2019

The Conservation Action Planning Process

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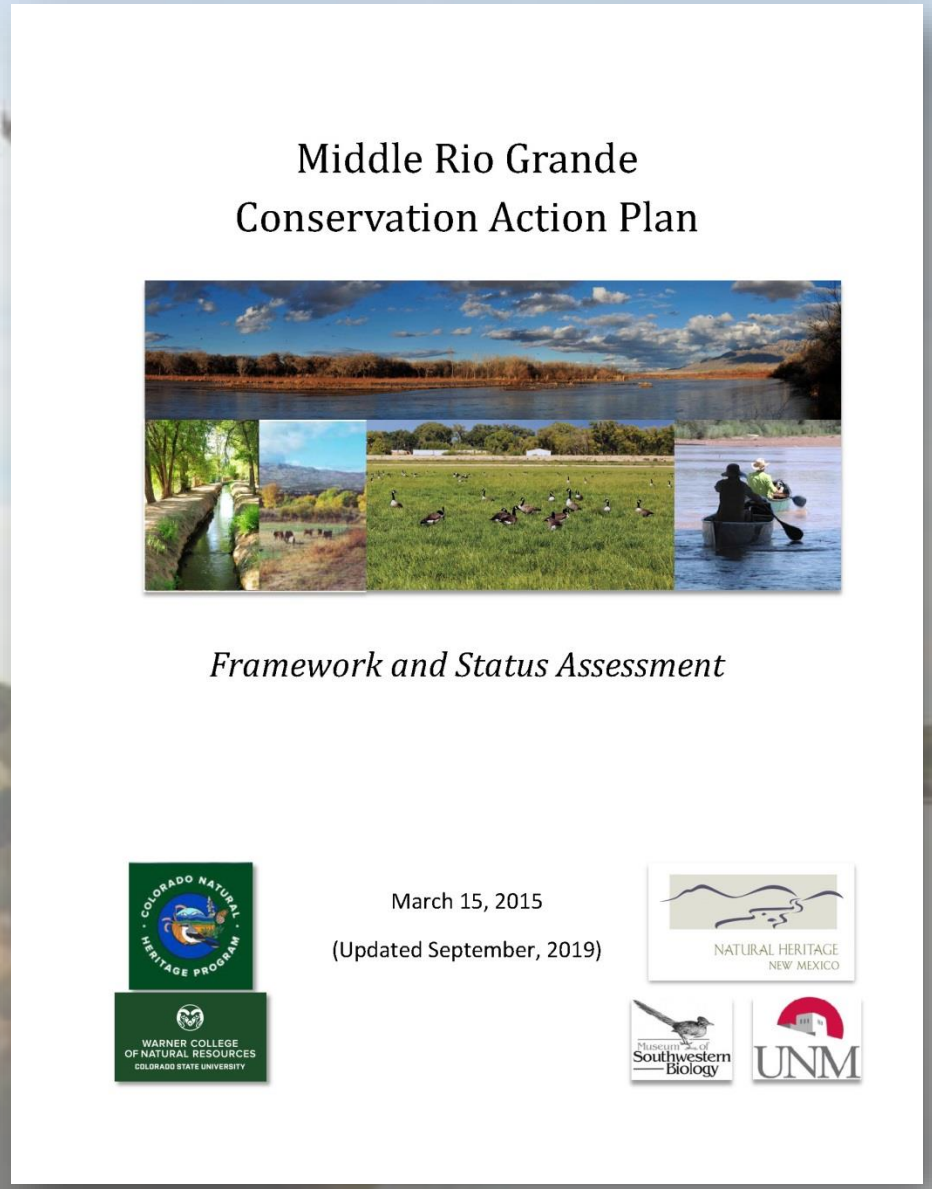


