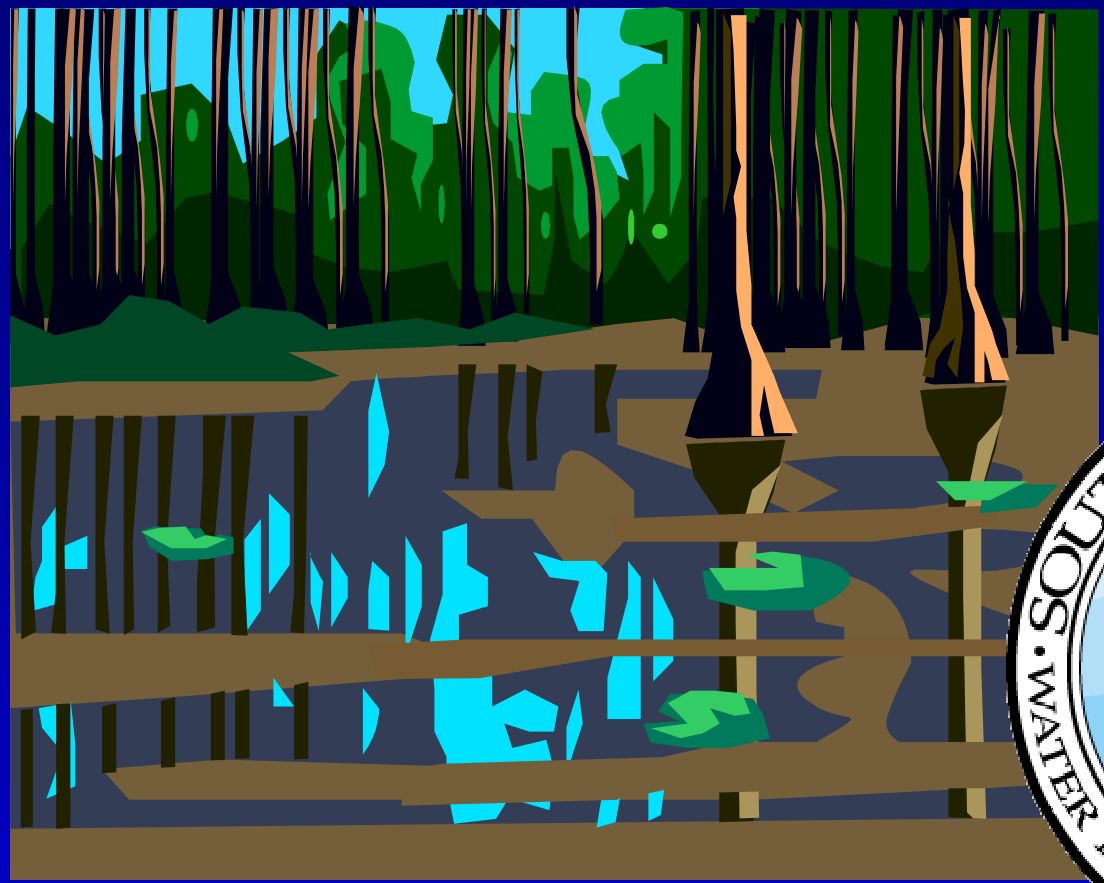
Proposed Wetland Assessment Procedure (WAP)

2004 Revisions



Today's Presentation

- Background (How we got here)
- Presentation of Proposed Revisions
- Questions/Comments/Ideas/Discussion
- Formats/Deadlines/Databases
- Field Testing
- Training

Purpose of the WAP

- EMP monitoring
- Monitoring long-term wetland health
- Developing MFL methodologies
- Assessing Recovery

WAP review began in 2000

- Phase 1 - gather all data and place in database
- Phase 2 – initial assessment of data, identifying differences in scores, evaluations, etc., and suggest reasons
- Phase 3 - evaluate and improve methodology

General Findings of WAP Review

- Highly statistical review of method using historical WAP results is not possible, due to inconsistencies in application of method
- Through the process of detailed review of data, field visits, and interviews with assessors, a revised methodology can still be achieved

General Findings of WAP Review

- Improvements needed in
  - Clarified instructions/less redundancy
  - Consistent transect setup
  - Improved quality control
  - Improved training
  - Central database

WAP Review Timeline

- November – December 2003
  - Consultant interviews
- December 2003 – Early February 2004
  - Produce draft of WAP revision

WAP Review Timeline

- Late February 2004
  - Send WAP revision for TAC review
- March/April 2004
  - TAC review and meeting to discuss
- April 2004
  - Produce second draft of revision

WAP Review Timeline

- April and May 2004
  - Field testing
- June 2004
  - Proposed revision to Tampa Bay Water Board

WAP Review Timeline

- July – August 2004
  - Training
- September 2004
  - Revised WAP activated

Key Changes

(Things you no longer have to do)

- No weedy scores
- Old soils method is out
- Vines scoring is out (included in groundcover)

Key Changes
(New things you have to do)

- Wetland history
- 5-year soils assessments
  - Hydric soil marker ID
  - ES assessment
- Stress of Inappropriate species vs Appropriate

Other Key Changes

- Expanded definitions and instructions
- Choices clarified
- Five scoring choices rather than three
- Only species on ground assessed

Other Key Changes

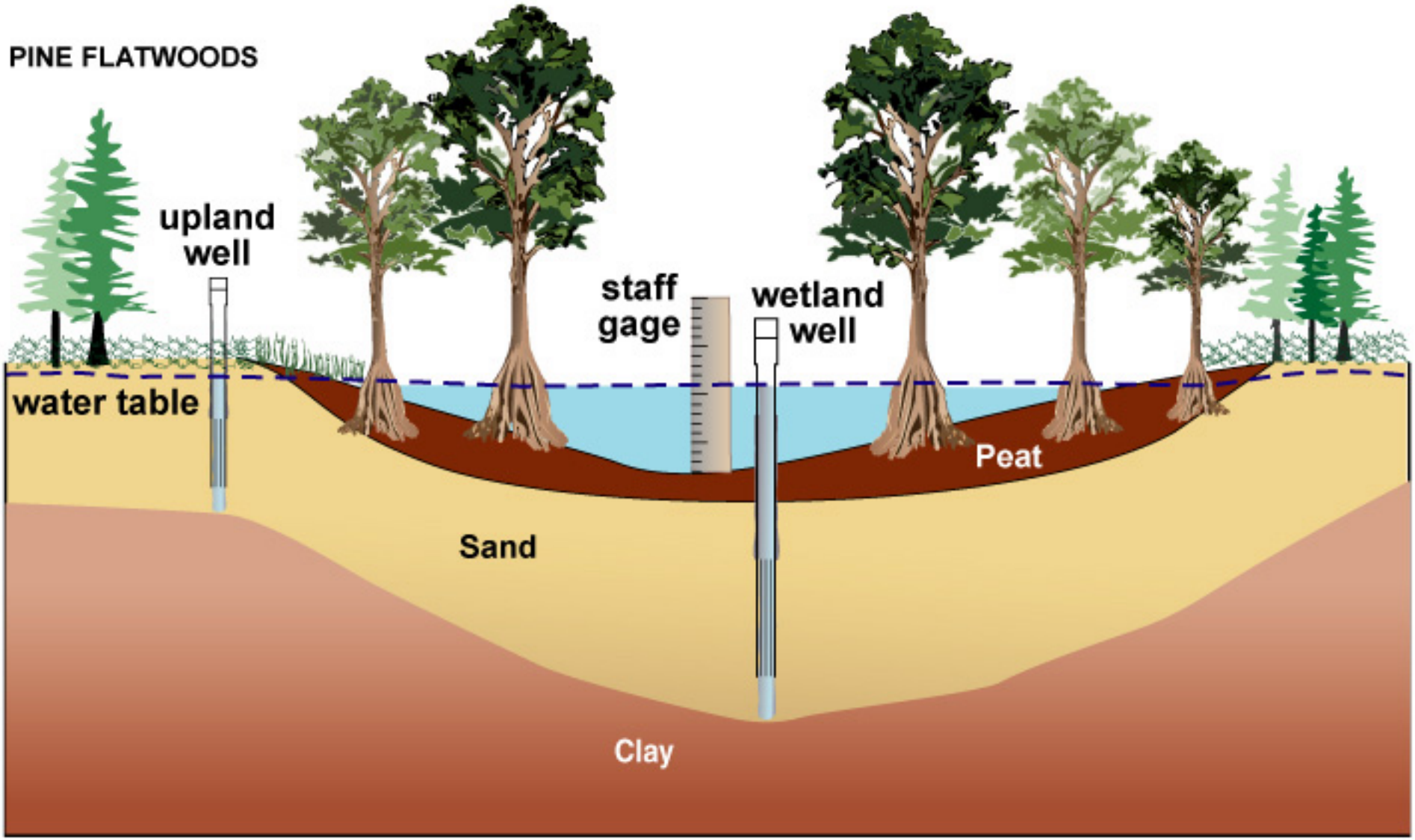
- Comments stressed
- Vegetative Index list included
- Data reporting and formatting included
- Recovery information added

