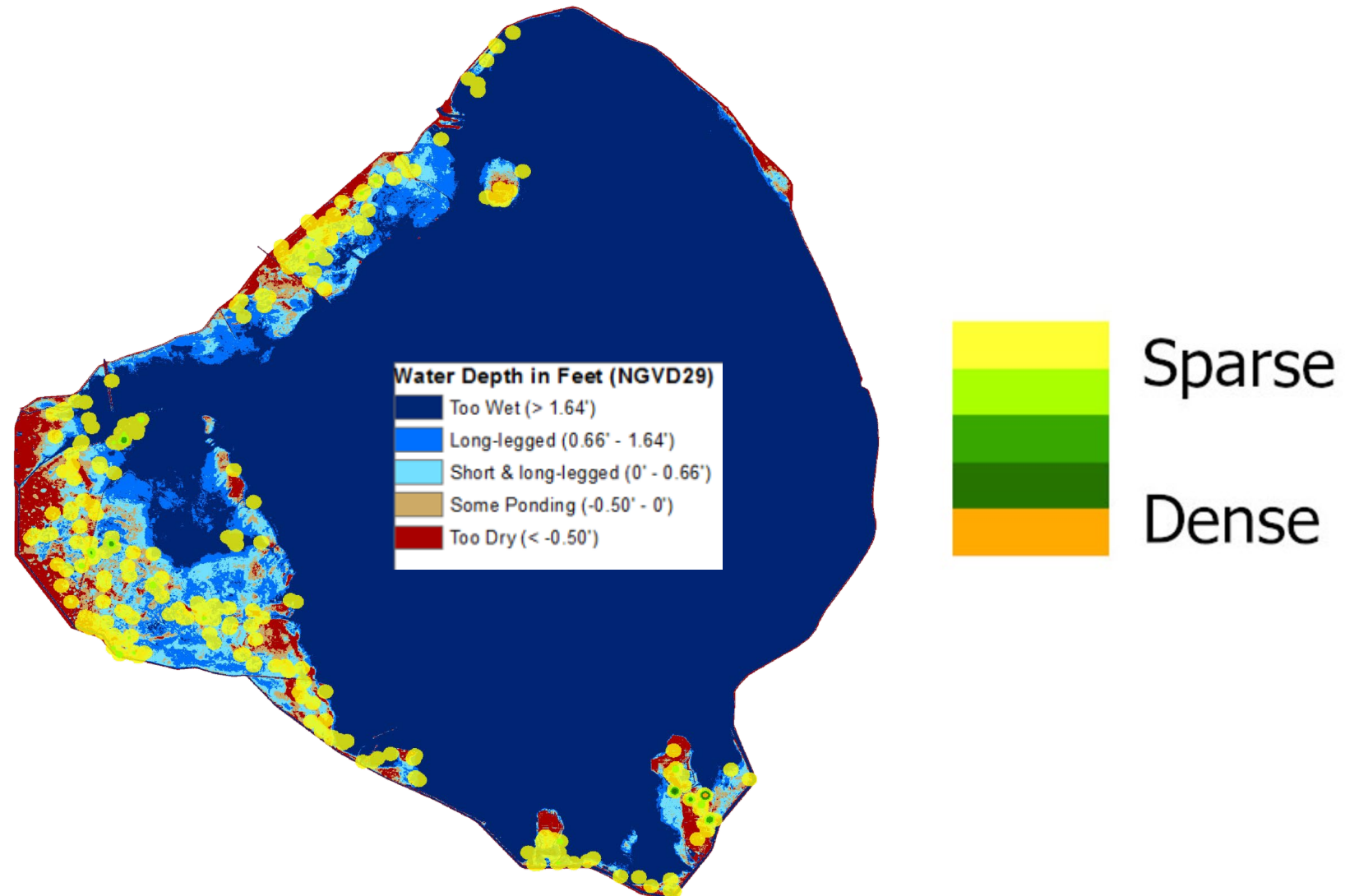
# Lake Stage 15.5 - 15



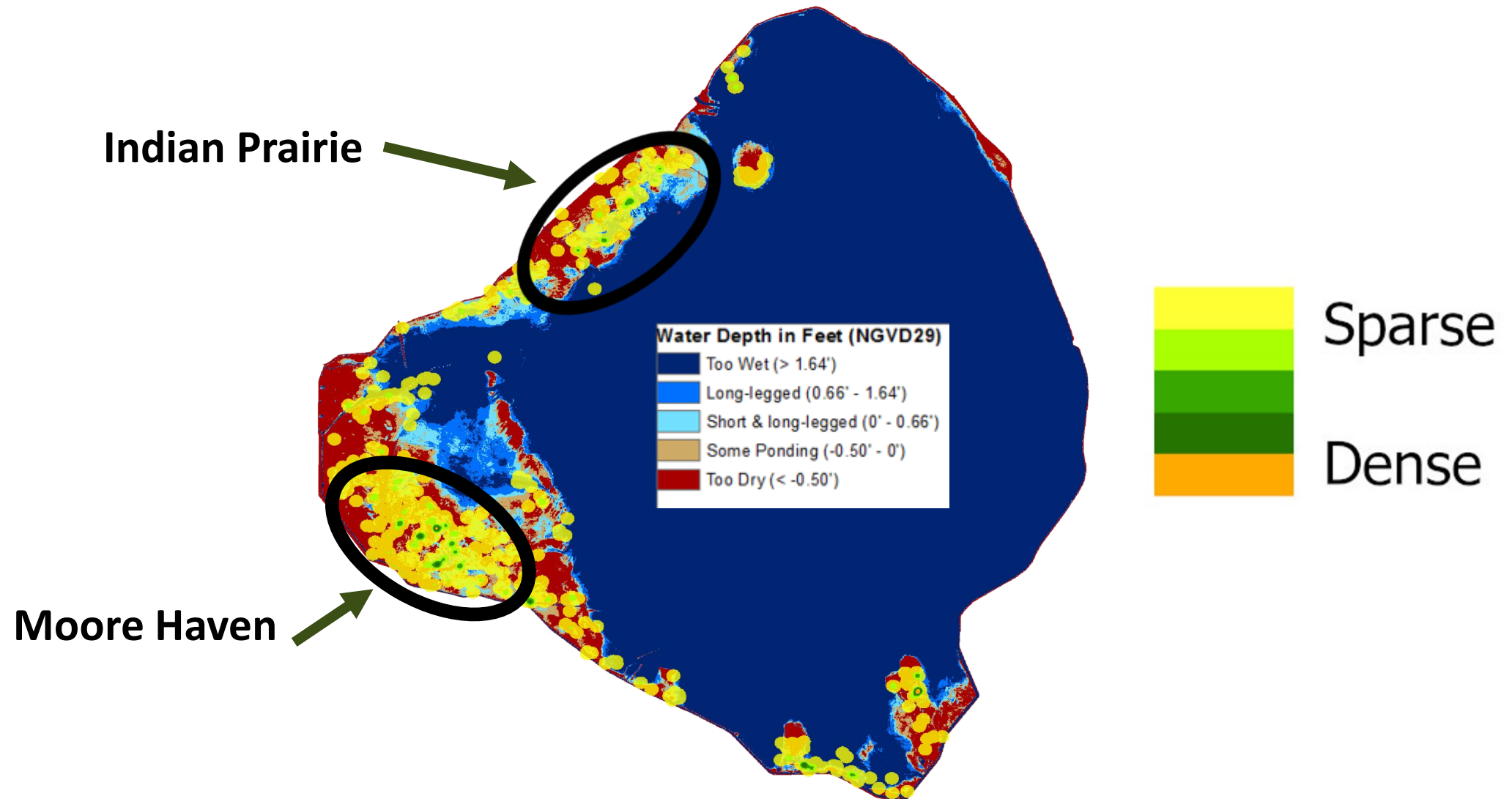