The Conservation Action Planning Process

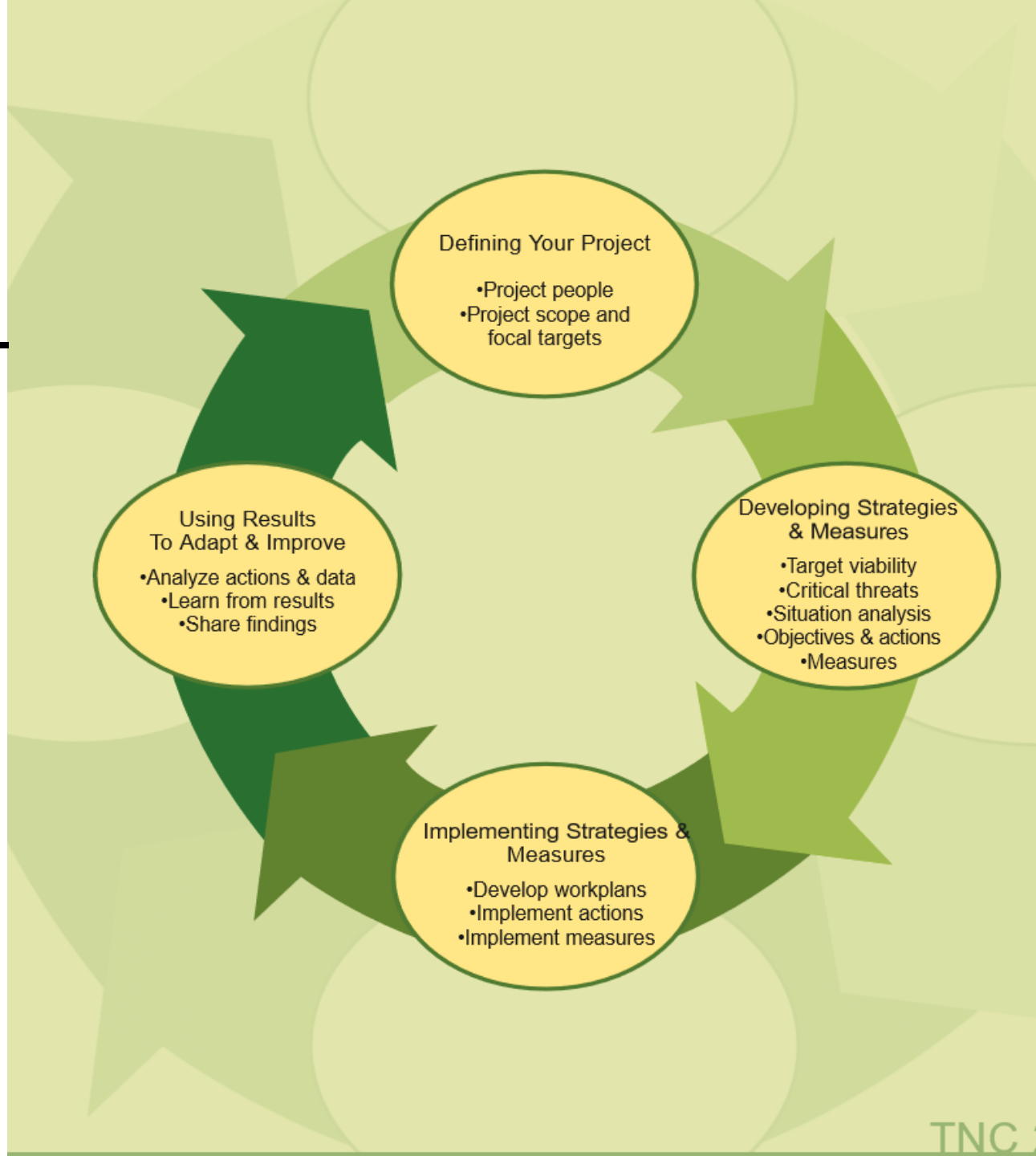
Middle Rio Grande Conservation Action Plan