The focus of the proposed WAP revisions is to document hydrologic impacts and recovery due to ground-water withdrawals

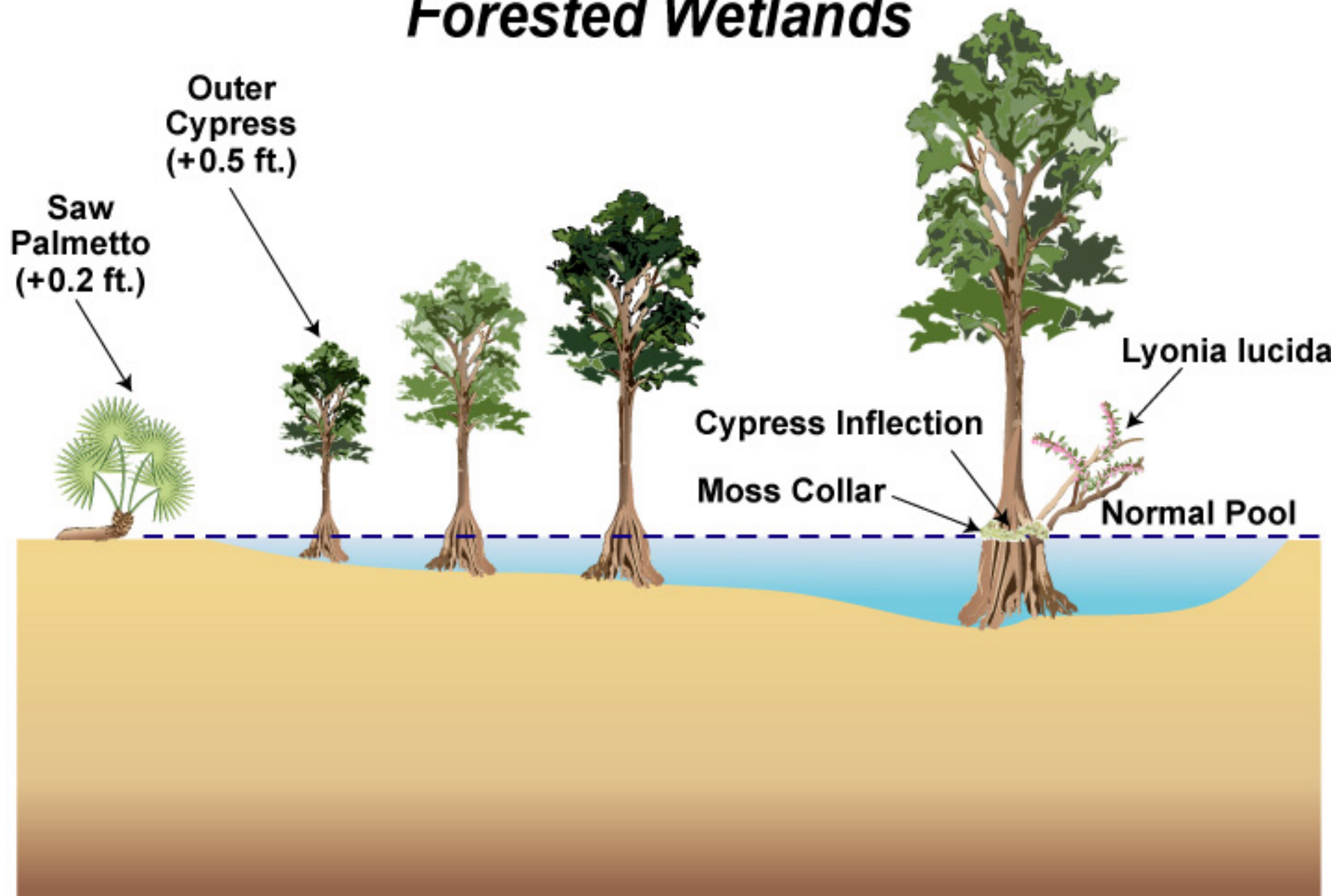
Setting up the transect

- Choose transect wisely
  - Good transition and deep zones