# Lake Stage 15 - 14.5



# Lake Stage 14.5 - 14

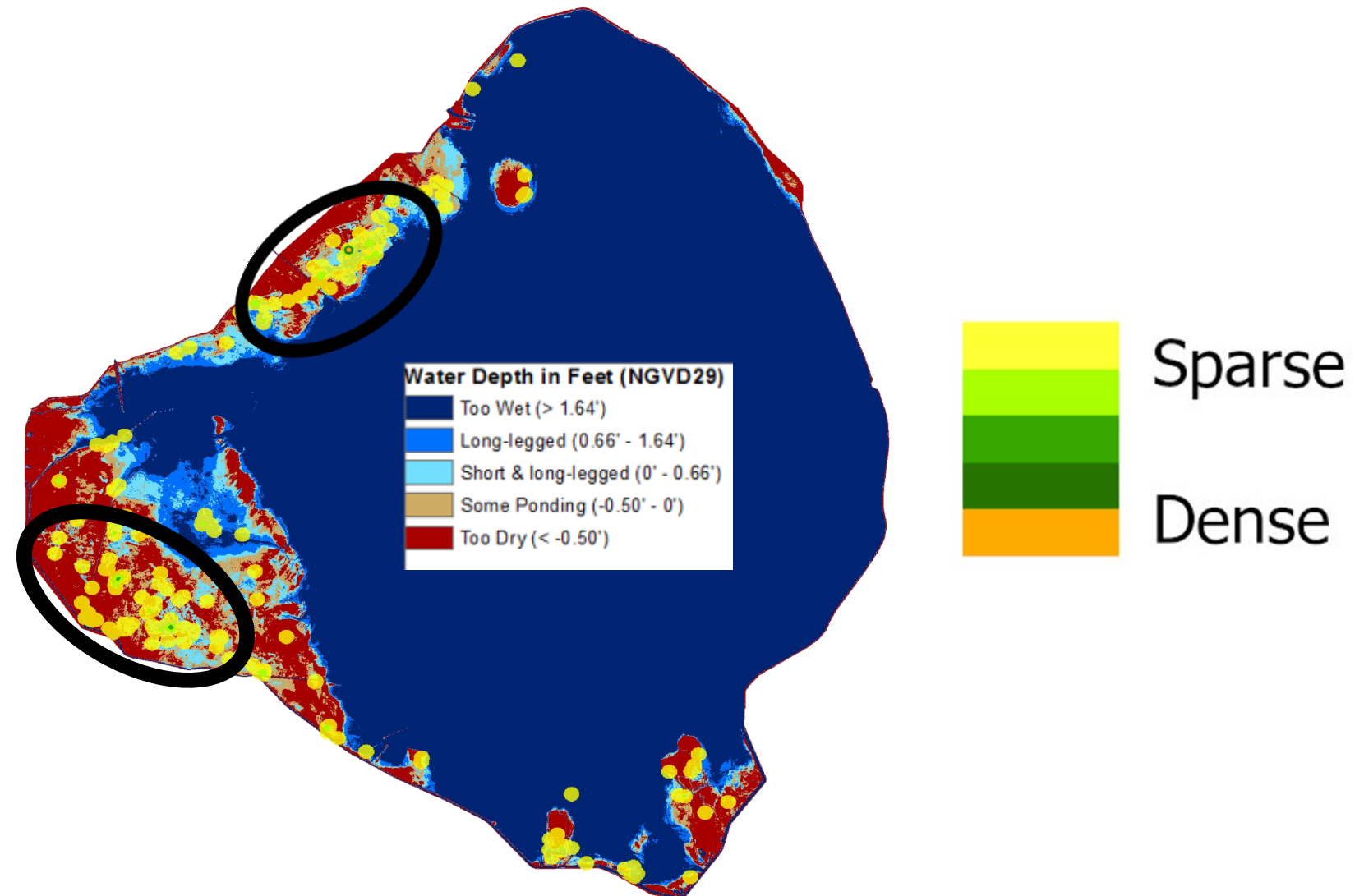


# Lake Stage 14 - 13.5

