

Lower Mississippi Valley

J O I N T V E N T U R E

Management Board Meeting

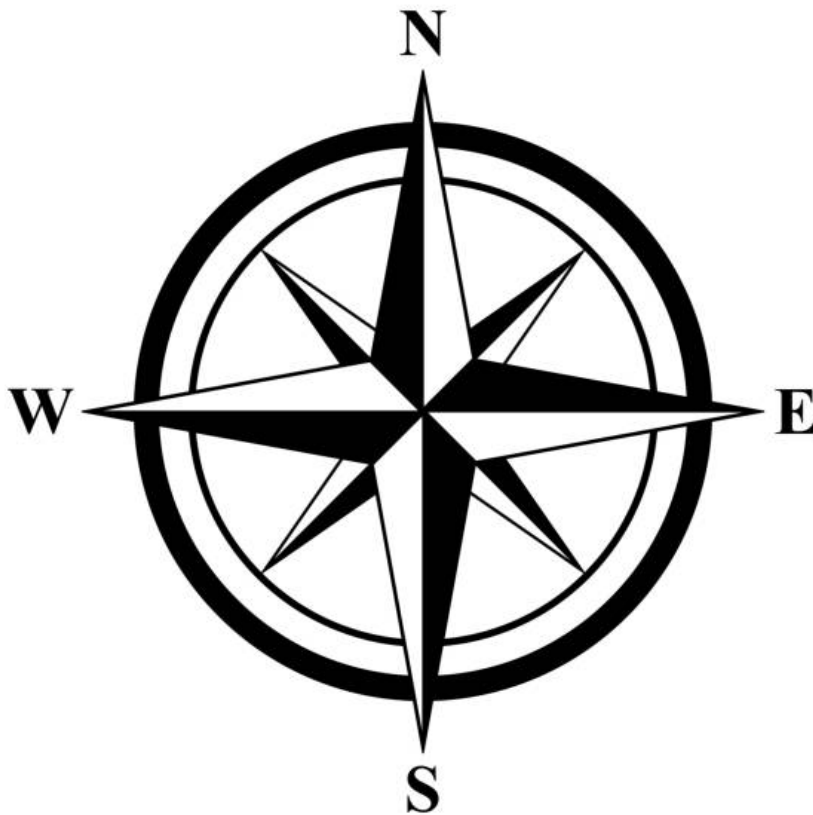


Paducah, KY



1-2 Nov 2023

The Lower Mississippi Valley Joint Venture is a self-directed, non-regulatory private, state, federal conservation partnership that exists for the purpose of sustaining bird populations and their habitats within the Lower Mississippi Valley region through implementing and communicating the goals and objectives of relevant national and international bird conservation plans.



The mission of the LMV Joint Venture is to function as the forum in which the private, state, federal conservation community develops a shared vision of bird conservation for the Lower Mississippi Valley region; cooperates in its implementation; and collaborates in its refinement.

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***Request Management Board Approval**

LMVJV Fall 2023 Board Meeting Agenda

Holiday Inn Express, Paducah, KY

Tuesday, 31 October

6:30pm Gather for dinner in hotel lobby

Wednesday, 1 November

Organization, Administration, Staff

		Notebook
8:00am	Welcome, Introductions, Overview of Agenda	
	Spring 2023 Action Item Progress	p.4
	Fall 2024 Meeting Venue	p.9
8:30am	Operational Plan: 2018 Close / 2024 Plan Approval	p. 11/29
	Filling MAV Coordinator Position in 2024	
	FY2024 Budget Forecast	p.72
	IRA & Other Large Funding Opportunities	
10:15am	BREAK	

Science Coordination

		Notebook
10:45am	Secretive Marshbird Pop. & Habitat Objectives	p.75
	Forest Hydrology Working Group Charter	p.83
11:30am	Science Investment Status Update	
	Open Pine Decision Support Tool 3.0	p.85
	LOWA HSI/Climate nexus	
	Science Roundup	
12:30pm	LUNCH	

Field Tour - Ballard WMA

2:00pm Gather at Vehicles
2:15pm Depart for WMA
5:30pm Arrive at Dinner Location
8:30pm Arrive at Holiday Inn Express

LMVJV Fall 2023 Board Meeting Agenda

Holiday Inn Express, Paducah, KY

Thursday, 2 November

Delivery Coordination

Notebook

- 8:00am** MAV Delivery Activity Summary
WGCPD Delivery Activity Summary
Desired Forest Conditions for Wildlife Revision Status
& Distribution Strategy Discussion

p.97

Communication & Larger Partnerships

- 9:15am** **Private Landowner Conservation Champion
Selection Committee**
Larger Partnership/Collaborations Roundup
- 9:45am** Review Action Items
- 10:00am** Adjourn & Safe Travels!