  - Access

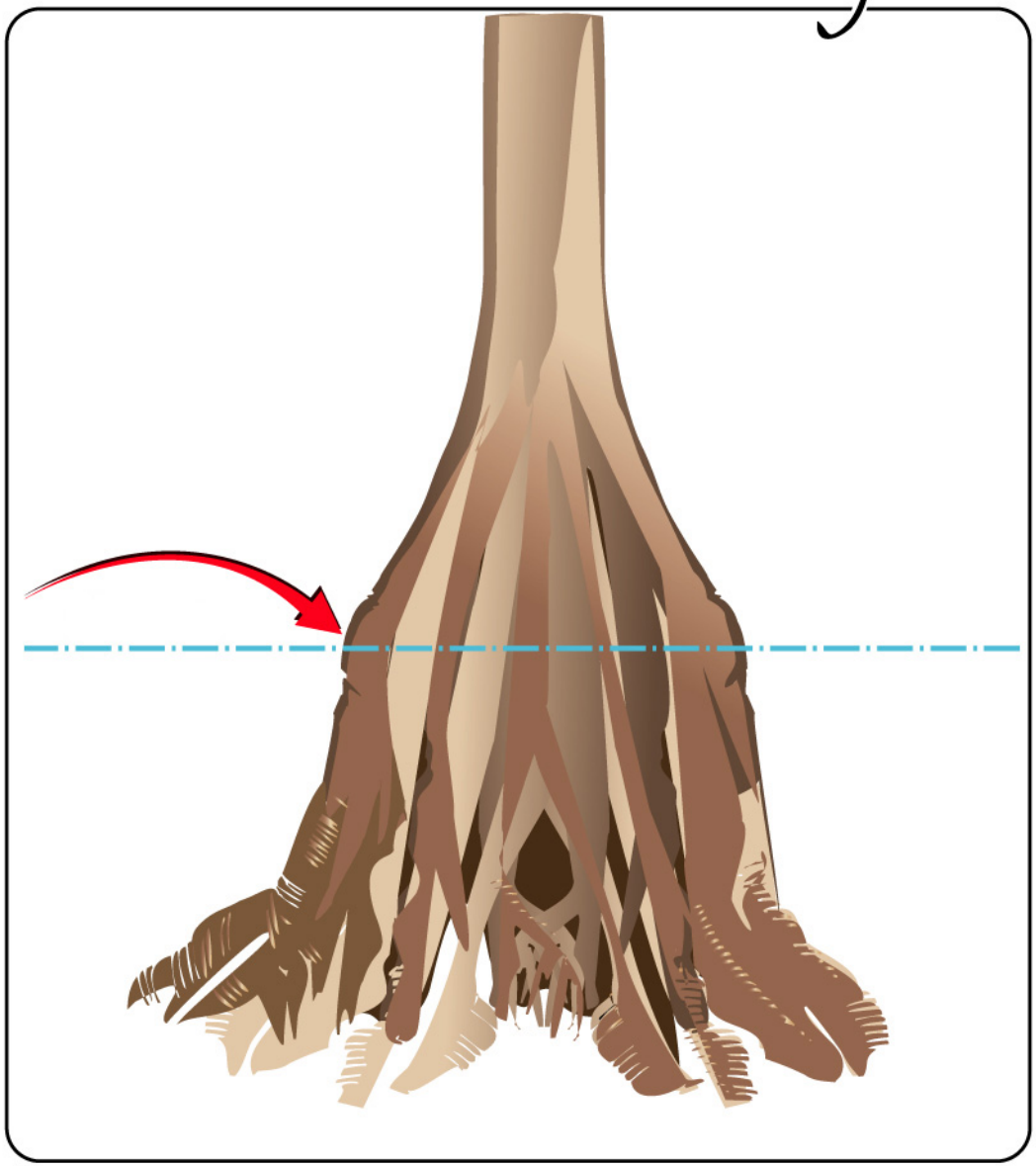
Wetland Monitoring Instrumentation



Indicators of Historic Normal Pool for Forested Wetlands

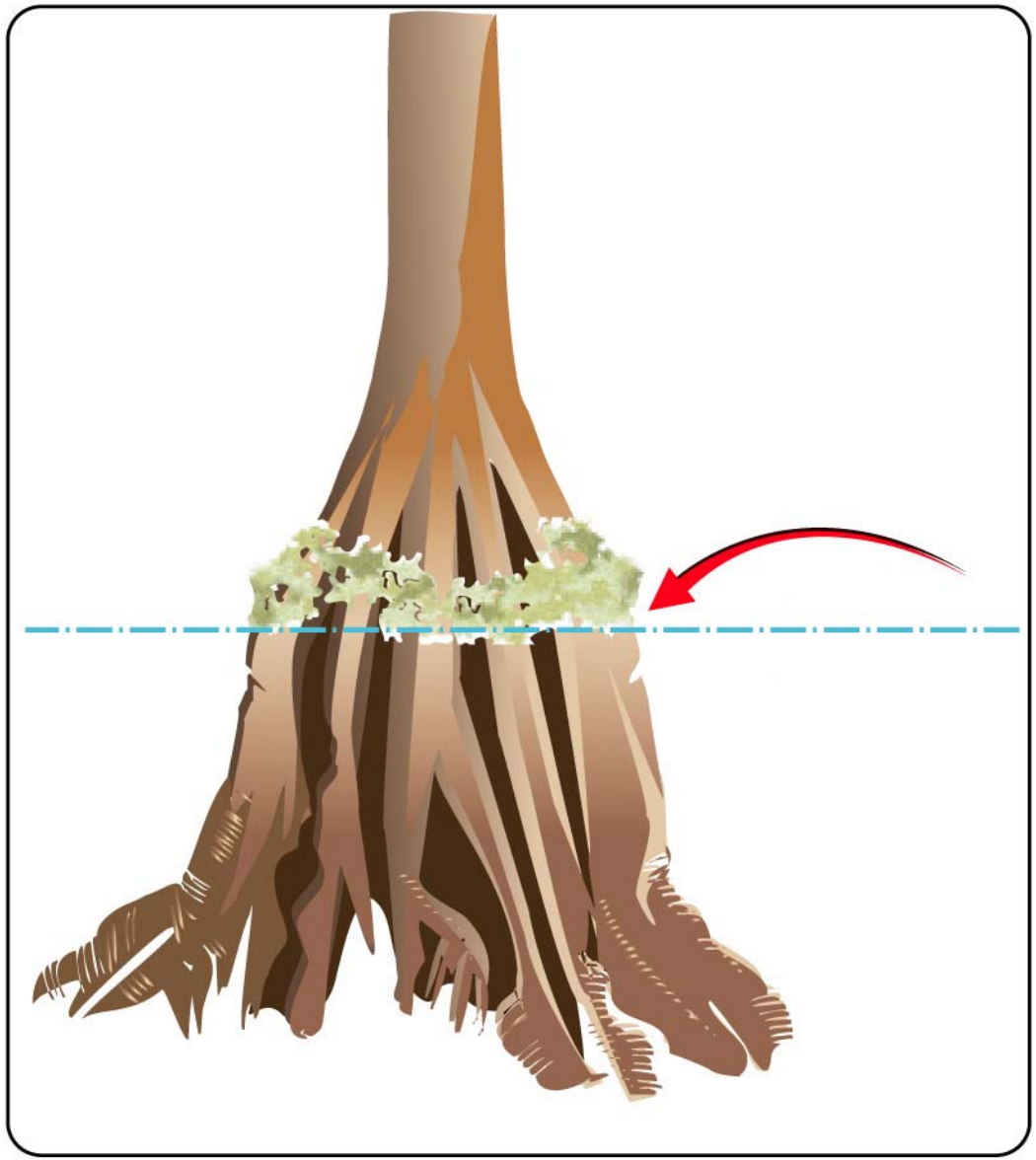


Buttress Swelling



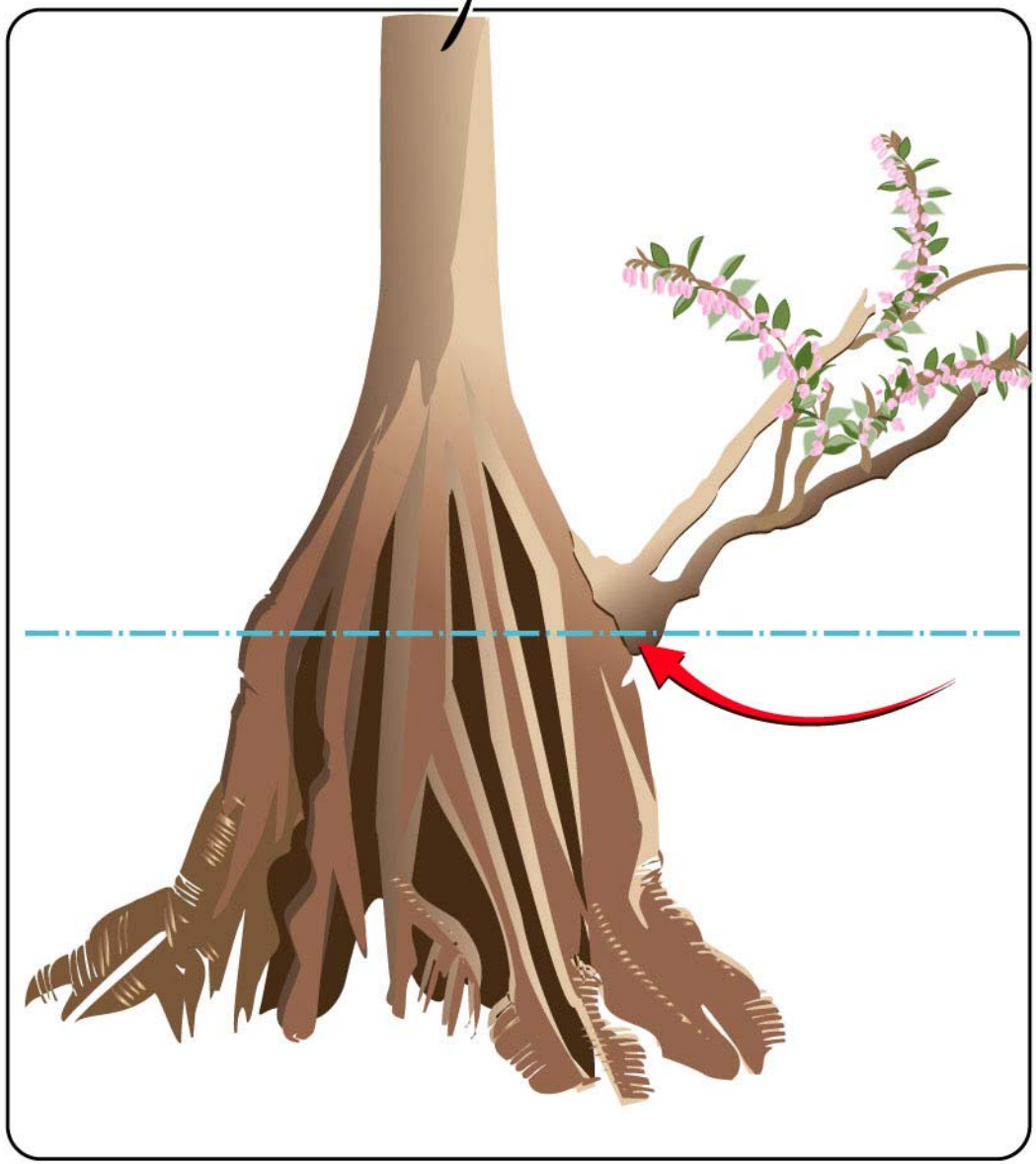