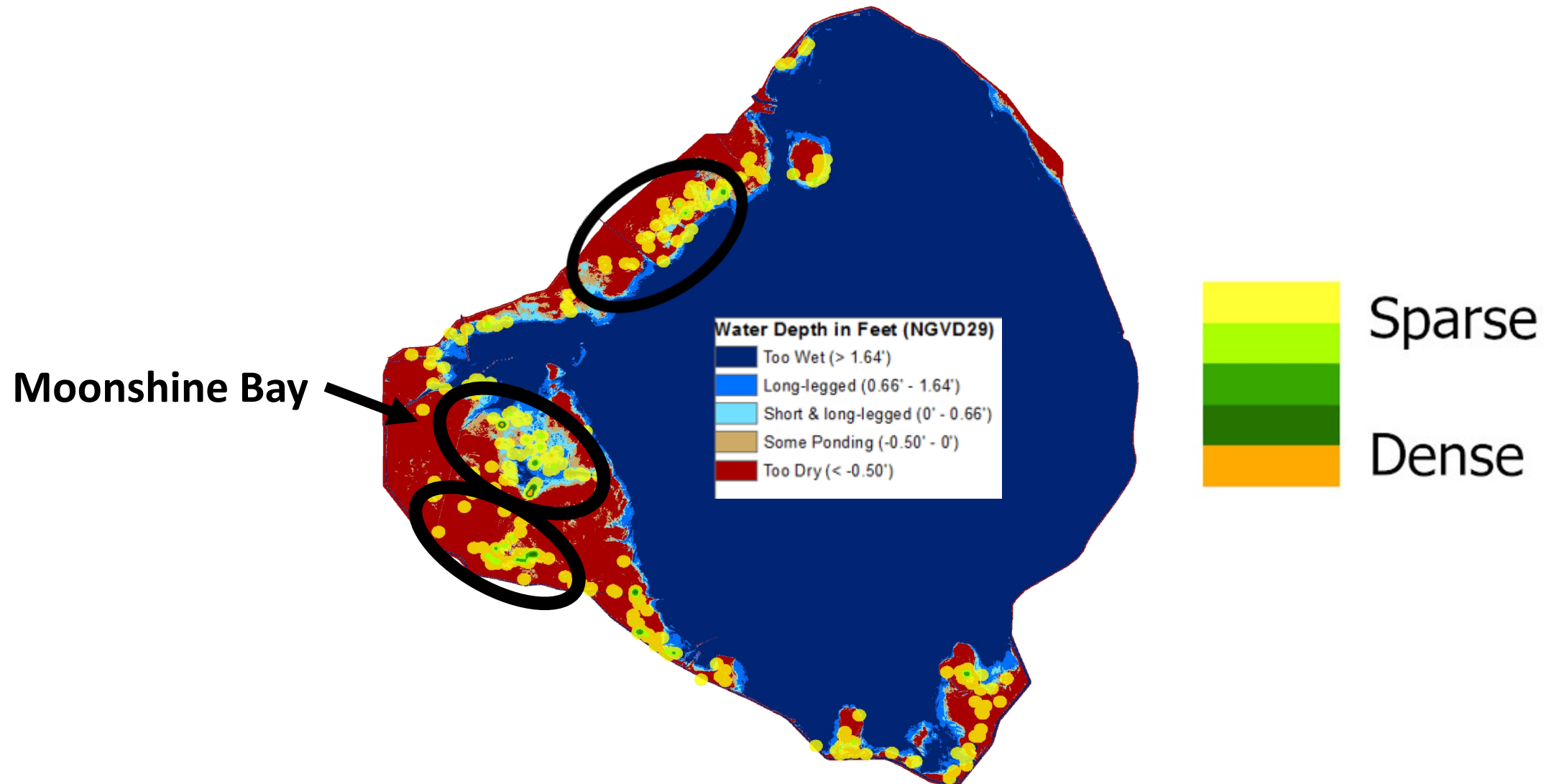




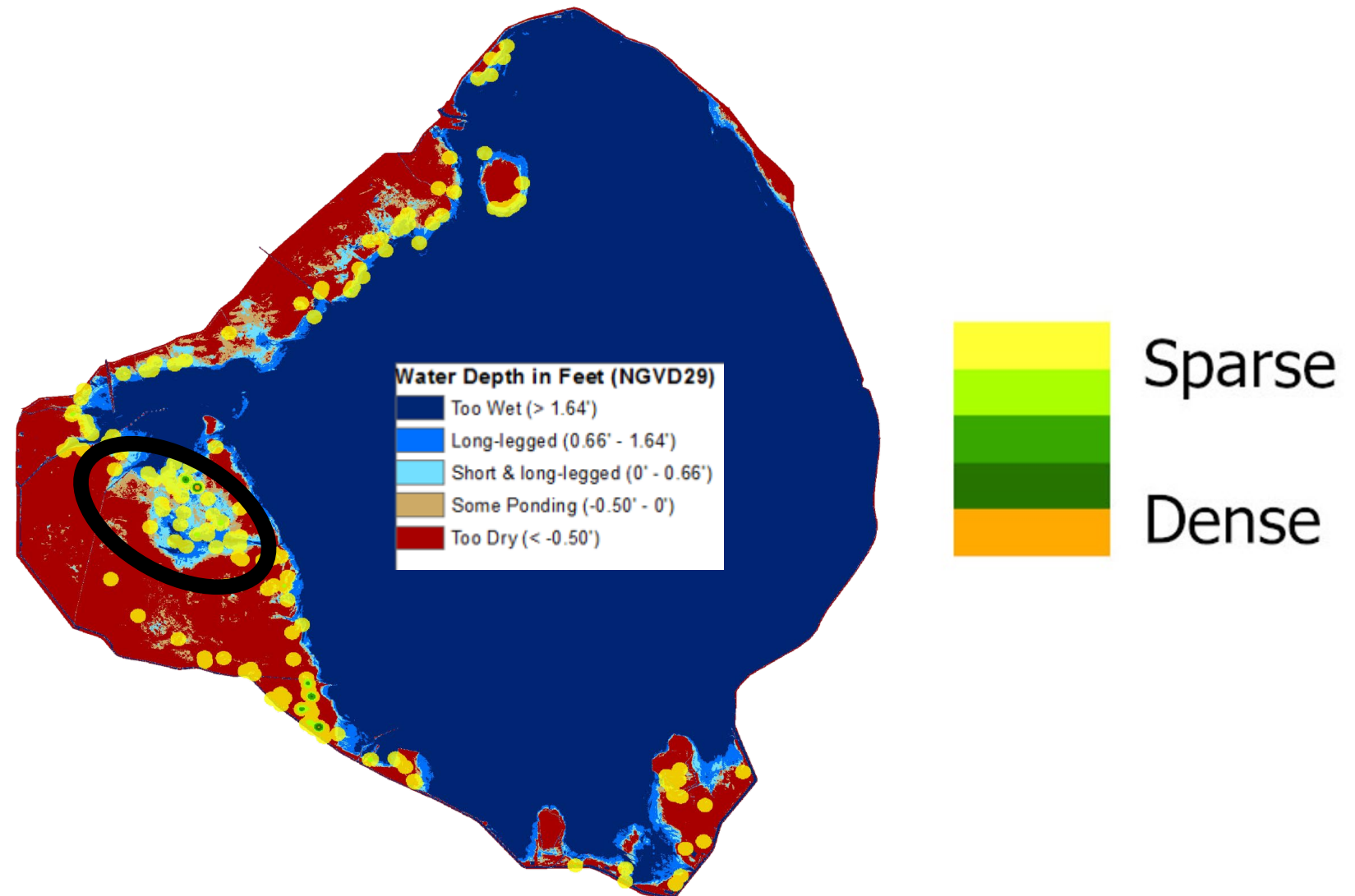
# Lake Stage 13.5 - 13



# Lake Stage 