Jonathan Tyrrell
Utton Transboundary Resources Center
University of New Mexico

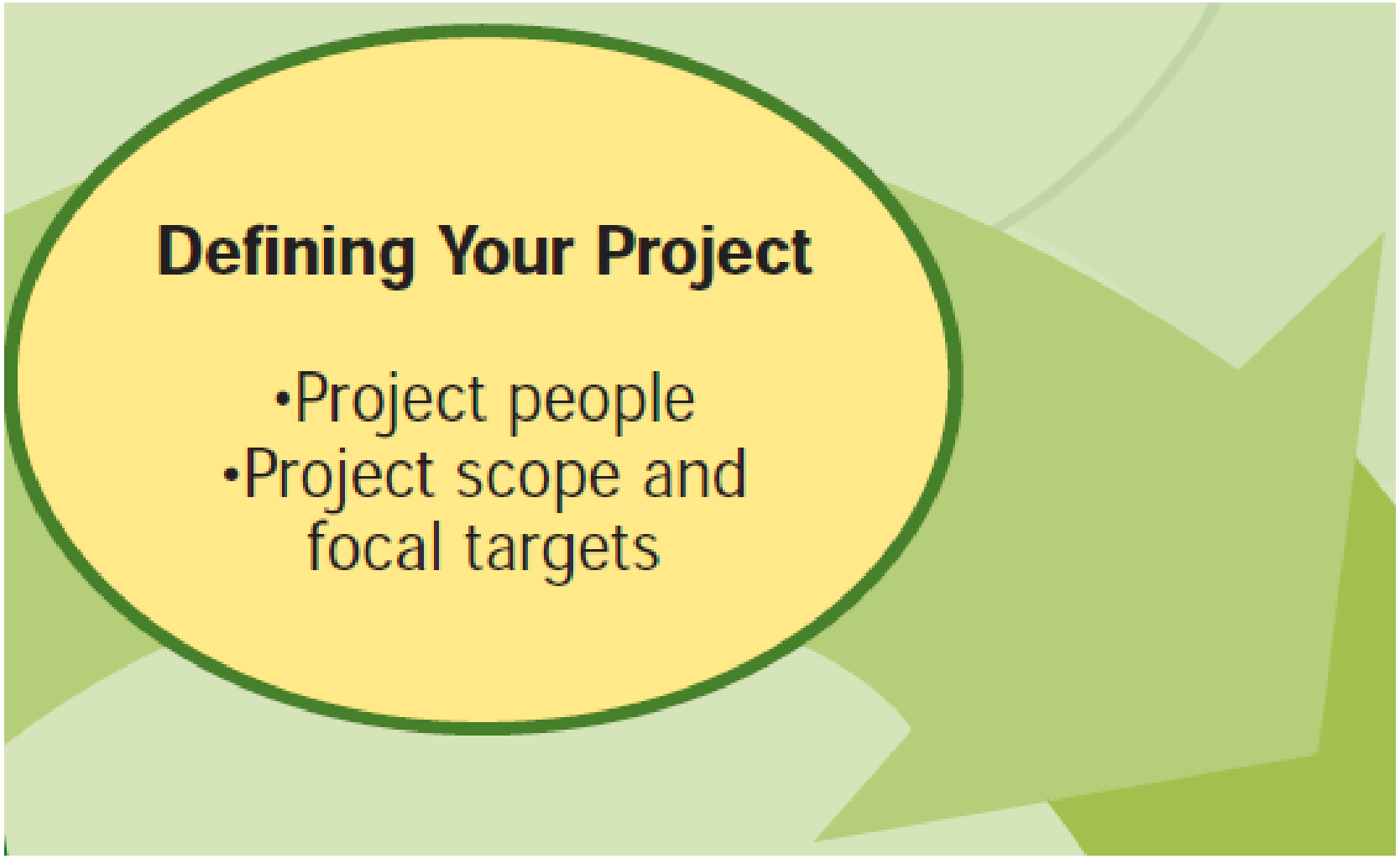
MRG-CAP Symposium
November 14, 2019

The Conservation Action Planning Process

- Developed by the Nature Conservancy, 2005
- General Steps:
  1. Defining Your Project
  2. Developing Strategies & Measures
  3. Implementing Strategies and Measures
  4. Using Results to Adapt & Improve



Science and Managers Workshops (May 5 & 8, 2014)



The Dynamic Patch Mosaic (DPM) Framework

5 Conservation Targets

- Riparian and Wetland Vegetation Communities
- Native Bird Habitat
- Native Fish Community
- Wildlife Corridors
- Ditch and Drainage Habitat

9 Critical Threats

- Channelization
- Dam Operations
- Housing and Urban Areas
- Wildfire
- Introduced Species
- Diversions
- Habitat Modifications
- Drought
- Recreational Activities