Cypress Inflection Example

Moss Collar



Moss Collar Example

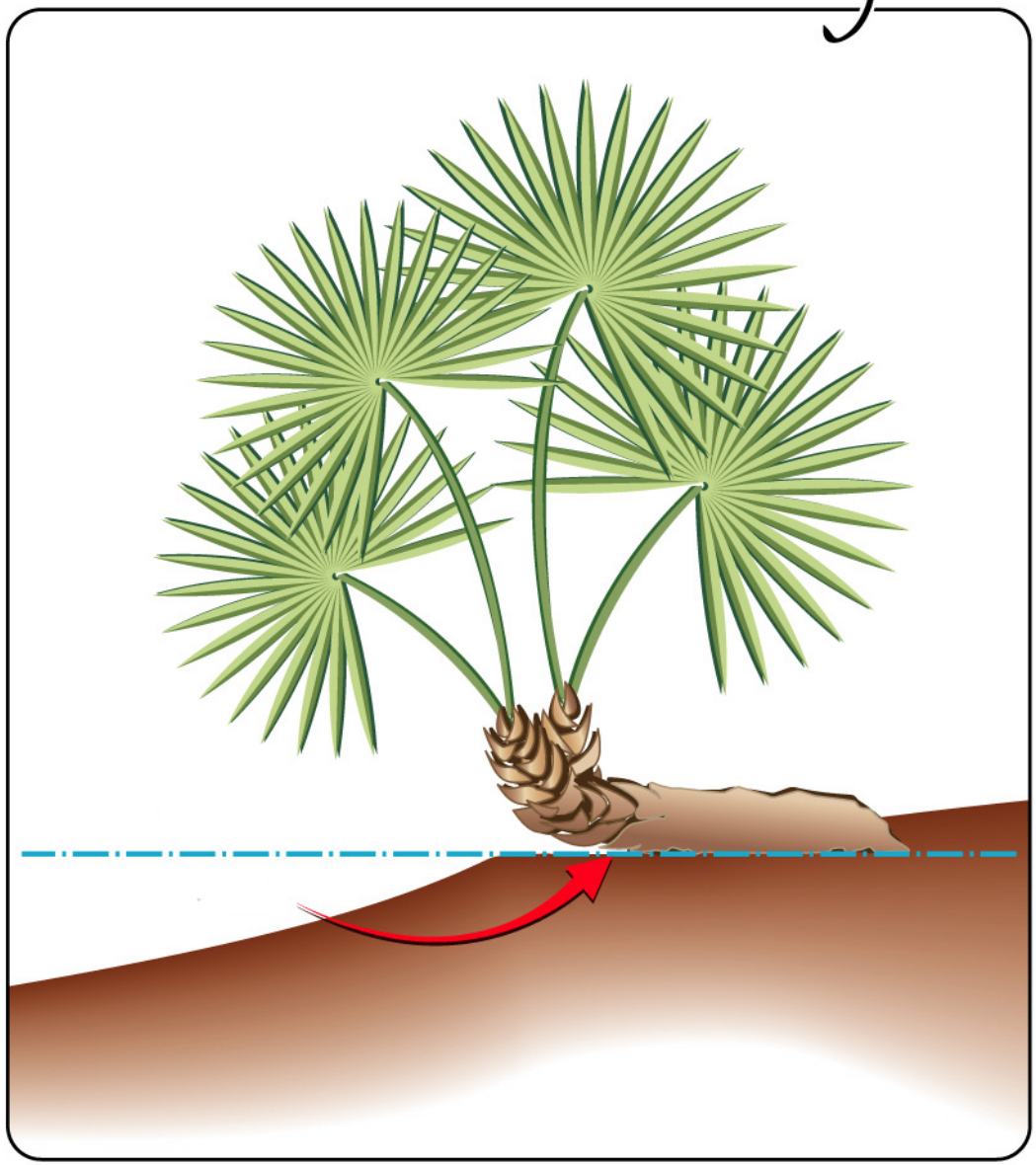
Lyonia



Diameter at base >1 inch

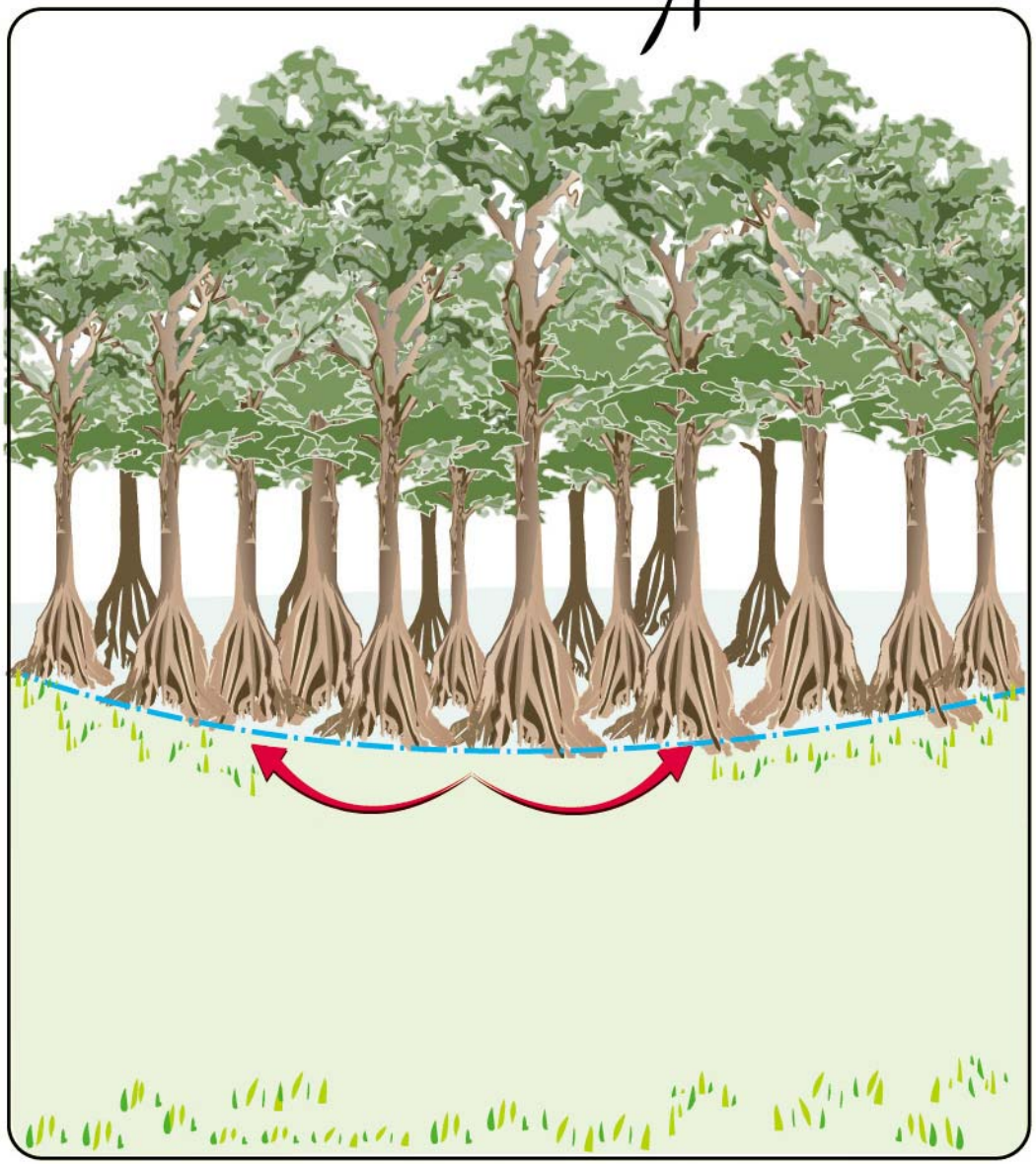
Lyonia Example

Saw Palmetto Fringe