Board Approval/Action Requested



LMVJV Management Board Contact List - October 2023

Name	Title	Organization	Email	Phone	Address
Jeff Raasch ¹ (Chair)	Statewide Wetlands/Joint Venture Program Coordinator	Texas Parks and Wildlife Department	jeff.raasch@tpwd.texas.gov	512.389.4578	Texas Parks and Wildlife 4200 Smith School Road, Austin, TX 78744
Ron Seiss ¹ (Vice Chair)	Director, Lower Mississippi River Program	The Nature Conservancy	rseiss@tnc.org	601.713.3307	The Nature Conservancy 217 Rocky Branch Road, Covington, TN 38019
E.J. Williams	VP, South East and Atlantic Coast Region	American Bird Conservancy	ejwilliams@abcbirds.org	706.818.1799	American Bird Conservancy 1609 William Hapton Way Mount Pleasant SC 29466
Luke Naylor	Wildlife Management Division Chief	Arkansas Game and Fish Commission	Luke.Naylor@agfc.ar.gov	501.913.5872	Arkansas Game & Fish Commission #2 Natural Resources Dr., Little Rock, AR 72205
Tim Willis	Director, Conservation Programs (MS, TN, AR, LA, AL)	Ducks Unlimited	twillis@ducks.org	601.956.1936	Ducks Unlimited 193 Business Park Dr., Suite E Ridgeland, MS 39157
Dan Figert ¹	Assistant Director	Kentucky Department of Fish & Wildlife Resources	dan.figert@ky.gov	502.548.6774	1 Sportsman's Lane Frankfort, KY 40601
Tommy Tuma	Director, Habitat Stewardship	Louisiana Department of Wildlife and Fisheries	ttuma@wlf.la.gov	225.765.2349	LA Dept Wildlife and Fisheries 2000 Quail Drive P.O. Box 98000, Baton Rouge, LA 70898
Russ Walsh	Executive Wildlife Director	Mississippi Department of Wildlife, Fisheries, & Parks	russw@mdwfp.state.ms.us	601.432.2202	Mississippi Dept of Wildlife, Fisheries, & Parks 1505 Eastover Drive, Jackson, MS 39211-6374
Joel Porath	Wildlife Section Chief	Missouri Department of Conservation	joel.porath@mdc.mo.gov	573.522.4115 ext 3188	Missouri Dept. of Conservation P.O. Box 180 Jefferson City, MO 65102
Kacie Bauman	District Biologist (AR, LA, MS)	National Wild Turkey Federation	kbauman@nwf.net	228.222.7463	911 Timberton Drive Pearl, MS 39208
Richard Beagles	Senior Biologist	Oklahoma Department of Wildlife Conservation	richard.beagles@odwc.ok.gov	580.320.3177	PO Box 397 Clayton OK 74563
Patrick Lemons	Wildlife Program Manager, Region 1	Tennessee Wildlife Resources Agency	patrick.lemons@tn.gov	731.697.5200	200 Lowell Thomas Drive Jackson, TN 38301
Wade Hairrell ¹	Deputy Chief, Migratory Birds	US Fish and Wildlife Service, Region 2	wade_hairrell@fws.gov	361.676.9953	210 Terra Vista Trail Victoria, TX 77904
Will Meeks	Assistant Regional Director - Refuges	US Fish and Wildlife Service, Region 4	will_meeks@fws.gov	720.541.0310	Savannah National Wildlife Refuge 694 Beech Hill Lane Hardeeville, SC 29927
Vacant		US Geological Survey			
Kimpton Cooper	Forest Supervisor, National Forests & Grasslands in Texas	USDA Forest Service, Region 8	kimpton_cooper@usda.gov	936.404.9505	2221 N. Raguet Street Lufkin, TX 75904
Mike Sullivan	State Conservationist, Arkansas	USDA Natural Resource Conservation Service	michael.sullivan@ar.usda.gov	501.301.3100	U.S.D.A. NRCS Room 3416, Federal Building 700 W. Capitol Ave, Little Rock, AR 72201-3215

¹Executive Committee

LMVJV Management Board 11-12 May 2023

Cleveland, MS

Action Items, Responsible Parties, Status



Administration

➤ **Future Board Meeting Locations**

- 2024 Spring: Louisiana; date TBD
- 2024 Fall: TBD; Volunteers Encouraged

Responsible: K. McKnight & Tommy Tuma; **Fall '24 Ongoing**

➤ **USFWS Region 4 Overhead Applied to 1234 Funds for CH, EGCP, and LMV JVs**

- Convene LMVJV, EGCPJV, and CHJV Chairs & Coordinators and ABC Board Representatives to strategize a request to USFWS R4 to provide more detail regarding Regional Office Overhead charges to JVs

Responsible: K. McKnight, with the other JV Coordinators; **Letter sent 25 July 2023**

Delivery

➤ **TNC's Markets For Reforestation Planning Tool:**

- Share link with Management Board

<https://tnc.maps.arcgis.com/apps/webappviewer/index.html?id=11c16baf8b044f94a951c086f041dcc8>

Responsible: K. McKnight; **Complete**

➤ **Desired Forest Conditions for Wildlife Revision Draft**

- Share current revision draft link with Management Board
link: <https://www.lmvjv.org/dfcw-draft-document>
password: dfcwboardaccess

Responsible: K. McKnight; **Complete**

Science

➤ **Pre-print link for *Assessment of Landbird Population Change in the Southeastern United States***

- Share link with Management Board

<https://biorxiv.org/cgi/content/short/2023.05.16.540449v1>

Responsible: K. McKnight; **Complete**



➤ **Explore means for assessing CRP Bottomland Hardwood sites in the MAV**

- Spatial information regarding these sites potentially could be used to prioritize delivery of enhanced/additional long-term protection and management

Responsible: K. McKnight & JV Staff; **Complete**

May 11-12, 2023 Management Board Meeting Participants

Board Member	Organization
Jeff Raasch (Chair)	Texas Parks and Wildlife Department
Kacie Bauman	National Wild Turkey Federation
Richard Beagles	Oklahoma Department of Wildlife Conservation
Kimpton Cooper	U.S. Forest Service
Garrick Dugger	Arkansas Game and Fish Commission
Dan Figert	Kentucky Department of Fish & Wildlife Resources
Shawn Graff	American Bird Conservancy
Tim Landreneau (for Sullivan)	USDA Natural Resource Conservation Service
Wade Harrell	U.S. Fish & Wildlife Service R2
Will Meeks	U.S. Fish & Wildlife Service R4
Jason Milks (for Seiss)	The Nature Conservancy
Joel Porath	Missouri Department of Conservation
Tommy Tuma	Louisiana Department of Wildlife and Fisheries
Russ Walsh	Mississippi Department of Wildlife, Fisheries, & Parks
Tim Willis	Ducks Unlimited
LMVJV Office Staff	
Janine Antalffy	Avian Scientist
Bill Bartush	WGCP Partnership Coordinator
Steve Brock	MAV Partnership Coordinator
Blaine Elliott	GIS Applications Biologist
Keith McKnight	Coordinator
Anne Mini	Senior Scientist
Partner/Guest	Organization
Reuben Gay	Texas Parks and Wildlife Department
Heath Hagy	U.S. Fish & Wildlife Service
Darren Hardesty	Mississippi Department of Wildlife, Fisheries, & Parks
Houston Havens	Mississippi Department of Wildlife, Fisheries, & Parks
Jason Keenan	USDA Natural Resource Conservation Service - MS
Kevin Nelms	USDA Natural Resource Conservation Service - MS
Stacey Shankle	Trust for Public Lands
Jake Spears	Ducks Unlimited

LMVJV Spring 2023 Board Meeting Agenda

Cotton House Hotel, Cleveland, MS - Donelson Room

Wednesday, 10 May

6:30pm Gather for dinner in hotel lobby

Thursday, 11 May

Organization, Administration, Staff

			Notebook
8:00am	Welcome, Introductions, Overview of Agenda		
	Spring Action Item Progress		p. 4
	Spring & Fall 2024 Meeting Venue		p. 12
	2023 Operational Plan Progress		
	WGCPD Delivery Coordinator		
	FY2023 Budget Outlook		p. 13