Science and Managers Workshops (May 5 & 8, 2014)

Evaluation of Targets and Threats

- Evaluated target viability: current and desired future conditions
  - Based on measurable indicators
  - Data-driven assessments or informed expert opinion
  - Establishment of 2025 goals
- Threats: scope & severity
- Strategies to meet goals

Targets: Riparian and Wetland Vegetation Communities

Data-driven assessments or informed expert opinion

Table 1 Riparian and Wetland Vegetation Communities Key Attributes, Indicators, and Status

Category	Key Attribute	Indicator	Current Status	Goal
Landscape Context	Hydrologic regime - surface water	[1] Floodplain connectivity	Fair	Good
		[2] Spring flood frequency	Fair	Good
	Hydrologic regime - groundwater	[3] Marsh groundwater depth and duration	Fair	Good
	Channel mobility	[4] Bank stabilization extent	Poor	Good
Condition	Dynamic Patch Mosaic (DPM) - Vegetation	[5] Relative abundance of riparian vegetation types (woodland, shrubland, meadow, or marsh)	Fair	Very Good
		[6] Woodland - minimum relative abundance	Very Good	Very Good
		[7] Riparian shrublands - minimum relative abundance	Good	Good
		[8] Meadows - minimum relative abundance	Fair	Very Good
		[9] Marshes - minimum relative abundance	Fair	Very Good
		[10] Upland vegetation encroachment	Fair	Very Good
		[11] Cottonwood age classes	Poor	Good
	Species composition / abundance	[12] % cover aggressive invasive herbaceous species	Fair	Good
		[13] % exotic woody cover	Poor	Good
		[14] Woodland - % cover herbaceous understory	Fair	Very Good

Key Attribute	Indicator	Poor	Fair	Good	Very Good	S[1]	R[2]	Current[3]	Trend[4]	Future[5]
Condition										
Dynamic Patch Mosaic (DPM) - Vegetation	[5] Relative abundance of riparian vegetation types (woodland, shrubland, meadow, or marsh)	>70% of the area of a reach composed of a single riparian/wetland vegetation type.	70-60% of the area of a reach composed of a single riparian/wetland vegetation type.	50-60% of the area of a reach composed of a single riparian/wetland vegetation type.	<50% of the area of a reach composed of a single riparian/wetland vegetation type.	Res	2	Overall: G R1: P[6] R2: P R3: VG R4: VG[7]	MD	VG
Dynamic Patch Mosaic (DPM) - Vegetation	[6] Woodland - minimum relative abundance	<10% of the reach.	10-25% of the reach.	25-35% of the reach.	>35% of the reach.	Res	2	Overall: VG R1: VG[6] R2 :VG R3: VG R4: F	MD	VG
Dynamic Patch Mosaic (DPM) - Vegetation	[7] Riparian shrublands - minimum relative abundance	<10% of the reach.	10-25% of the reach.	25-35% of the reach.	>35% of the reach.	Res	2	Overall: G R1: P[6] R2: F R3: G R4: VG[7]	MD	VG
Dynamic Patch Mosaic (DPM) - Vegetation	[8] Meadows - minimum relative abundance	<1% of the reach.	1-5% of the reach.	5-10% of the reach.	>10% of the reach.	Res	2	F	MD	VG
Dynamic Patch Mosaic (DPM) - Vegetation	[9] Marshes - minimum relative abundance	<1% of the reach.	1-5% of the reach.	5-10% of the reach.	>10% of the reach.	Res	2	Overall: P R1: P[6] R2: F R3: P R4: P	MD	VG
Dynamic Patch Mosaic (DPM) - Vegetation	[10] Upland vegetation encroachment	>25% of the reach.	10-25% of the reach.	5-10% of the reach.	<5% of the reach.	Res	2	F	MD	VG

2015 Key Ecological Attribute Indicator Assessment

Key Attribute	Indicator	Poor	Fair	Good	Very Good	S[1]	R[2]	Current[3]	Trend[4]	Future[5]
Condition										
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Dynamic Patch Mosaic (DPM) - Vegetation	[10] Upland vegetation encroachment	>25% of the reach.	10-25% of the reach.	5-10% of the reach.	<5% of the reach.	Res	2	F	MD	VG