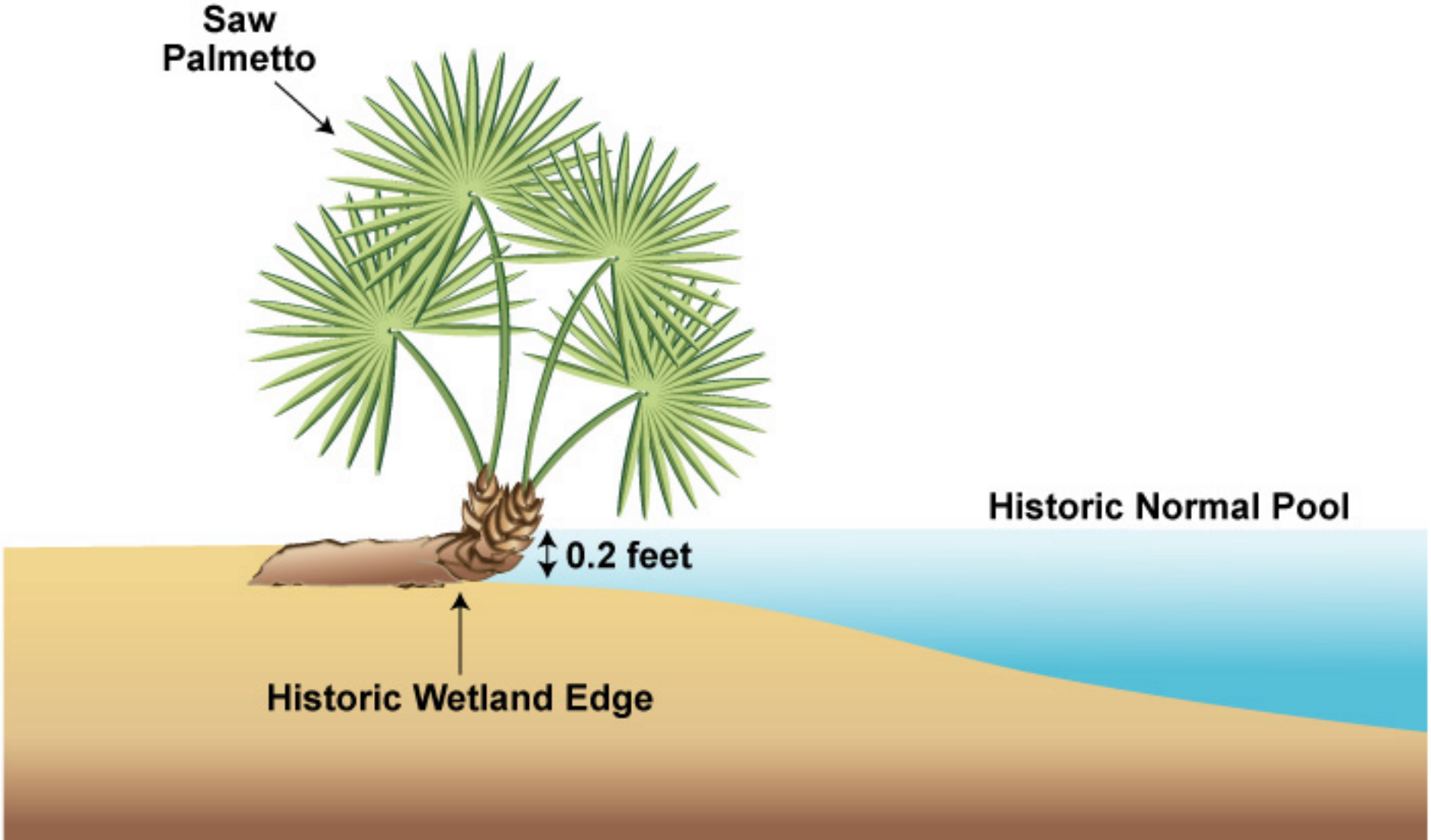
Palmetto Fringe Example

outermost Cypress

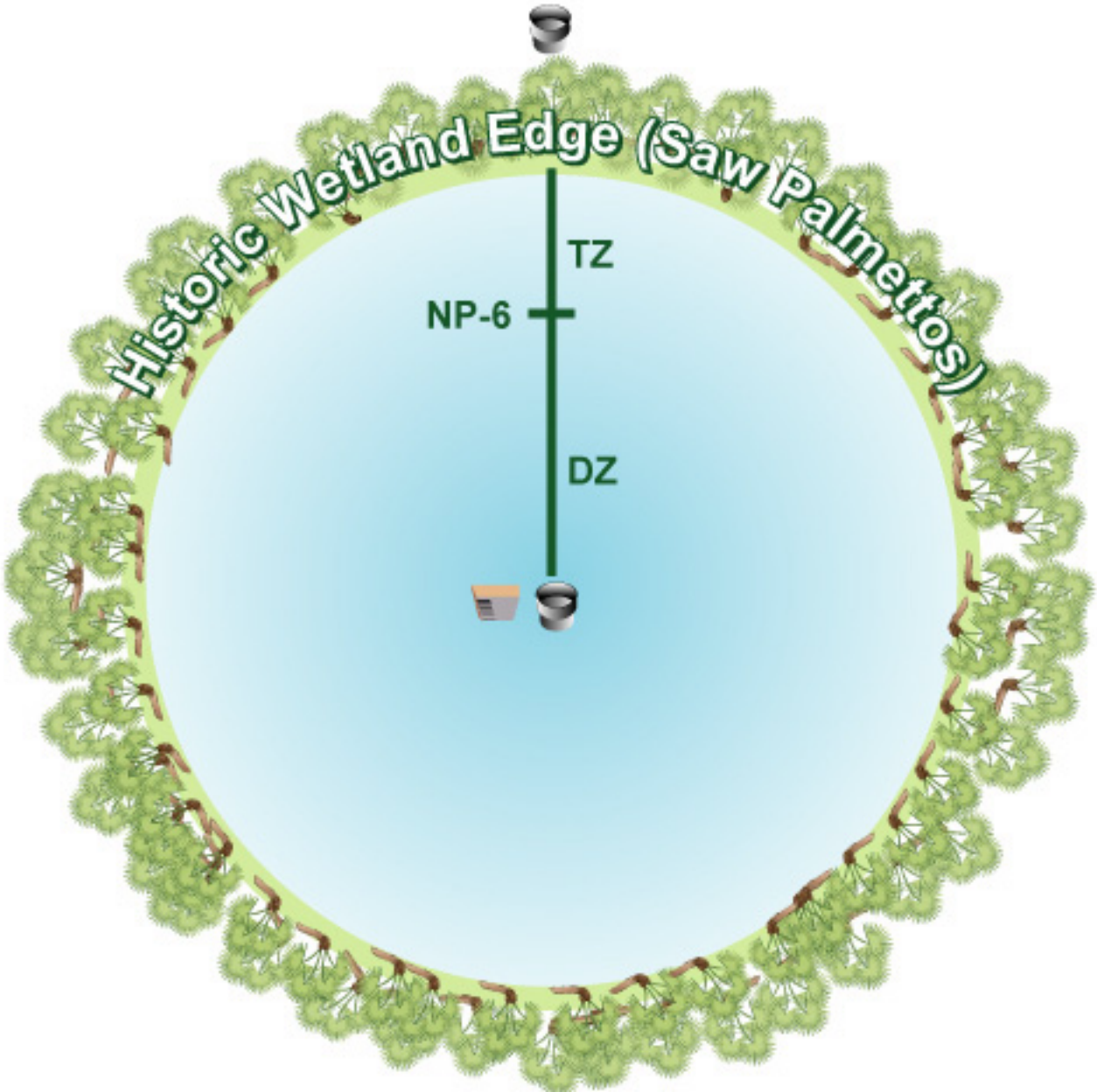


DBH >1.6 inches, <3.9 inches

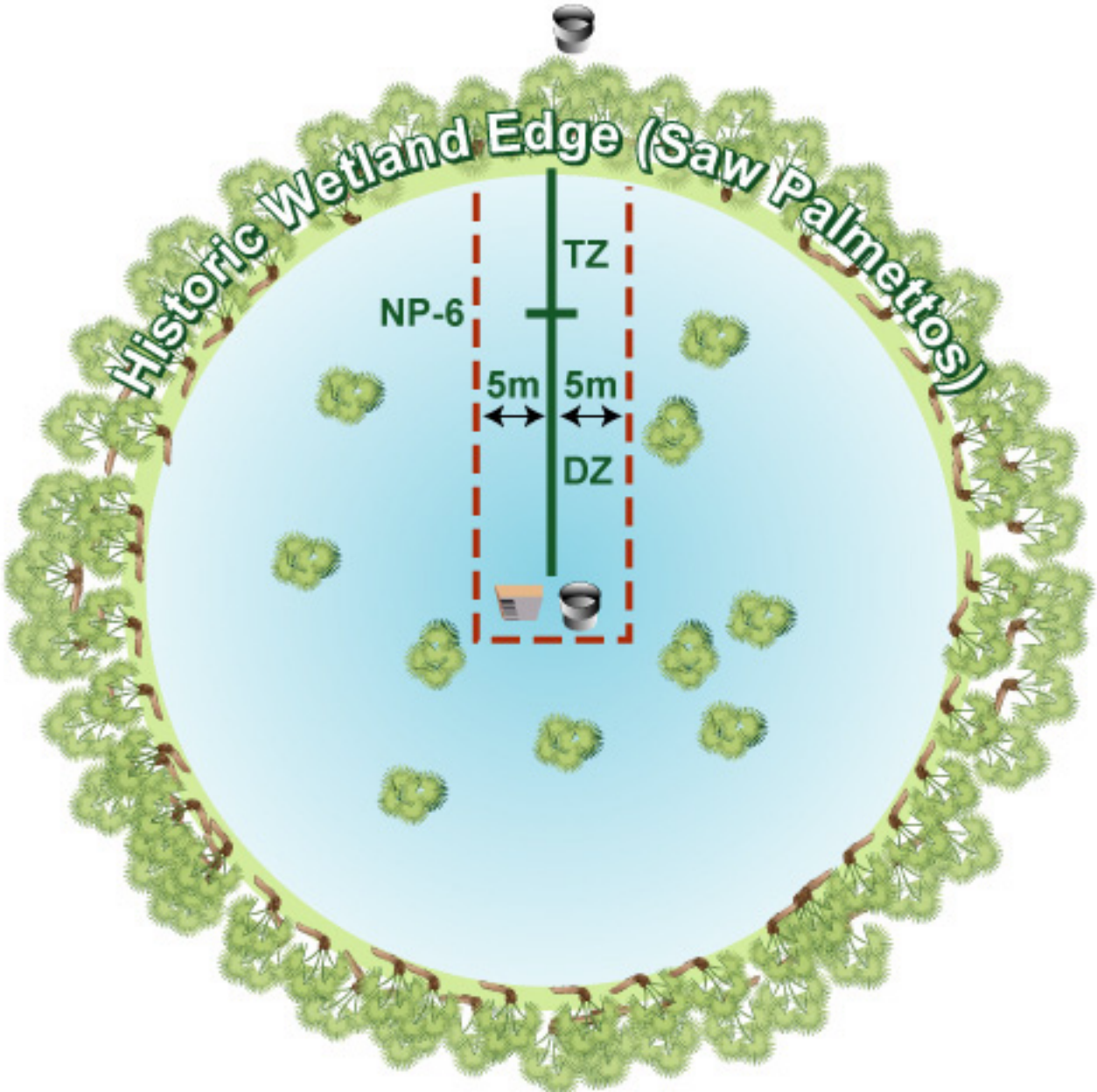
Indicators of Historic Normal Pool for Non-Forested Wetlands



