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The Conservation Action Planning Process

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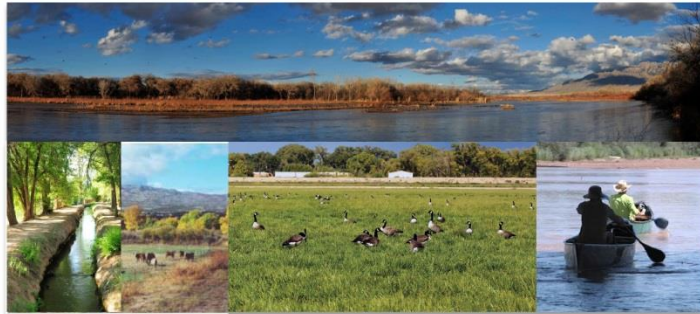
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Middle Rio Grande
Conservation Action Plan



Framework and Status Assessment



March 15, 2015
(Updated September, 2019)



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)

Defining Your Project

- Project people
- Project scope and focal targets

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

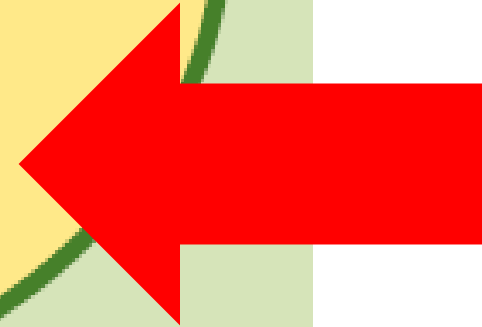
Science
and
Managers
Workshops
(May 5 & 8,
2014)

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

Developing Strategies & Measures

- Target viability
- Critical threats
- Situation analysis
- Objectives & actions
 - Measures



Targets: Riparian and Wetland Vegetation Communities

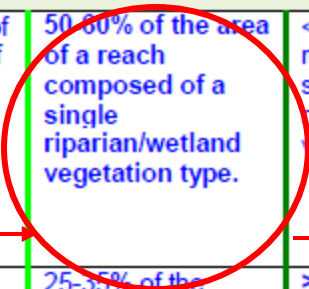
Data-driven assessments
or informed expert opinion

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

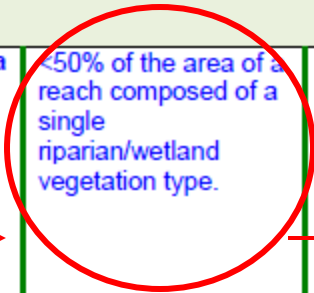
Key Attribute	Indicator	Poor	Fair	Good	Very Good	S ¹	R ²	Current ³	Trend ⁴	Future ⁵
Condition										
Dynamic Patch Mosaic (DPM) - Vegetation	[5] Relative abundance of riparian vegetation types (woodland, shrubland, meadow, or marsh)	>70% of the area of a reach composed of a single riparian/wetland 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

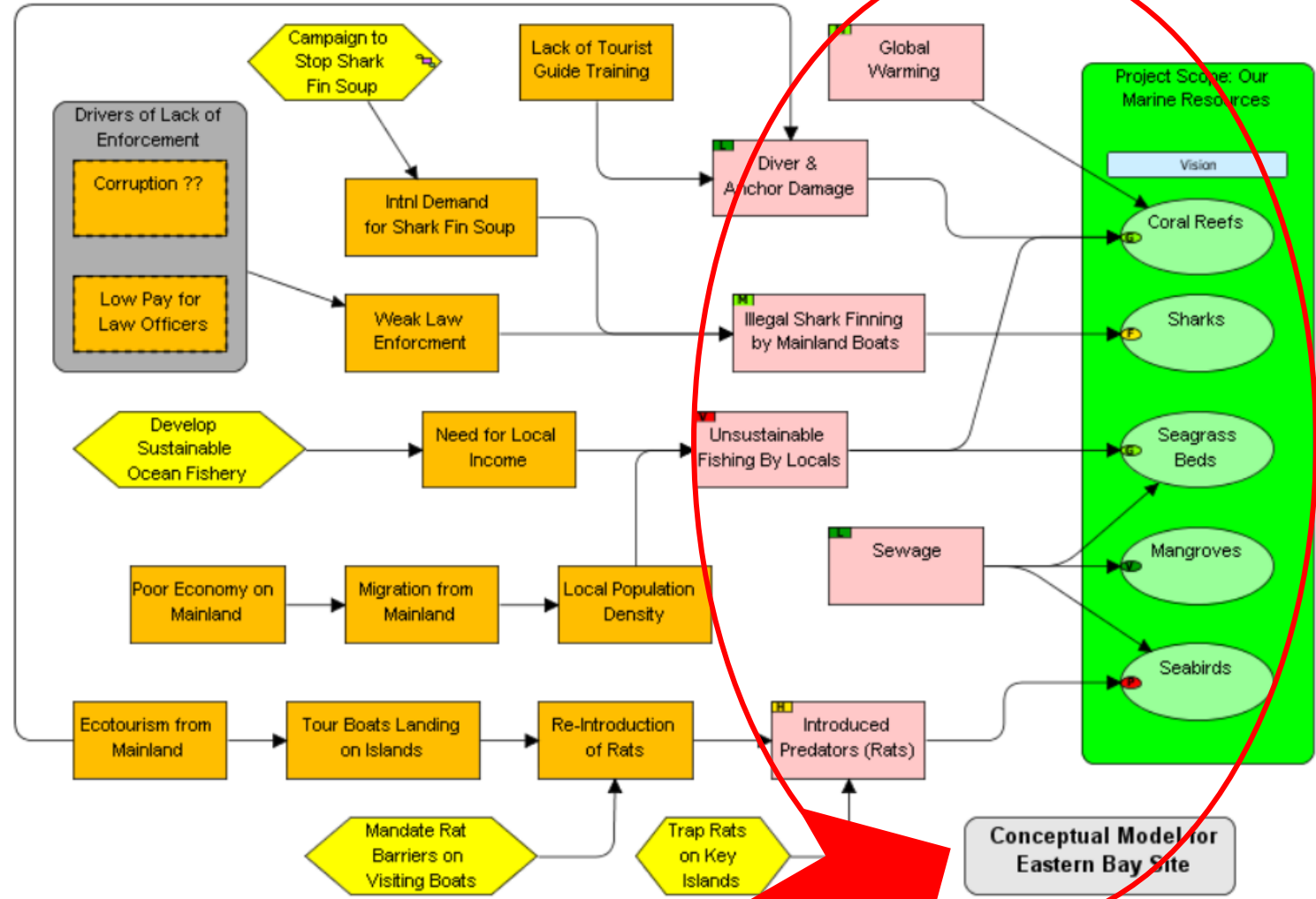
2025 Key Ecological Attribute Indicator Goal State



TNC Conceptual Model

Conceptual Model Example

The following shows a conceptual model for the marine project.



Next Steps

Update of 2015 assessments and 2025 goals

Development of implementation strategies

Questions or Comments?

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