

# How are CRAM and HGM Related?

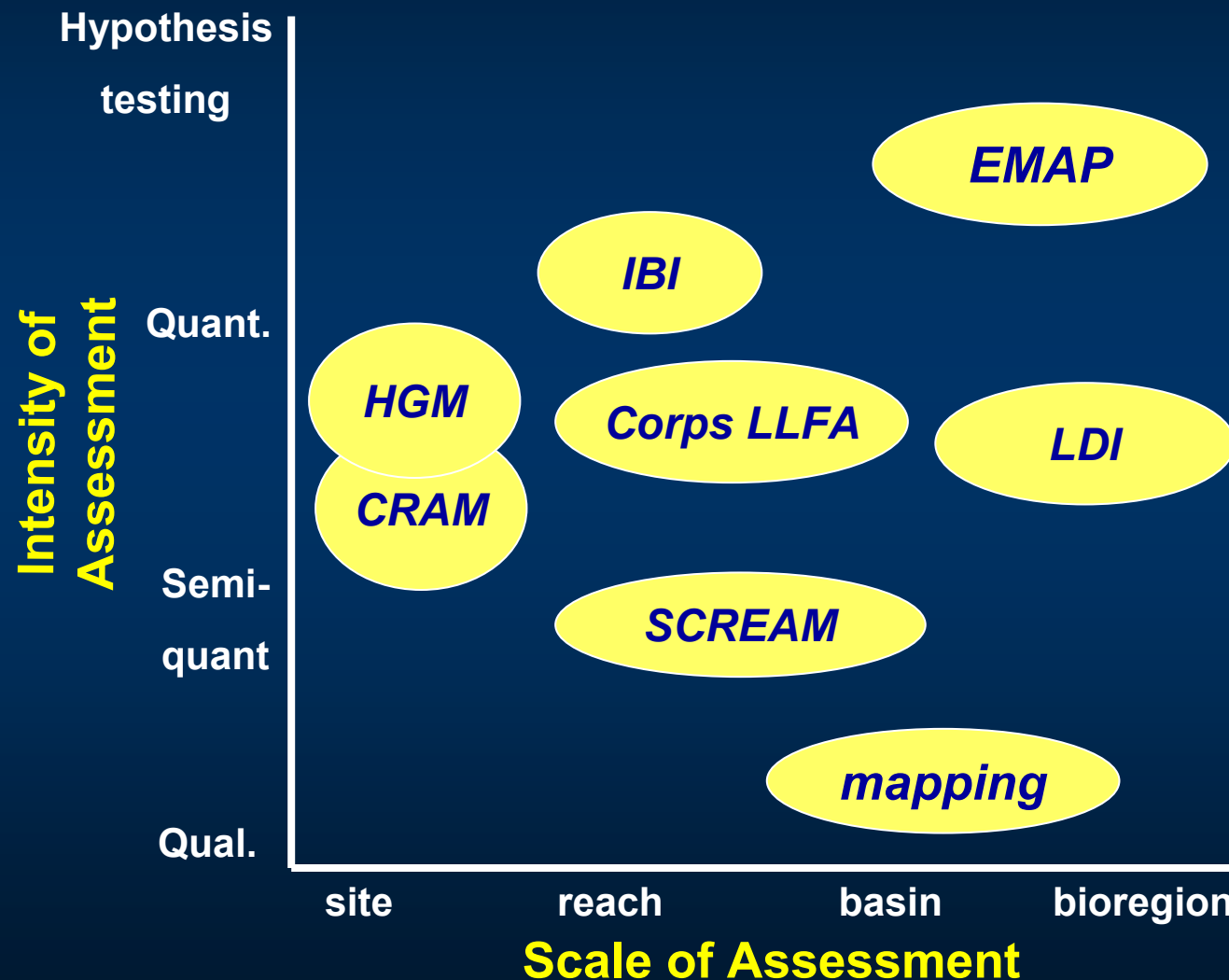
## General Goal:

Assess general condition or functional capacity of a wetland in a repeatable manner using a set of readily observable field indicators

# Key Terms

- Function = process occurring over time
- Condition = status at a point in time
  - = likelihood to perform function
  - = functional capacity
- Value = importance based on specific set of social values

# Types of Assessment Methods



After: R. Dan Smith, unpublished

# Key Similarities

- Assess general condition
- Based on observable field indicators
  - metrics  $\approx$  variables
- Relatively rapid
- Employ concept of reference
- “calibrated” to “level 3” data

# Key Differences

- Development Approach
- Reference & Calibration
- Types of Indicators
- Aggregating scores

# Development Approach

## HGM

- Individual guidebooks for specific wetland classes
- Organized by region/watershed (can add wetland subtypes)
- Up-front data collection necessary to scale variables

## CRAM

- Method includes ability to assess all wetland classes
- Organized by wetland subclass (additional subclasses can be added)
- Up-front development based on BPJ of team; calibrated to data at end

# Reference & Calibration

## HGM

- Reference data collected up front and used to scale variables
- Reference based on best attainable condition

## CRAM

- Method developed up front and calibrated/validated to field data at end
- Reference based on conceptual best condition that could occur for particular landscape

# Types of Indicators

## HGM

- Ordinal scale (0 - 1)
- Measures of condition
- Inferences of process
- Stressors

## CRAM

- Ordinal scale (3 - 12)
- Measures of condition
- No direct inference of process
- Stressors evaluated separately, not part of condition score

# Aggregating Scores

## HGM

- Variables aggregated using complex algorithms
- $\text{FCI} \times \text{area} = \text{FCU}$
- Cannot aggregate FCUs to an overall score

## CRAM

- Metrics aggregated using simple averages
- Cannot multiply by area
- Metrics aggregated into attributes; attributes aggregated into overall index score

# So, Now What?

- Fundamental similarities in approach
- Early development process is the same
- Key decisions
  - **Organization** - regional vs. wetland class
  - **Reference** - best attainable vs. conceptual optimum
  - **Calibration** - up front data vs. back end data

Development of the tool is not the end-game . . .

Focus on the ultimate application of the tool