

Monitoring and Adaptive Management (MAMP)

April 12, 2019

Swan Island Model Workshop



Monitoring Objectives

- Determine Success
- Adaptive Management Decisions
- Advance the Science – Pool and Compare Results
- Refine Restoration Techniques
- Reduce Restoration Costs
- Communication to Agencies/Public



Monitoring Challenges

- Time/Budget
- Site Specifics (All Projects are Different)
- None/Few Standard Protocols
- Personal Biases
- Differences Spatial/Temporal scales



Monitoring and Adaptive Management Plan - Living Document

TABLE of CONTENTS

- Project Objectives/Monitoring Objectives
- System Model
- Metrics
- Data collection protocols
- Data interpretation (evaluate/assess project/system model)
- Reporting
- Data management
- Roles and Responsibilities

Northerly Island Section 506 Great Lakes Fishery & Ecosystem Restoration

Appendix E - Monitoring & Adaptive Management Plan

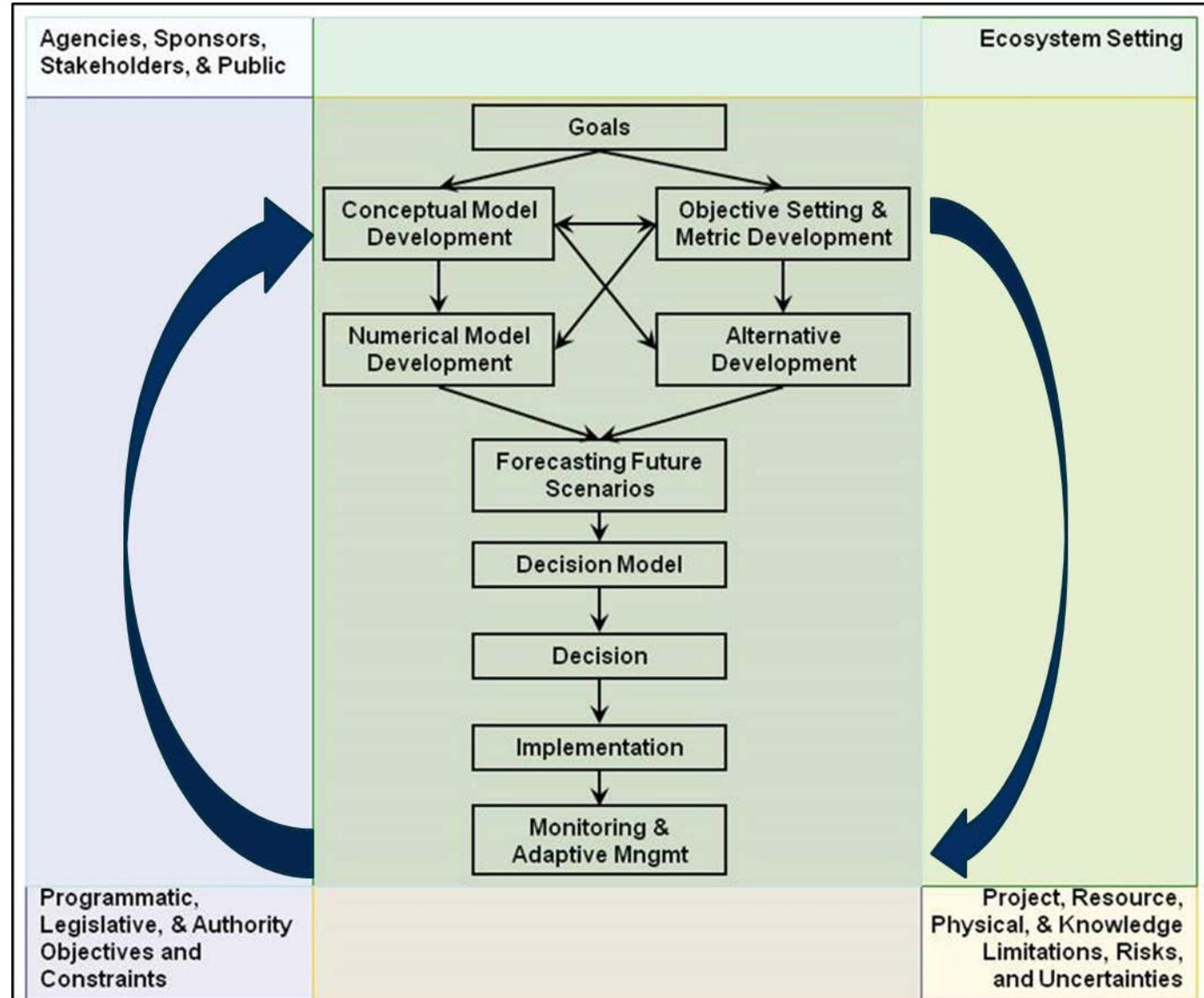


Chicago District, GL-ECO-CX



What do you want out of the monitoring data?

Set Monitoring Objectives.



Protocols:

- Detailed enough that someone could pick up plan and collect data for project (personnel turnover)
- Seasonality (timing) and Frequency (1x yr)

Data Records

Information	Notes
Date	day, month, year
Name(s) of Monitor	Even though it may be your notebook, and you will know who recorded the data, the person that takes over for you once you leave or retire from the position may need to know this information.
Site	Project name.
Management Unit or Locale	Specific type of vegetation or unique management unit name.
Transect Number and Description	Unique name or label of transect, start location of the transect (GPS coordinates), how far the start is from the edge of management unit, compass bearing/direction toward end, length of transect, location of end (GPS coordinates), rules of plot placement, etc.
No. of Plots	Expected number of plots to be sampled from transect.

July 24/17 Ilam
 Orland Grassland
 MU = Orland Tract Grassland
 Mesic Prairie
 D. Herman
 Orland Park, FL

Transect: Northside, moving away from
 Start: $41^{\circ}35.1325'N$ $87^{\circ}51.3683'W$
 End: $41^{\circ}35.1355'N$ $87^{\circ}51.6249'W$
 30 plots, 10 m down, alt hgt 9 ft

Transect	Plot	Species	Count
1	Pudhis	20	15
	Solalt	20	20
	Phaar	10	10
	Pitoin	25	25
	Fra vir	20	20
	fesela	10	10
	Peapra	5	5
	Zizaur	15	15
	Solalt	1	1
	Aspalt	5	5
2	Pan ali	20	20
	200t pruvu	25	25
	Ck 1 cell	35	35
	3 Solalt	20	20
	Zizaur	25	25
	Agg alb	15	15
lys num	5	5	
peapra	45	45	
4 Sub occ	15	15	
Solalt	10	10	
Elycan	20	20	

Data Management/ Roles & Responsibilities

- Electronic Files (e.g., Excel spreadsheet)
 - Manage Folders/Files
 - A. Orland Tract Grassland sect 206
 - a. Monitoring
 - i. 2010
 - 1. Wet Prairie
 - a. Transects
 - i. Orland_WetPraire_2010_T2.exl
- Data collection, per parameter
- Data management/storage
- Reporting – factsheets, rare data, journal articles

Marsh Vegetation Restoration Project

1. a) To track establishment of marsh vegetation b) To test the role of sediment in marsh vegetation establishment
2. Critical Drivers: biomass, sediment transport
3. Metrics:
 1. a) stem density: number of stems per plot
 2. b) depth: average depth of plot at low tide
4. Predictions:
 1. Stem density will increase over time (Years 1-5) to reach a maximum of 50 stems (over predefined area)
 2. Depth will be maintained at an average of 0.05 meters after sediment placement (Years 1-5)

Interpret the Data

Placement Areas

Revised – 24 September 2015