13 - 12.5

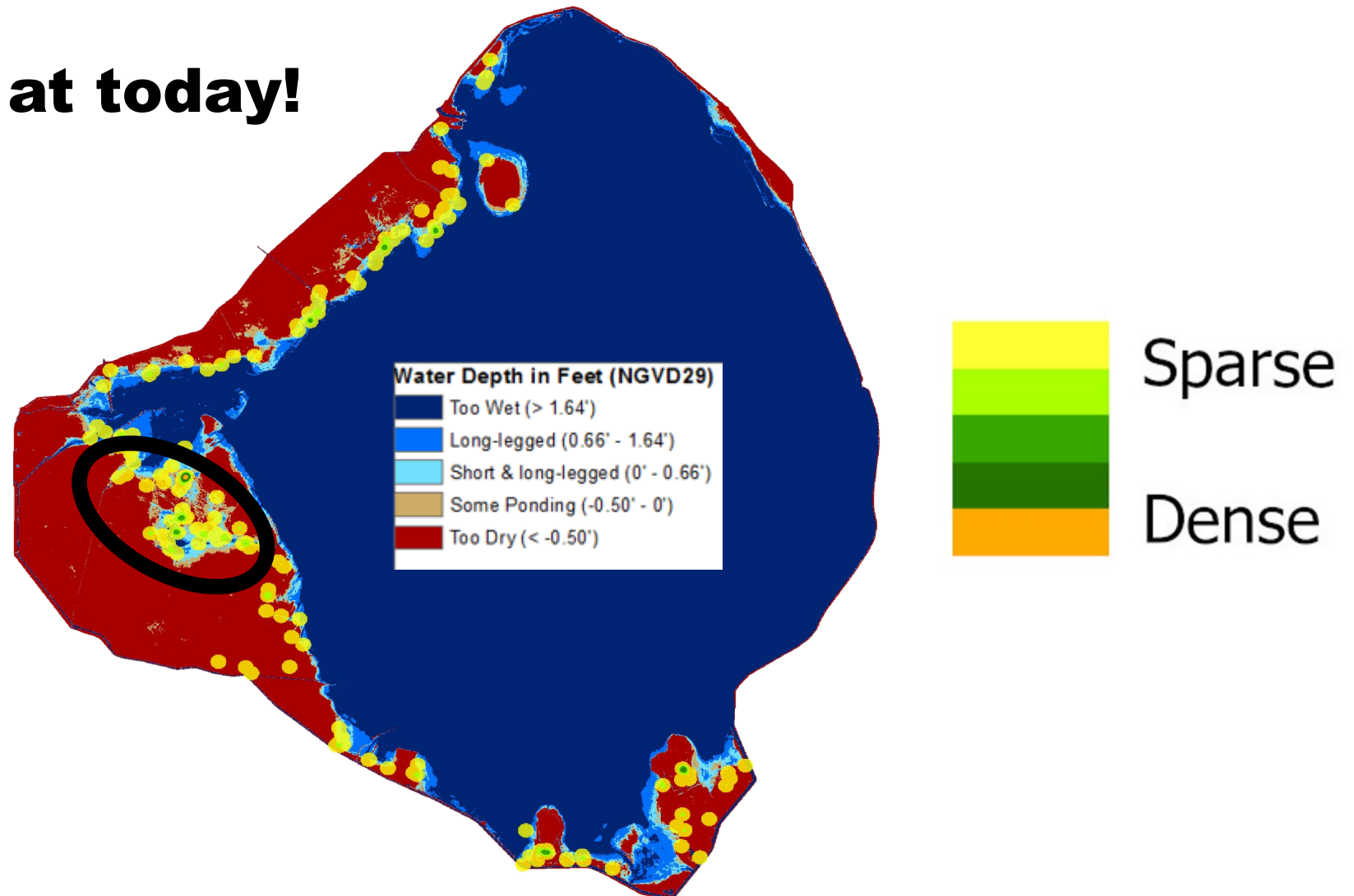


# Lake Stage 12.5 - 12



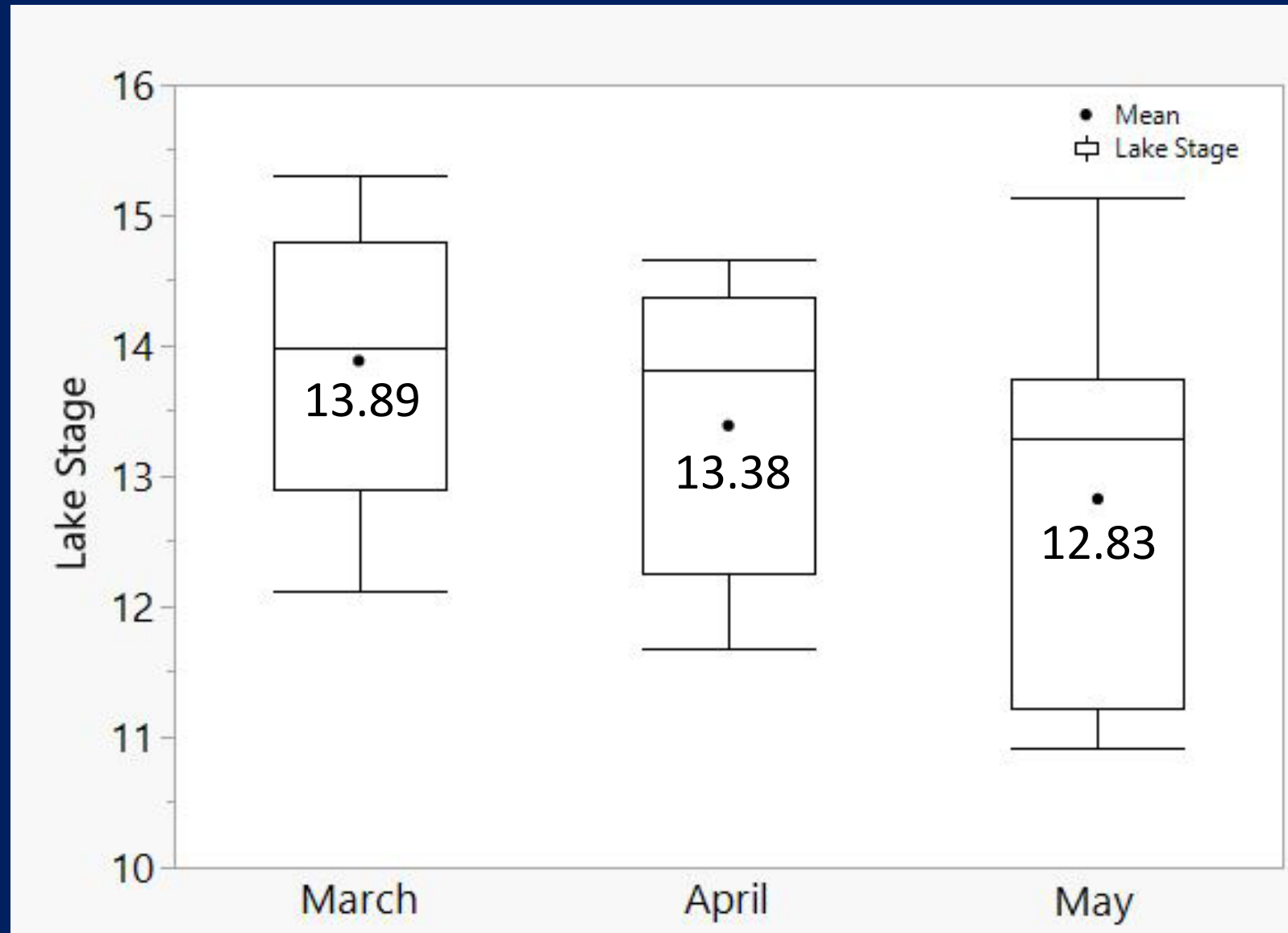