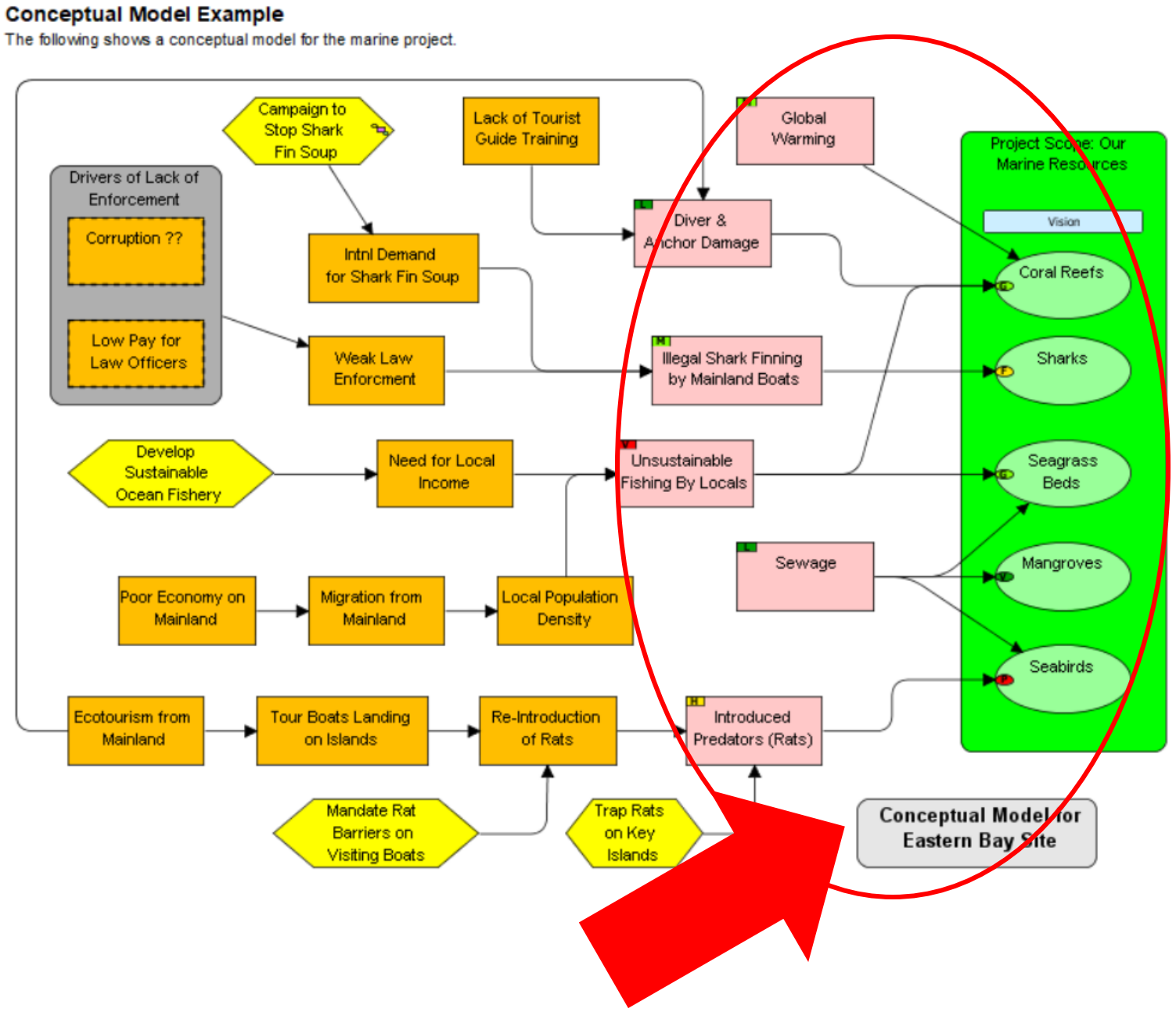
2025 Key Ecological Attribute Indicator Goal State

Next Steps

Update of 2015 assessments and 2025 goals

Development of implementation strategies

TNC Conceptual Model



Questions or Comments?

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