Delivery Coordination

			Notebook
9:00am	WGCPD Delivery Coordination		
	Arkansas-Louisiana CDN	D. Breithaupt/A. Klais	p. 18
	Northeast Texas CDN	R. Gay	p. 29
	Longleaf Implementation Teams		
	Texas Longleaf Team	B. Bartush	p. 31
	West-Central Louisiana Ecosystem Partnership	D. Breithaupt	p. 34
10:00am	BREAK		
10:30am	MAV Delivery Coordination		
	Arkansas MAV CDN	D. Graves/J. Spears	p. 35
	Louisiana-Mississippi CDN	D. Breithaupt	p. 59
	Tri-State Conservation Partnership	R. Seiss	p. 79
	Wetland Policy Coalition	R. Seiss	p. 81
11:15am	MAV Private Lands Carbon Initiatives		
	Ducks Unlimited	T. Willis	
	The Nature Conservancy	J. Milks	

Noon **LUNCH**

LMVJV Spring 2023 Board Meeting Agenda

Cotton House Hotel, Cleveland, MS - Donelson Room

Delivery Coordination (Cont'd)

1:30pm USFWS IRA Lower MS Basin River Funds W. Meeks
Other IRA-Related Potential Opportunities

Field Tour - Charlie Capps WMA

2:15pm Gather at Vehicles

2:30pm Depart for WMA

Field Tour Canceled Due to Weather

5:00pm Arrive back at Cotton House Hotel

5:45 Depart for Grammy Museum & Dinner

Friday, 12 May

Science

Notebook

8:00am Waterfowl Plan Revision - Progress Update
MAV Forest Assessment
MAV Reforestation & Water Quality Lit. Synthesis

8:45am Open Pine Decision Support Tool Revision
Louisiana Waterthrush Model Validation
Climate & Louisiana Waterthrush Habitat Nexus
Southeastern 3BB Analysis

9:35am Science Investment - Update on Past Funding p. 85
Science Investment - 2023 Recommendation p. 87
Science Roundup

10:15am **BREAK**

10:45am Desired Forest Conditions for Wildlife Revision Update

Communication & Larger Partnerships

11:15am Assoc. of JV Management Boards Meeting Hi-lights J. Raasch
Cross-JV Coordination

11:45am Action Item Review

Noon Adjourn & Safe Travels!

LMJVJ Management Board Contact List - April 2023

Name	Title	Organization	Email	Phone	Address
Jeff Raasch ¹ (Chair)	Statewide Wetlands/Joint Venture Program Coordinator	Texas Parks and Wildlife Department	jeff.raasch@tpwd.texas.gov	512.389.4578	Texas Parks and Wildlife 4200 Smith School Road, Austin, TX 78744
Ron Seiss ¹ (Vice Chair)	Director, Lower Mississippi River Program	The Nature Conservancy	rseiss@tnc.org	601.713.3307	The Nature Conservancy 217 Rocky Branch Road, Covington, TN 38019
E.J. Williams	VP, South East and Atlantic Coast Region	American Bird Conservancy	ejwilliams@abcbirds.org	706.818.1799	American Bird Conservancy 1609 William Hapton Way Mount Pleasant SC 29466
Garrick Dugger	Assistant Wildlife Division Chief	Arkansas Game and Fish Commission	Garrick.Dugger@agfc.ar.gov	501.223.6362	Arkansas Game & Fish Commission #2 Natural Resources Dr., Little Rock, AR 72205
Tim Willis	Director, Conservation Programs (MS, TN, AR, LA, AL)	Ducks Unlimited	twillis@ducks.org	601.956.1936	Ducks Unlimited 193 Business Park Dr., Suite E Ridgeland, MS 39157
Dan Figert ¹	Assistant Director	Kentucky Department of Fish & Wildlife Resources	dan.figert@ky.gov	502.548.6774	1 Sportsman's Lane Frankfort, KY 40601
Tommy Tuma	Director, Habitat Stewardship	Louisiana Department of Wildlife and Fisheries	ttuma@wlf.la.gov	225.765.2349	LA Dept Wildlife and Fisheries 2000 Quail Drive P.O. Box 98000, Baton Rouge, LA 70898
Russ Walsh	Executive Wildlife Director	Mississippi Department of Wildlife, Fisheries, & Parks	russw@mdwfp.state.ms.us	601.432.2202	Mississippi Dept of Wildlife, Fisheries, & Parks 1505 Eastover Drive, Jackson, MS 39211-6374
Joel Porath	Wildlife Section Chief	Missouri Department of Conservation	joel.porath@mdc.mo.gov	573.522.4115 ext 3188	Missouri Dept of Conservation P.O. Box 180 Jefferson City, MO 65102
Kacie Bauman	District Biologist (AR, LA, MS)	National Wild Turkey Federation	kbauman@nwtf.net	228.222.7463	911 Timberton Drive Pearl, MS 39208
Richard Beagles	Senior Biologist	Oklahoma Department of Wildlife Conservation	richard.beagles@odwc.ok.gov	580.320.3177	PO Box 397 Clayton OK 74563
Patrick Lemons	Wildlife Program Manager, Region 1	Tennessee Wildlife Resources Agency	patrick.lemons@tn.gov	731.697.5200	200 Lowell Thomas Drive Jackson, TN 38301
Wade Harrell ¹	Deputy Chief, Migratory Birds	US Fish and Wildlife Service, Region 2	wade.harrell@fws.gov	361.676.9953	210 Terra Vista Trail Victoria, TX 77904
Will Meeks	Assistant Regional Director - Refuges	US Fish and Wildlife Service, Region 4	will.meeks@fws.gov	720.541.0310	Savannah National Wildlife Refuge 694 Beech Hill Lane Hardeeville, SC 29927
Mike Langston	Deputy Director, SC Climate Science Adaptation Center	US Geological Survey	milangston@usgs.gov	405.290.8348	201 Stephenson Parkway, Suite 2100 Norman, OK 73019
Kimpton Cooper	Forest Supervisor, National Forests & Grasslands in Texas	USDA Forest Service, Region 8	kimpton_cooper@usda.gov	936.404.9505	2221 N. Raquet Street Lufkin, TX 75904
Mike Sullivan	State Conservationist, Arkansas	USDA Natural Resource Conservation Service	michael.sullivan@ar.usda.gov	501.301.3100	U.S.D.A. NRCS Room 3416, Federal Building 700 W. Capitol Ave, Little Rock, AR 72201-3215