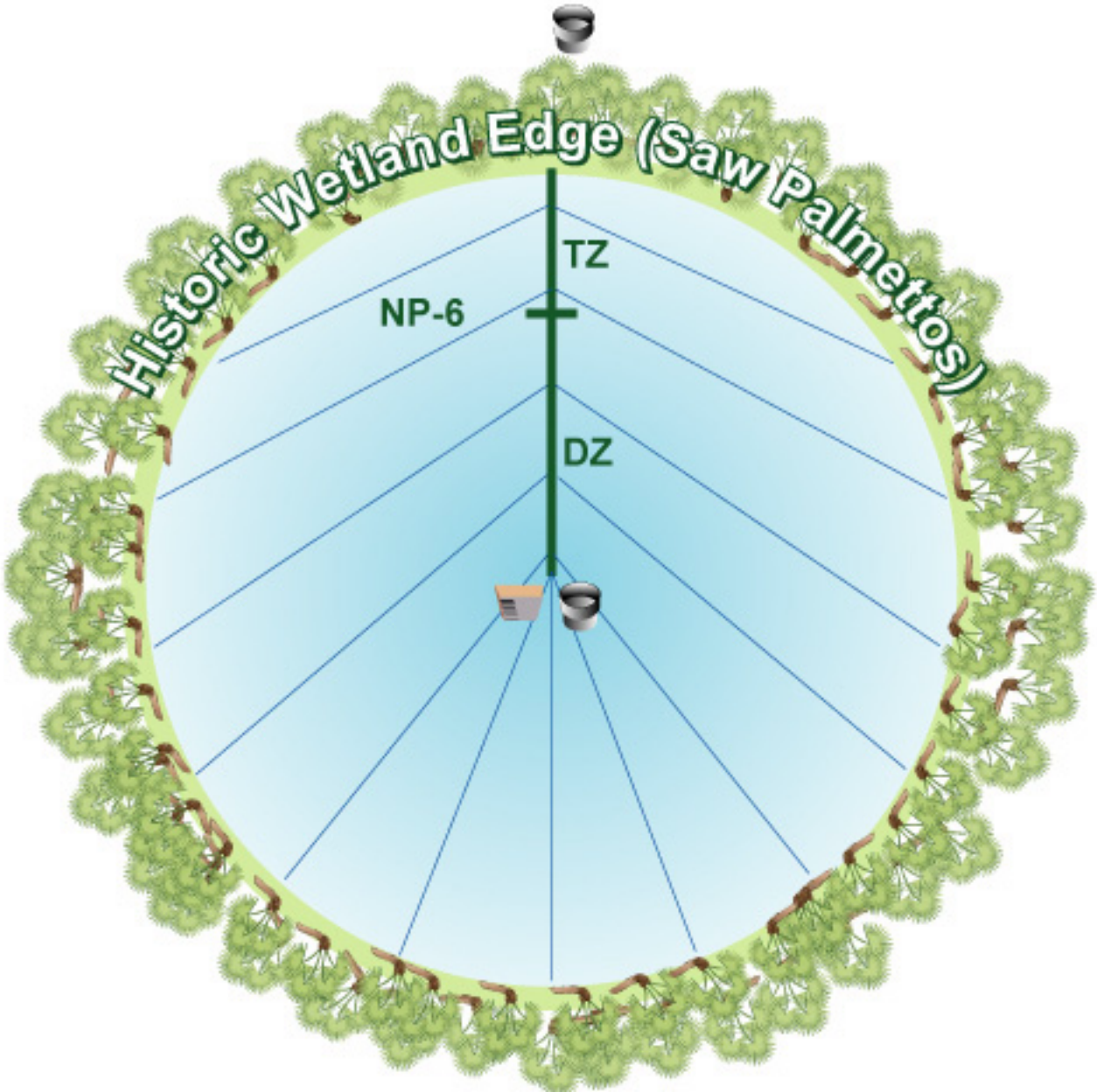
Transect Set-up



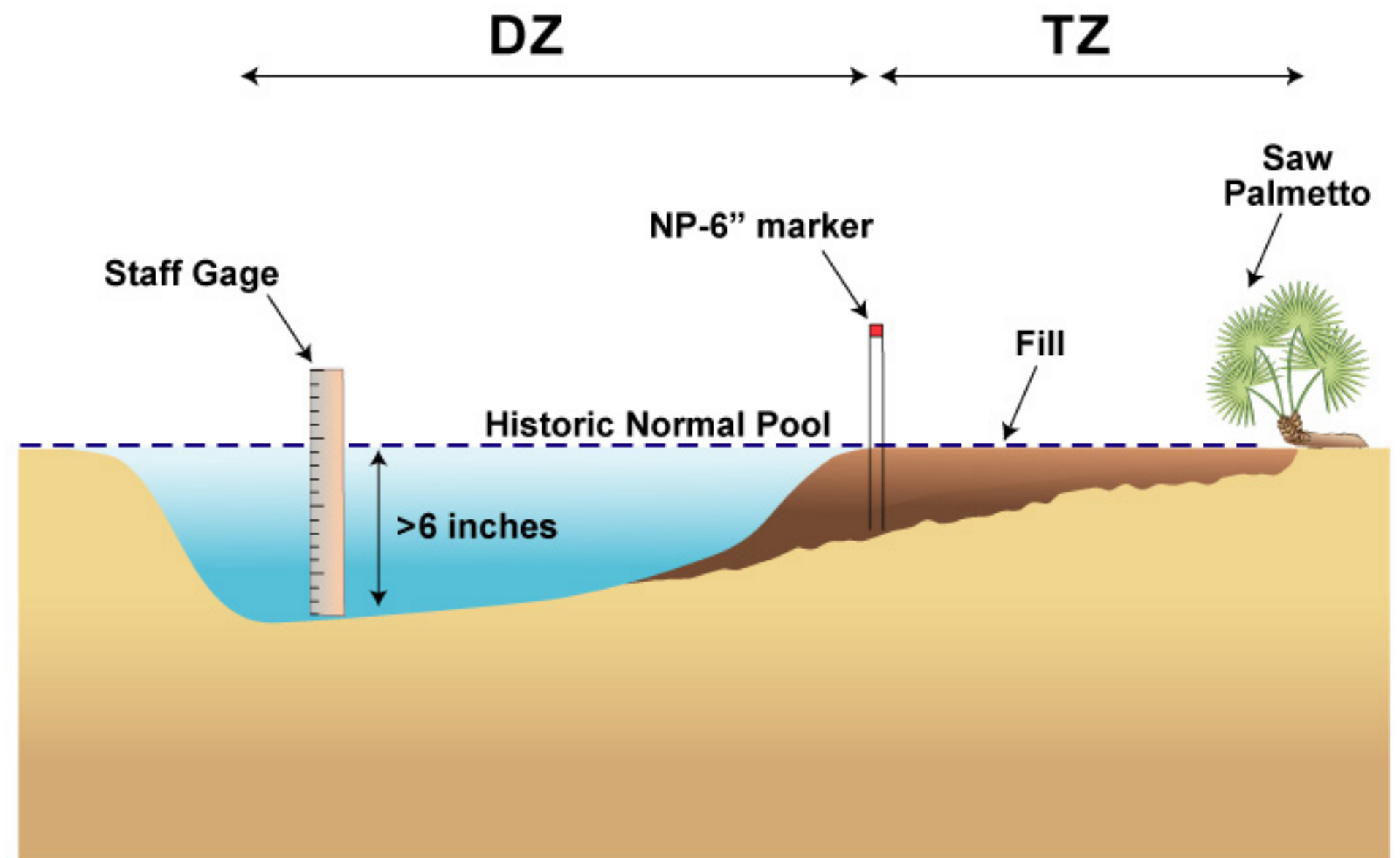