# Lake Stage <12

**Where we are at today!**





# Monthly Beginning Lake Stage for Above Average Nesting Years



## Recommended Timing of Drawdown



Steady Drawdown  
Allowing Access to Prey

**Below 14 ft**

Concentration of Prey



Lake Stage NGVD



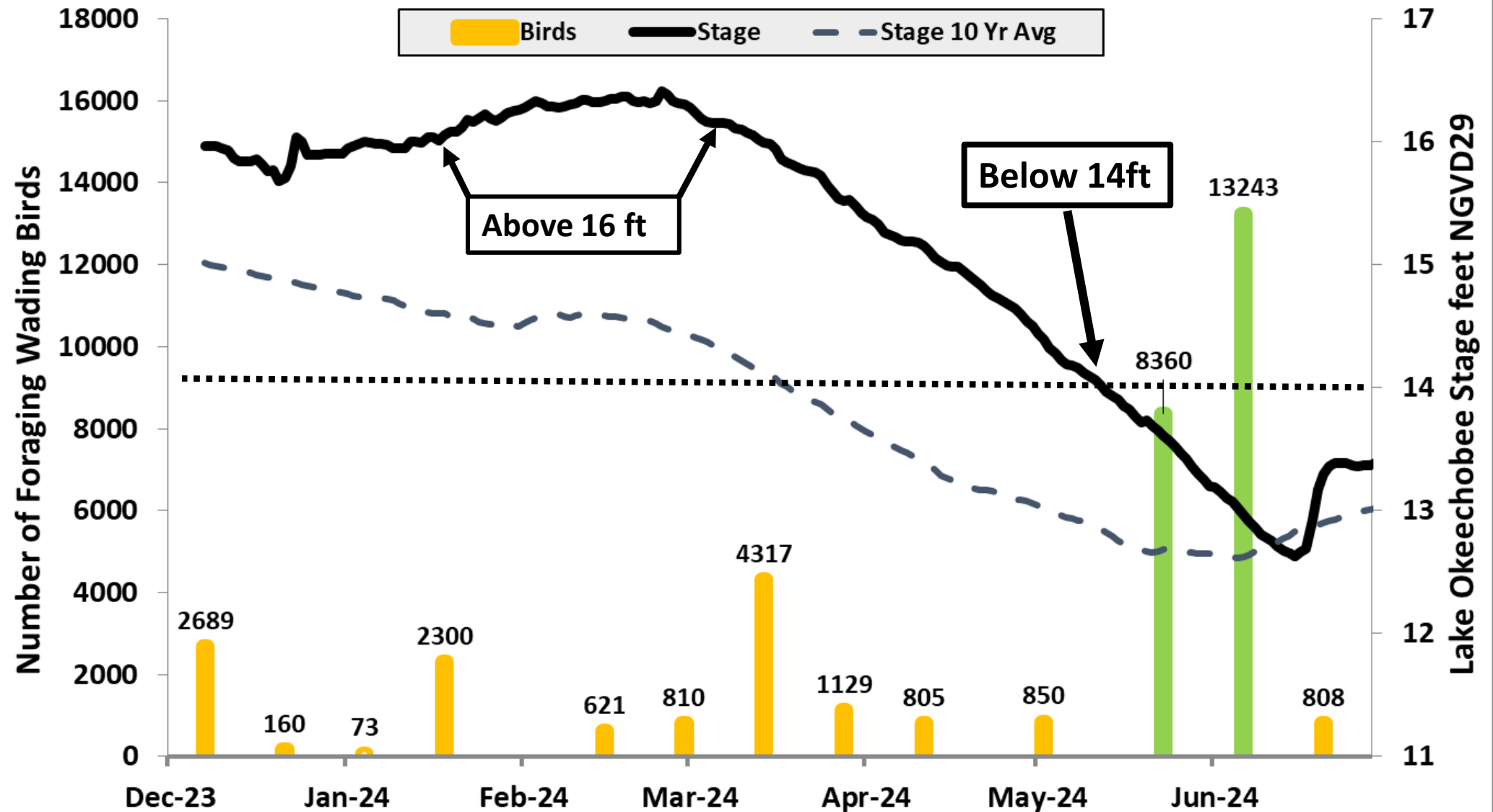
# High Lake Stage Delays Timing of Drawdown