Lower Mississippi Valley Joint Venture Management Board Meeting Locations 2002-2024

Fa/Wi 2024 Sp/Su 2024	Louisiana (TBA)
Fa/Wi 2023 Sp/Su 2023	Kentucky (Paducah) Mississippi (Cleveland)
Fa/Wi 2022 Sp/Su 2022	Arkansas (Heber Springs) Tennessee (Memphis, DU Headquarters)
Fa/Wi 2021 Sp/Su 2021	Video conference (in-person meeting not possible due to COVID-19 issues) Video conference (in-person meeting not possible due to COVID-19 issues)
Sp/Su 2020 Fa/Wi 2020	Video conference (in-person meeting not possible due to COVID-19 issues) Video conference (in-person meeting not possible due to COVID-19 issues)
Sp/Su 2019 Fa/Wi 2019	Texas (Jefferson) Louisiana (Cypress Bend)
Sp/Su 2018 Fa/Wi 2018	Louisiana (West Monroe) Mississippi (Natchez)
Sp/Su 2017 Fa/Wi 2017	Missouri (Cape Girardeau) Tennessee (Dyersburg)
Sp/Su 2016 Fa/Wi 2016	Arkansas (Wildlife Farms) Louisiana (Baton Rouge, after SEAFWA; October 19-20 OR 20-21)
Sp/Su 2015 Fa/Wi 2015	Mississippi (Tara Wildlife) Tennessee (Millington)
Sp/Su 2014 Fa/Wi 2014	Texas (Caddo Lake State Park) Florida (SEAFWA)
Sp/Su 2013 Fa/Wi 2013	Louisiana (Lafayette) Oklahoma (SEAFWA)
Sp/Su 2012 Fa/Wi 2011	Arkansas (Heber Springs) Tennessee (SEAFWA)
Sp/Su 2011 Fa/ Wi 2010	Arkansas (Eureka Springs) Mississippi (SEAFWA)
Sp/Su 2010 Fa/Wi 2009	Arkansas (5 Oaks Lodge) Georgia (SEAFWA)
Sp/Su 2009	Oklahoma (Broken Bow)
Sp/Su 2008	Mississippi (Vicksburg)
Sp/Su 2007	Texas (Tyler)
Sp/Su 2006	Mississippi (Vicksburg)
Sp/Su 2005	Arkansas (Winrock)
Sp/Su 2004	Louisiana (Buras)
Fa/Wi 2003	Alabama (SEAFWA)
Sp/Su 2003	Texas (Big Woods on the Trinity)
Sp/Su 2002	Mississippi (Tara Wildlife)

<u>2-Day Location "Box Score"</u>	
Arkansas	6
Mississippi	6
Louisiana	6
Texas	4
Tennessee	3
Missouri	1
Oklahoma	1
Kentucky	1

Bold = Multi-day meeting
Gray = Planned

Lower Mississippi Valley Joint Venture

Final Progress Assessment of 2018 Operational Plan Goals & Priorities

Year 5



Lower Mississippi Valley

J O I N T V E N T U R E

www.lmvjv.org

October 2023

LMVJV Operational Plan – Year 5 Progress

The Lower Mississippi Valley Joint Venture (LMVJV) was formed in 1987 as a regional partnership working towards achieving the goals and objectives of the North American Waterfowl Management Plan (NAWMP), and now assumes responsibility for planning, designing, coordinating, and implementing conservation in support of the U.S. Shorebird Conservation Plan, North American Waterbird Conservation Plan, and Partners in Flight Landbird Conservation Plans as well. The conservation landscape has changed (for better and worse) since the inception of the LMVJV and many challenges remain to be addressed. To facilitate a focused and efficient pursuit of shared partnership objectives, the LMVJV is guided by a 5-year Operational Plan.

The 2018 Operational Plan articulates the collective expectations of the Management Board with respect to how the LMVJV operates, interacts, and cooperates among all its parts (office staff, partners, other partnerships), and the essential expected outcomes. The primary purpose of the Plan is to ensure that the LMVJV Management Board, coordinator, office staff, and partner staff have proper context for making key (and perhaps tough) resource allocation decisions.

This document summarizes an assessment of progress upon completion of work under the 2018 five-year plan.

LMVJV Operational Plan – Year 5 Progress

Organizational Performance

Priority A

Consistent, high-level engagement and involvement from Management Board members

Change from 2022: None

Positives

Solid interest and participation in JV activities by most Management Board members continues. Management Board members actively facilitate increased involvement by their organization's staff in LMVJV technical teams, etc.

Challenges

Turnover in Board members challenges us to share institutional knowledge, maintain a common context, and ensure continuity through time. Less than 50% of current Board members have served in that roll for more than three years.

Priority B

Consistent, high-level engagement and involvement from partner staff in technical and delivery teams

Change from 2022: None

Positives

CDNs are enjoying successful in-person meetings, with partner staff participation in all CDNs (40-60 active members each) remaining high.

Participation and input provided by science-related working groups is generally high (e.g., WGCPO BHW HSI development, MAV Forest Protection Model, MAV Forest Breeding Bird Plan revision, NETX Bird Monitoring, RCPP Science elements, Emergent Wetland Assessment Tool development).

Challenges

Fluid nature of roles among partners' technical staff makes membership and continuity within WGs difficult.

Priority C

Effective communication of LMVJV activities

Change from 2022: None

Regular email updates on timely issues sent to Board members and partner networks, with regular *News & Updates* e-newsletters distributed constantly.

Website launched in 2019 receives frequent updates, including videos of virtual meetings allowing for more innovative application of video meeting platforms.

Glossy summaries of five LMVJV Plans completed and posted on the website.

Partner accomplishments (e.g., acquisition, restoration) communicated to the partnership via *News & Updates*, owing to the provision of this information by partner organizations to JV staff.

Numerous informational emails (CDN Blasts) distributed to CDN participants related to an array of topics including relevant news articles, bulletins, position announcements, webinars and workshops.

Leaders on the Land private landowner newsletter launched Summer 2021.