Assessment Area with Obstructed View



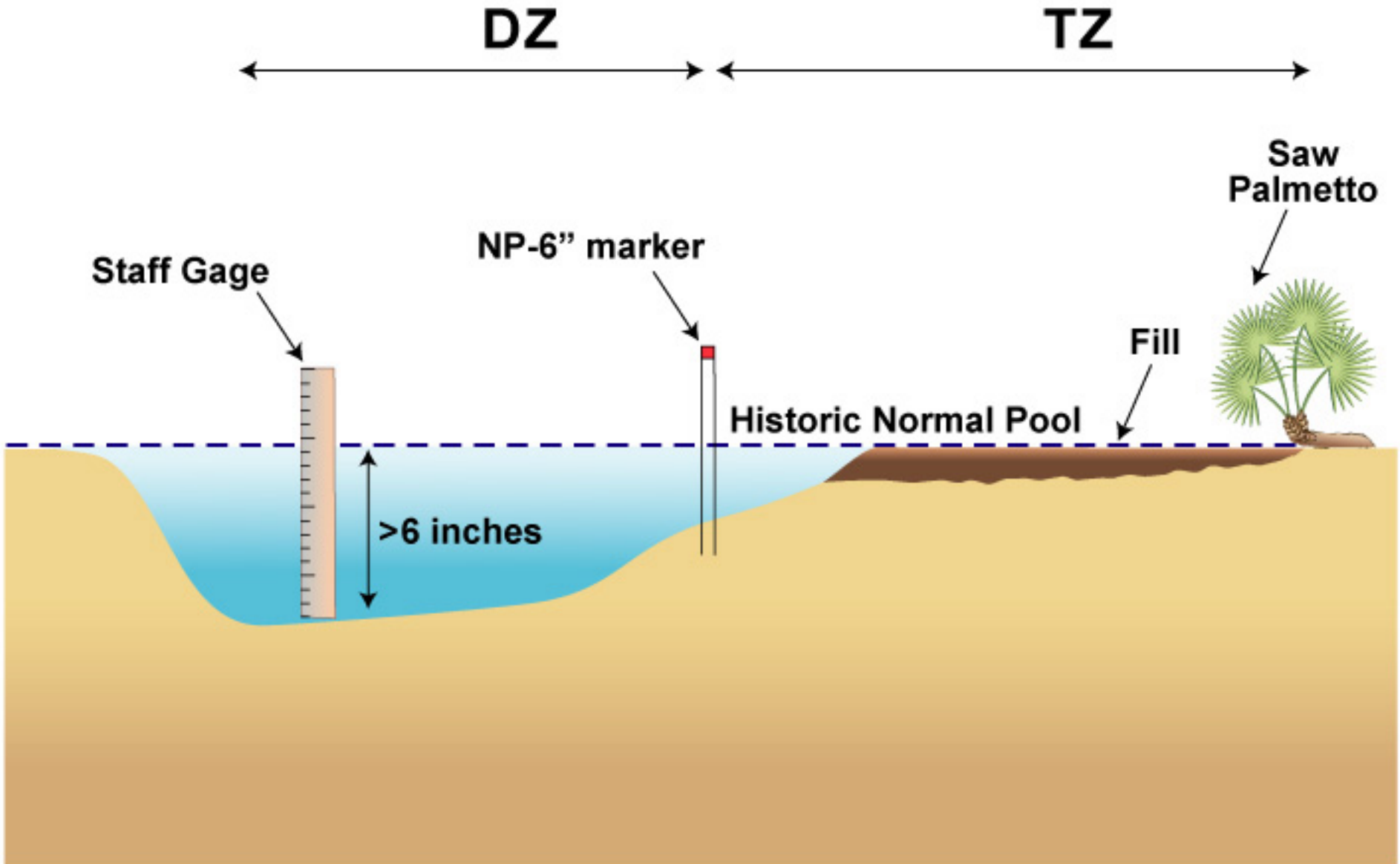
Assessment Area with Non-Obstructed View