## Lake Stage NGVD

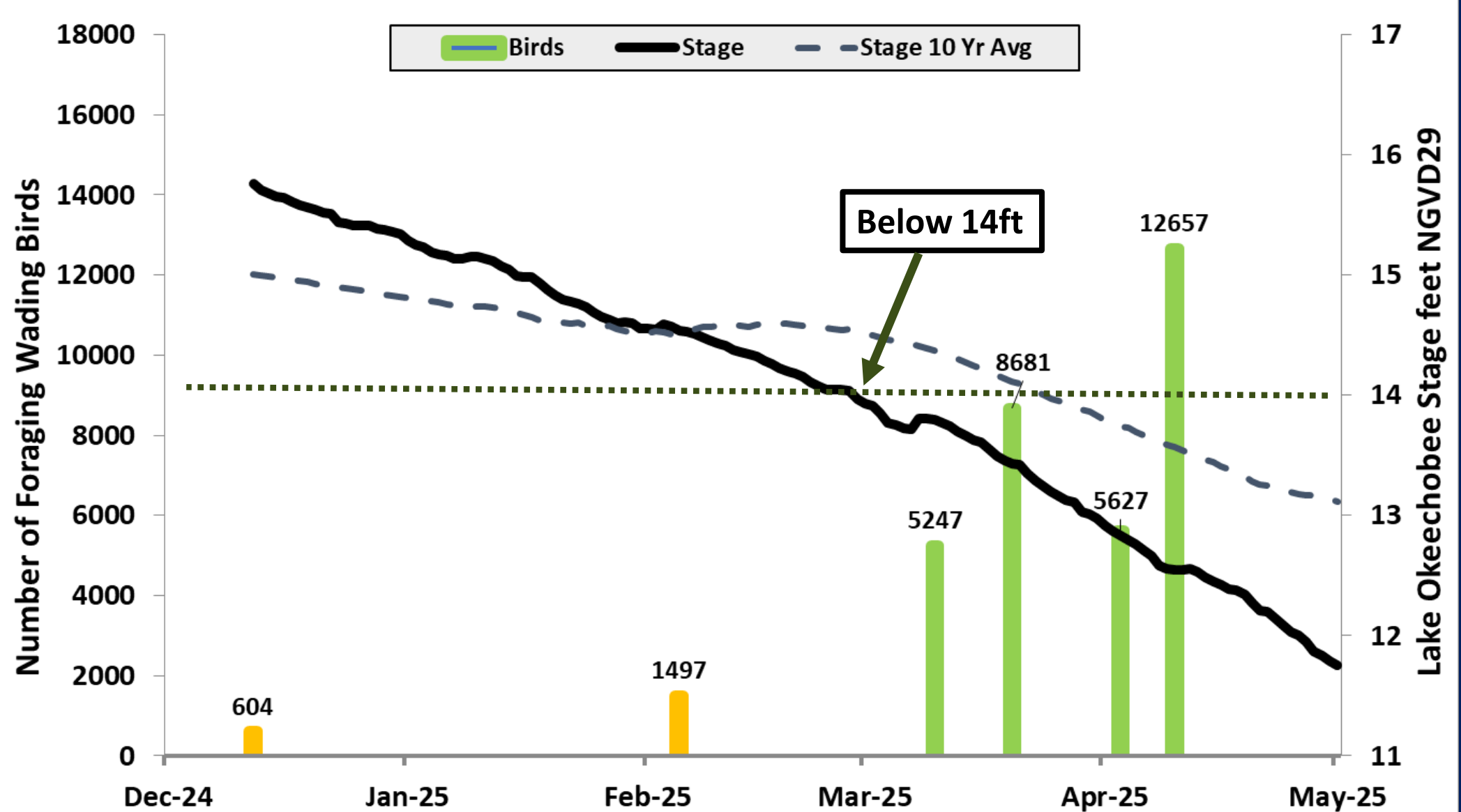


# 2024





# 2025



# Summary

1. Identified - Critical Foraging Areas
2. March Matters - Timing in which these must be online to support nesting
3. Mechanism of drawdowns/concentrations becoming more important (prey density decreasing)
4. Recession Rates (approx. 0.15 - 0.18 ft/week)
5. Further understanding what is influencing the Prey Base (modeling)