LMVJV Operational Plan – Year 5 Progress

Priority D

Cultivating relationships with key DOI & USFWS decision-makers and relaying accomplishments

Change from 2022: None

Positives

LMVJV Board Chair coordinated “fly-ins” among USFWS Southwest (2018) & Southeast (2020) Region JVs and USFWS Regional leadership. The efforts were successful and well received.

LMVJV Coordinator and Chair participated in DC fly-in meetings with USFWS Leadership (Director, Deputy Director, Program Leadership) in February 2020.

LMVJV report to NAWMP Plan Committee, including USFWS Assist. Director for Migratory Birds, September 2021.

Challenges

Maintaining regular contact with key staff for building relationships is an ongoing challenge.

Priority E

Cultivating new sources of funding for partner activities

Change from 2022: None

Positives

Regional Conservation Partnership Program (RCPP) awarded in 2021 for Open Pine conservation in the WGCP of Arkansas and Louisiana (\$5.9MM RCPP, \$8.1MM partners). Includes Innovative contribution opportunity from energy ROW managers.

Wetlands Reserve Enhancement Program (WREP) awards in 2023 for wetland conservation in the MAV (\$10MM).

USFWS Migratory Bird funds secured for MAV emergent wetland remote assessment (\$26K) supporting planning for secretive marsh birds and other taxa; a 2021 Shorebird/Waterbird Workshop (\$10K); and an assessment of SE JV and SECAS Blueprint outputs (\$80K) and recommendations for better harmonization.

NFWF 2020 LMAV Fund approved \$2.6MM to partners in 8 projects. JV Staff directly involved in successful proposals for DFCW Revision, MAV Bird Monitoring, and Tri-State WREP (AR, LA, MS).

Texas Longleaf Team’s Texan by Nature “Wrangler” award is promoting collaboration with industry partners in East Texas, and has received over \$1MM in industry-sourced funding.

Expanded TPWD funding for Delivery programs with landscape priority focus (increased two-fold from \$100 to \$166-\$200k annually for 2-4 years).

Challenges

Accessing funds from sources outside of our traditional streams is an ongoing and worthwhile process that requires time, energy, and coordination.

Identifying and cultivating additional new donors to LMVJV partner efforts, while avoiding conflict with ongoing development efforts by partner organizations is a delicate process.

LMVJV Operational Plan – Year 5 Progress

Priority F

Sufficient JV Office budget to support staff, travel, and activities

Change from 2022: None

Positives

Migratory Bird Joint Venture (1234) funding levels remain relatively flat to increasing (\$920,250 average annual increase since FY19), despite reductions in other programs.

LDWF, ABC, AGFC, MDC, TWRA, NRCS, ODWC, and TPWD are contributing funds to the LMVJV Support Office to augment 1234 funds.

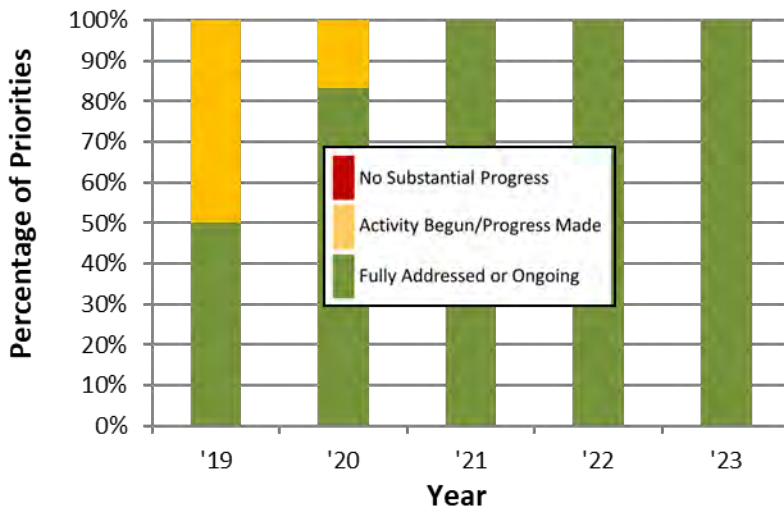
TPWD provides office space and support to JV staff in TX.

NFWF funds, through an amended award to ABC, provide approx. 50% of the WGCP Partnership Coordinator's costs through 2024.

Challenges

Securing additional, sustained, outside (e.g., NFWF) funding requires ongoing investment.

Organizational Performance



Year 5 ('23) Priorities Status

- Board member engagement
- Partner staff engagement
- Communication of JV activities
- Communication with DOI & USFWS
- Cultivate and increase funding sources
- Sufficient Office budget to support staff

LMVJV Operational Plan – Year 5 Progress

Biological Planning

Goal 1: Landscape-oriented, biologically driven, partner vetted, up-to-date population objectives for priority species within all bird guilds in both BCRs by 2023

Highest Priority

Waterbirds of the Mississippi Alluvial Valley & West Gulf Coastal Plain/Ouachitas Plan

Change from 2022: None

Positives

Waterbird Working Group assembled, first meeting held 22 September 2021. Univ. of Arkansas Monticello marshbird research underway, with funding from LMVJV.

DU, in collaboration with JV staff, completed emergent wetland assessment, fundamental to assessing marshbird habitat. Formal validation underway by scientists at Univ. Arkansas Monticello.

King Rail habitat suitability model development underway, via inter-agency agreement for post-doc researcher with USGS/University of Missouri.

Challenges

This effort is challenged by a lack of population data to set defensible population objectives. Habitat and habitat use data collection ongoing.

Highest Priority

MAV Landbird Plan Revision

Change from 2022: None

Positives

Drs. Twedt & Mini published an update to the landbird biological model for the MAV as USGS Open File Report. Board approved new Population & Habitat Objectives September 2020.

Challenges

Peer reviewed document synthesizing all four components of planning & design in progress.

Highest Priority

WGCP Open Pine Plan Revision

Change from 2022: Improved

Scientists at Mississippi State University collaborated with LMVJV and EGCPJV staff and partners to develop key base information/data layers and approaches used in producing a revised assessment of Open Pine bird habitat.

LMVJV Operational Plan – Year 5 Progress

High

Waterfowl – New Population Objectives

Change from 2021:
Improved

Positives

New population objectives have been completed by LMVJV Science Coordinator and shared with Waterfowl Working Group leadership. With the GCJV, we have agreed upon an interpretation of the dual NAWMP objectives (80th percentile vs. Long-term average).