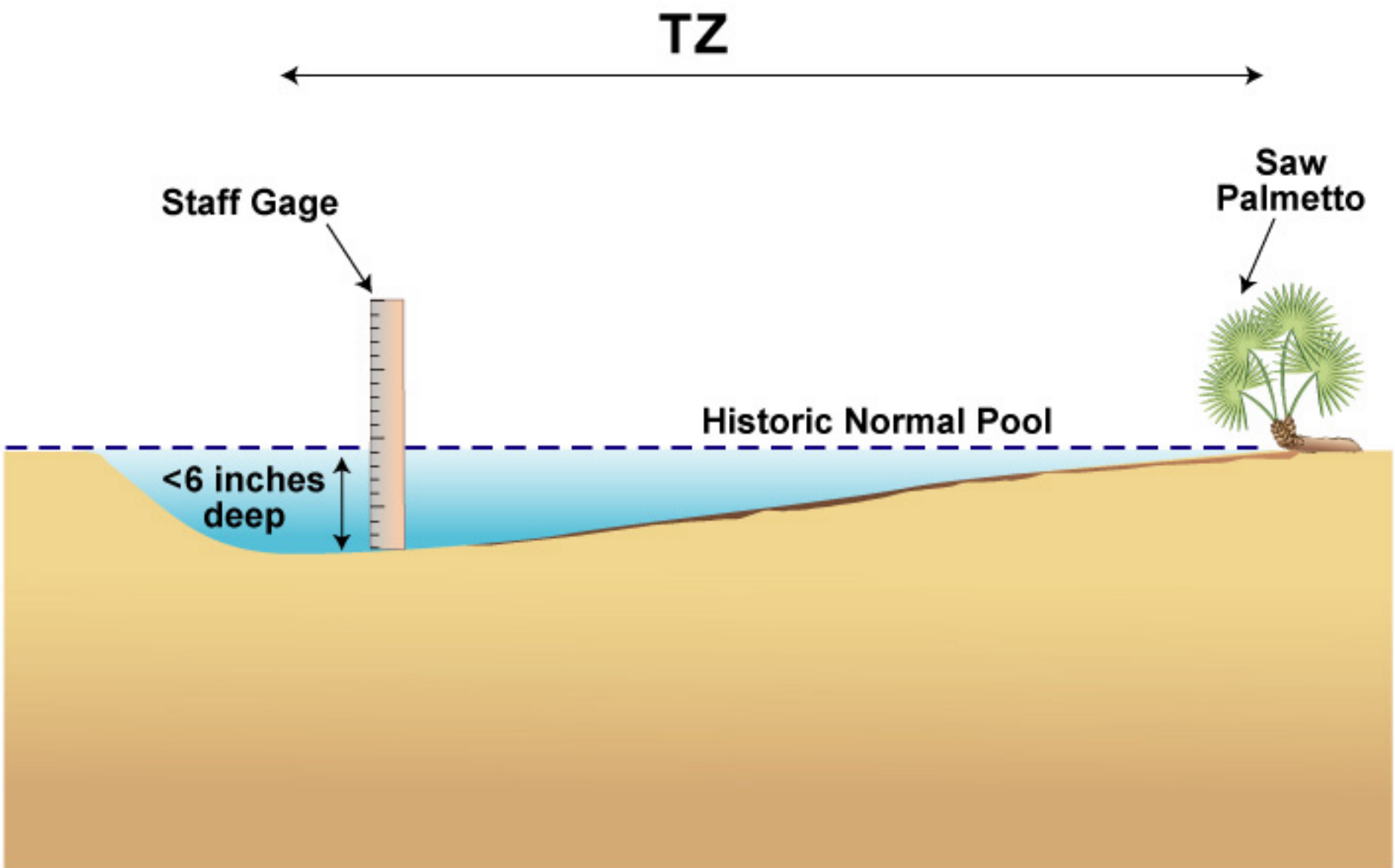
Example of Assessment of Totally Filled Transition Zone



Example of Assessment of Partially Filled Transition Zone



Example of Assessment of Shallow Wetland



Activities performed every five years

- Soils scientist identify hydric soils
- Wetland evaluator to assess the general soils conditions throughout the wetland
- Update wetland history

Semi-Annual Data Collection Labeling

- FLUCCS code and WAP wetland type
- Photography
- Water Level conditions

Vegetational Trends

- Groundcover, Shrubs and small trees, Trees
- Assess only rooted vegetation within the Historic Wetland Edge
  - Nothing overhanging from uplands (including vines)
  - Nothing on hummocks
  - Nothing floating

Vegetational Trends

- Scale is 1 to 5 (no halves)
- Reference lists
- When in doubt….
  - Leave comments
  - Ask

Groundcover

- All woody species < 1 m
- All non-woody species
- All must be rooted on ground
- Includes vines rooted on ground of Assessment Area

Groundcover

- List all common species and important species
- List approx. percent coverage
- List Wetland Affinity (FAC, FACW, etc.)

Groundcover

Zonation score

1. Many signs of abnormal groundcover zonation all through wetland
2. Many signs of abnormal groundcover zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 2.
3. Some signs of abnormal groundcover zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 3.
4. Some signs of abnormal groundcover zonation limited to the transition zone
5. Normal groundcover zonation

N/A Not enough groundcover to make evaluation

Shrubs and Small Trees

- All woody species > 1 m with a DBH of < 4 cm

Shrubs and Small Trees

- List all common species and important species
- List approx. percent coverage
- List Wetland Affinity (FAC, FACW, etc.)

Shrubs and Small Trees

Zonation score

1. Many signs of abnormal shrub and small tree zonation all through wetland
2. Many signs of abnormal shrub and small tree zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 2.
3. Some signs of abnormal shrub and small tree zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 3.
4. Some signs of abnormal shrub and small tree zonation limited to the transition zone
5. Normal shrub and small tree zonation

N/A Not enough shrub and small tree cover to make evaluation

Shrubs and Small Trees Stress of Appropriate Species

- Use professional judgment, based on history when possible
- Leave good comments, including species list

Shrubs and Small Trees

Stress of Appropriate Species score

1. >50 percent exhibit stress
2. 25-50 percent exhibit stress
3. 10-25 percent exhibit stress
4. 5-10 percent exhibit stress
5. <5 percent exhibit stress

N/A Not enough cover to make evaluation

Shrubs and Small Trees Stress of Inappropriate Species

- Use professional judgment, based on history when possible
- Leave good comments, including species list

Shrubs and Small Trees

Stress of Inappropriate Species score

1. <5 percent exhibit stress
2. 5-10 percent exhibit stress
3. 10-25 percent exhibit stress
4. 25-50 percent exhibit stress
5. >50 percent exhibit stress

N/A Not enough cover to make evaluation

Trees

- All woody species > 1 m with a DBH of > 4 cm

Trees

- List all common species and important species
- List approx. percent coverage
- List Wetland Affinity (FAC, FACW, etc.)

Trees

Zonation score

1. Many signs of abnormal tree zonation all through wetland
2. Many signs of abnormal tree zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 2.
3. Some signs of abnormal tree zonation in the transition zone and outer deep zone (if no transition zone or no plants in transition zone select 3.
4. Some signs of abnormal tree zonation limited to the transition zone
5. Normal tree zonation

N/A Not enough tree cover to make evaluation

Trees
Leaning or Dead

- Leaning Tree - 30 degrees or greater from vertical
- Dead includes
  - On the ground
  - Rotted or removed (non-timbered)
- Dead doesn’t include dead standing or cut (timbered) trees

Trees

Leaning and Dead score

1. >25 percent of **trees** dead or leaning
2. 15-25 percent **trees** dead or leaning
3. 5-15 percent of **trees** dead or leaning
4. <5 percent of **trees** dead or leaning, but inappropriate percentage for wetland type
5. Normal numbers of dead or **leaning trees** for wetland type

N/A Not enough **cover** to make evaluation

Trees
Canopy Stress of Appropriate Species

- Use professional judgment, based on history when possible
- Leave good comments, including species list
- Include dead standing (for convenience)

Trees

Canopy Stress of Appropriate Species score

1. >50 percent of individual trees exhibit stress
2. 25-50 percent of individual trees exhibit stress
3. 10-25 percent of individual trees exhibit stress
4. 5-10 percent of individual trees exhibit stress
5. <5 percent of individual trees exhibit stress

N/A Not enough cover to make evaluation

Trees
Canopy Stress of Inappropriate Species

- Use professional judgment, based on history when possible
- Leave good comments, including species list

Trees

Canopy Stress of Inappropriate Species score

1. <5 percent of individual trees exhibit stress
2. 5-10 percent of individual trees exhibit stress
3. 10-25 percent of individual trees exhibit stress
4. 25-50 percent of individual trees exhibit stress
5. >50 percent of individual trees exhibit stress

N/A Not enough cover to make evaluation

Additional Information

- Misc. information
- Mostly a worksheet to help update the wetland history
- Based on observation only

Additional Information
Disturbance

- Flags to identify the wetland as having major man-made alteration or subsidence
- For future users of the data

Additional Information
Disturbance

- Filled or disturbed edges
- Trash
- Hog disturbance
- Cattle trampling
- Vehicle damage

Additional Information
Disturbance

- Insect damage
- Disease
- Fire effects

Additional Information
Hydrology

- Augmentation
- Stormwater inflow
- Drainage (direct and nearby)
- Borrow pits and ponds

Additional Information
Other

- Soils
- Lake docks
- Protected and Wetland Dependent species

Additional Information *Recovery and Stress*

- Young trees (appropriate)
- Vines (inappropriate)

Appendices

- Vegetative Index and Extension (vines)
- Field Form
- Definitions
- Historic Normal Pool/Historic Wetland Edge
- Wetland Types
- Worksheets
- References

Questions – Comments – Ideas – Discussion

What's next?

- Formats and Deadlines
- Field Testing (April and May)
- Training