Improved Water Management Tool deployed, with new data from partners to serve foundational role in revised plan.

Revised population and habitat objectives developed in 2023.

Waterfowl Symposium (150 participants) held 4-6 Oct, 2022; much of presented material and participating scientists to be part of 2023 Plan Revision.

Challenges

Human dimensions objectives in revised planning is new ground for LMVJV.

Medium

Multi-JV grassland bird conservation planning (“Murmuration”)

Change from 2021: None

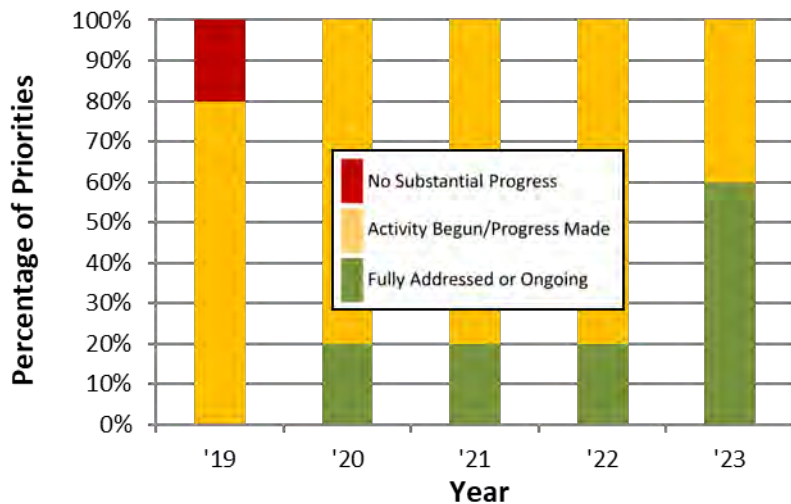
Positives

Senior Scientist and Avian Ecologist participating in periodic planning discussions re: scope, approach, and study sites.

Challenges

Funding to conduct field work necessary to develop Full Annual Cycle models has not been fully obtained.

Biological Planning



Year 5 ('23) Priorities Status

- Waterbird Planning
- MAV Landbird Plan Revision
- WGCPD Open Pine Plan Revision
- Waterfowl Objectives Updated
- SE Grassland Bird Initiative

LMVJV Operational Plan – Year 5 Progress

Conservation Design

Goal 2a: Up-to-date habitat objectives for priority species within each bird guild in both BCRs by 2023

Goal 2b: Effective decision support tools to link and integrate habitat objectives for priority species in each bird guild and other relevant resource concerns, useful for delivery action by 2023

Highest Priority

Waterbirds of the Mississippi Alluvial Valley & West Gulf Coastal Plain/Ouachitas Plan

Change from 2022: None

Positives

Palustrine emergent wetland remote assessment tool is complete.

Waterbird Working Group has met, with resultant timeline, tasks assigned, and next-steps established.

King Rail habitat suitability model development began Fall 2022, via inter-agency agreement for post-doc with USGS/University of Missouri.

Challenges

Must connect habitat models to habitat assessment, once complete.

Highest Priority

WGCPPO Open Pine Plan Revision

Change from 2022: Improved

Engagement of new membership/leaders within the AR-LA CDN, Delivery & Prioritization Team was extensive in 2022. Continued dialogue with USFWS Science Applications staff regarding Integration of SWAP efforts in AR & LA with CDNs. Collaboration with Longleaf and Open Pine partnerships (NETX & TLIT) has advanced the dialogue of seamless delivery across western WGCPPO – BCR 25. Scientists at Mississippi State University are developed key base information/data layers and approaches used in the revision. Revision to be completed in 2023.

Highest Priority

CDN Delivery Priorities updated and distributed

Change from 2022: None

LMVJV staff provided GIS and related expertise in development of the latest Texas Longleaf Implementation Team priority geography map, and provide ongoing mapping support. The AR-LA CDN, galvanized around the RCPP effort, has solidified a shared partner vision of high priority landscapes and practices.

High

Waterfowl – New Population Objectives translated to habitat objectives

Change from 2022: None

Positives

The LMVJV Waterfowl Working Group began revision of waterfowl habitat objectives beginning in late 2022. Partners are applying new approaches to temporal variability in population objectives, habitat complexes, and human dimensions. Habitat complex modeling accelerated by Summer 2023 Directorate Fellows Program intern.

LMVJV Operational Plan – Year 5 Progress

High

Human Objectives developed for waterfowl

Change from 2022: **None**

Positives

NAWMP Regional Conservation Planning Tool (includes social inputs) in hand for plan revision and human dimensions inputs. Social scientists engaged for participation in waterfowl plan revision. Habitat Complex modeling provides a first-ever spatial framework upon which to build/incorporate human objectives

Challenges

Partners need to settle on how to incorporate human dimensions into planning.

High

Integration of priorities among guilds, ecosystem services, etc.

Change from 2022: **None**

Positives

On pace to have solid planning/design (spatially-explicit) products for multiple bird guilds (requisite for integration) in both BCRs by the end of 2024.

Challenges

Developing and updating basic biological plan/design elements is staff-intensive and occupies a higher priority than does integration.

Medium

Multi-JV grassland bird conservation planning ("Murmuration")

Change from 2022: **None**

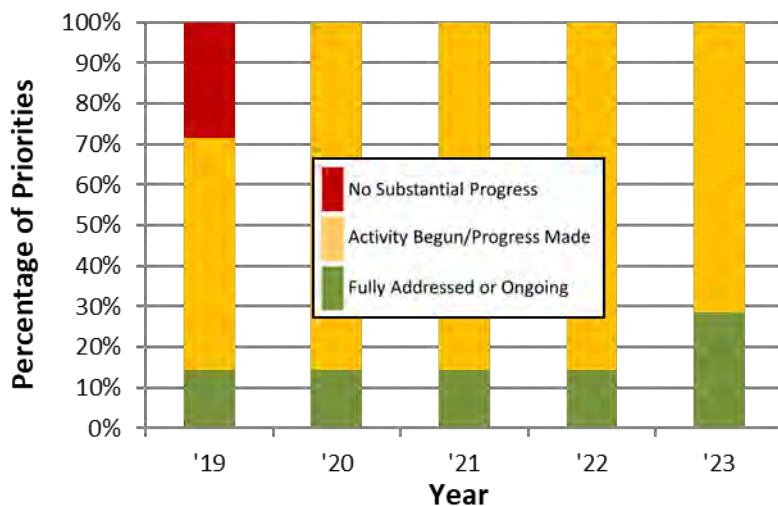
Positives

Some progress made in 2022 regarding implementing portions of the effort.

Challenges

Sufficient funding to conduct field work necessary to develop Full Annual Cycle models has not been obtained.

Conservation Design



Year 5 ('23) Priorities Status

- Waterbird Priorities
- WGCPD Open Pine Priorities Revision
- CDN Priorities
- Waterfowl Objectives Updated
- Waterfowl Human Objectives
- Integration Among Guilds
- Grassland Bird Murmuration

LMVJV Operational Plan – Year 5 Progress

Habitat Delivery

Goal 3a: The Partnership actively seeks and fosters existing and emerging opportunities for coordinated habitat delivery in support of LMVJV objectives

Goal 3b: Establish fully-functioning Conservation Delivery Networks throughout the JV, guided by LMVJV objectives by 2023

Goal 3c: Fully supported long-term functionality and productivity of existing Conservation Delivery Networks and Tri-state Conservation Partnership

Highest Priority

Continue support of existing CDNs & Cooperatives:

- CDNs
- Tri-state Cons. Partnership
- Longleaf Partnerships

Change from 2022: **None**

Positives

Much LMVJV Office staff and partner staff time continues to be invested in support of existing cooperatives and networks.

Conservation Delivery Networks. All four CDNs continue to function well and benefit from active support of the LMVJV staff. CDN membership participation remains high, with 30-50 attendees typical at regular CDN meetings, workshops and field days, with similar or higher participation in virtual meetings, which were still necessary in some instances in early 2022 due to later COVID-19 concerns and/or travel restrictions for some partners. CDNs continue to develop and update their priorities to address identified objectives and to meet information needs unique to their geographies.

- The AR and LA/MS MAV CDNs continue to maintain active Working Ag Lands Working Groups and are working to address opportunities for CDN partners to more effectively implement conservation actions in the MAV working agriculture landscape. The LA/MS MAV hosted two field days in Sep (MS) and Oct (LA) to continue its efforts to advance on-farm "Turn-row Credibility" among MAV delivery professionals.
- In 2023, the MAV CDNs have placed focus on Forest Carbon, aimed at advancing awareness and understanding of carbon sequestration, carbon markets. The CDN meetings included multiple presentations from companies that are actively marketing carbon contracts to private landowners.
- The AR MAV CDN also hosted a meeting focused on Farm Carbon and efforts to begin marketing on-farm carbon.
- The NE TX CDN continues to deliver a successful private lands program (NETX Habitat Incentive Program [HIP]), improving over 23,000 acres of private lands in seven years.
- The AR-LA WGCP CDN completed year 2 of its \$5.9MM RCPP in 2023, with having now conserved over 30,000 acres.

Longleaf Partnerships. JV Office staff continue to provide technical guidance, communication and logistical support to the TX Longleaf Implementation Team (TLIT). JV Office staff continue to work with the Western Louisiana Ecosystem Partnership (WLEP). A Tall Timbers Pineywoods Quail Program Biologist is now based out of Livingston, TX. Continued connections to LLA, America's Longleaf, Tall Timbers, and LA - TX partners will ensure optimal communication and shared resources.

LMVJV Operational Plan – Year 5 Progress

High

Develop and foster unique partnership opportunities at sub-regional scale

- Tri-state Conservation Partnership

Change from 2022: **None**

Tri-state Conservation Partnership (TCP). The TCP continues to experience strong support and engagement from NRCS and other JV partners actively engaged in the partnership. The TCP also continues to engage with MAV CDNs to foster opportunities to advance a continuing productive working relationship (additional details below).

Challenges

Effective communication and coordination of these multiple partnerships requires special attention as the activities and opportunities increase in number and frequency, and as partner staff composition and participation changes over time.

The **Tri-state Conservation Partnership (TCP)** was initiated in 2013 and was fully formalized through the JV in 2015 with a Declaration of Partnership (signatories: NRCS AR, LA, MS & LVMJV). This unique partnership continues to be successful and strong, serving as an effective mechanism for fostering engagement among LMVJV partners in support of shared delivery priorities within the MAV of AR, LA & MS. Many of the Farm Bills ACEP-WRE centered delivery priorities identified by TCP planning are shared and promoted through the CDNs. The TCP has become an important catalyst for supporting and addressing JV delivery interests. JV Staff continue to work directly with Board member Seiss (TNC's Lower MS River Prog. Coordinator) in leading the stewardship of the TCP. Specific recent examples of the productive collaboration resulting from the TCP/CDN relationship include:

- In Dec 2021, the TCP completed and released a seven video series for landowners, focused on wetland and forest management on Wetland Reserve Easements (WRE). The TCP's Outreach Working Group is now actively developing several new videos that specifically address outreach and education for landowners interested in enrolling in WRE ("Understanding WRE"). The project will focus on understanding the breadth of the application process, as well as what restoration will look like if successfully enrolled. The project will also include a video that specifically targets limited resources and socially disadvantaged landowners.
- The TCP was awarded funding in late 2021 for a fourth phase of its multi-year MAV Tri-state WREP project. The NRCS fully funded the proposed \$5M project, which will restore 1500 wetland acres of MAV marginal cropland. The project included an additional \$123K in partner match from the Walton Family Foundation.
- The TCP is also actively supporting the NRCS in conducting WRE new enrollment outreach by coordinating the developing two new professionally designed outreach fliers then conducting targeted USPS mail outreach to more than 3,500 landowners in LA and 4500 in MS.
- Both the 2022 and 2023 TCP WREP projects have reserved half of the available funding (\$2.5MM each) for historically underserved producers.

Challenges

The TCP has proved a very successful and effective partnership. With ever increasing needs and demands across multiple JV priorities, the continued growth and success of the TCP serves to intensify overall demands on JV staff capacity.

LMVJV Operational Plan – Year 5 Progress

Medium

Be responsive to partners' desire to develop additional CDNs

Change from 2022: **None**

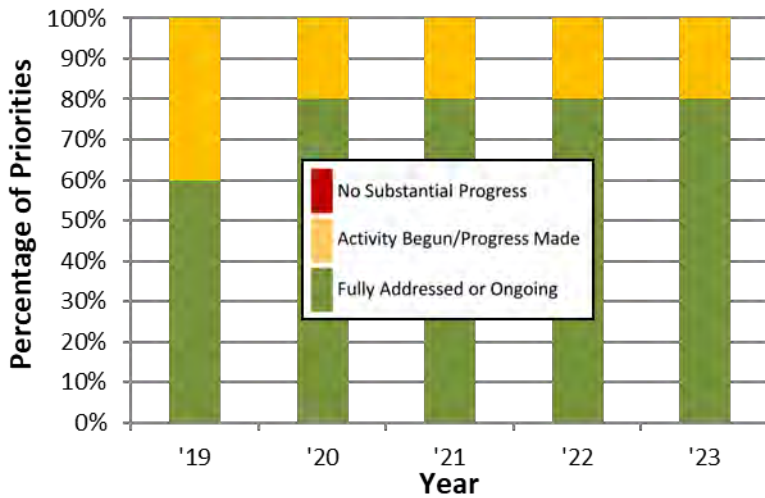
Positives

Some level of interest has been previously expressed for establishing CDNs in both the Atchafalaya Basin and the MAV of MO/KY/TN. To date, no concrete interest has been demonstrated by key JV partners to initiate CDN establishment in these areas.

Challenges

In order for new CDN's to be formulated and successfully established, strong support and commitment from a lead JV partner organization within a given area is required. Oklahoma dialogue has been initiated with NWTf, USFS and State personnel, however with limitations on travel and meetings, this engagement has not progressed beyond the formative stages

Habitat Delivery



Year 5 ('23) Priorities Status

- Support to CDNs
- Support to Tri-state Conserv. Partnership
- Support to Longleaf Partnerships
- Develop & Foster Unique Opportunities
- Responsive to Additional CDNs

LMVJV Operational Plan – Year 5 Progress

Monitoring & Evaluation

Goal 4a: Develop iterative habitat and population monitoring & evaluation priorities by 2020

Goal 4b: Capitalize on opportunities for effects monitoring that support LMVJV priority habitat conservation actions

Highest Priority

Monitoring & Evaluation Plan

Change from 2022: **None**

Monitoring and Evaluation Plan was approved by the Management Board Fall 2020.

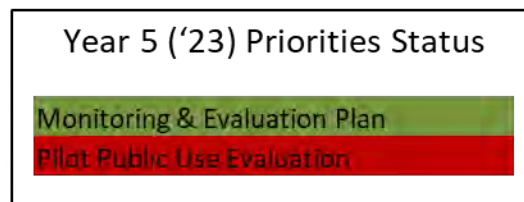
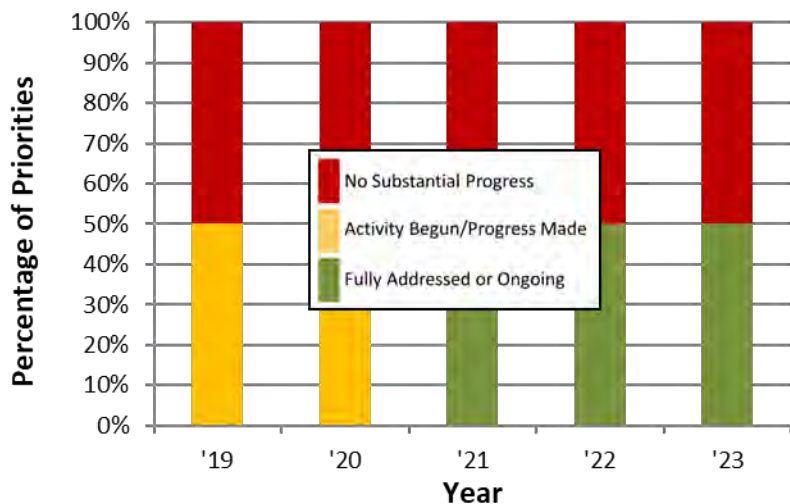
High

Pilot public use evaluation

Change from 2022: **None**

No progress. Human dimensions efforts are focused on landowner attitudes and hurdles to enrollment in conservation programs promoted by LMVJV partners in the WGCP of Arkansas and Louisiana (RCPP).

Monitoring & Evaluation



LMVJV Operational Plan – Year 5 Progress

Research

Goal 5a: Update and prioritize assumption-driven research needs by 2020

Goal 5b: Active engagement by key research professionals in assumption testing and other applicable research for each bird guild and human science in both BCRs

Priority A

Actively seek opportunities to increase research funds available through and to LMVJV partners

Change from 2022: None

JV staff and Science Team have established priorities for research funding in the near term, and continue to develop an approach to setting realistic priorities into the future through the 2022 Science Priorities document.

LMVJV staff have been successful in facilitating increased funds to Univ. Arkansas Monticello (Dr. Doug Osborne) marsh bird research project, NFWF funding to SFASU (Dr. Rebecca Kidd), Mississippi State Univ. (Dr. Kristine Evans) landscape scale planning assessment, King Rail habitat model (Dr. Lisa Webb, Univ. Missouri), Emergent Wetland Assessment Validation (Dr. Hamdi A. Zurqani), and RCPP research funds in the WGCP of Arkansas and Louisiana for open pine, native prairie, bird, and social science.

Priority B

Maintain and continue to build the depth and breadth of research scientist participation in LMVJV-relevant research topics

Change from 2022: None

Outreach to universities and other organizations by LMVJV Staff continues. As JV science priorities are maintained and addressed, and working groups are formed, further outreach will continue.

Currently working with the following:

- Dr. Dustin Brewer (Univ. of Missouri) Post-doc, King Rail habitat suitability modeling in the MAV
- Dr. Dan Saenz of USFS Southern Research Station (Nacogdoches, TX) on songbird response to NE Texas HIP program prescribed fire and songbird response to MAV forestry practices through a NFWF grant
- Dr. Rebecca Kidd (Stephen F. Austin State Univ.) on forest breeding bird response to WRE(P) reforestation in the MAV
- Dave Holdermann (TPWD) on waterborne bird surveys for bottomland hardwood priority bird species
- Dr. Hans Williams (Stephen F. Austin State Univ.) on evaluation of bottomland hardwood assessments associated with water development activities in the WGCPO
- Dr. Kristine Evans (Mississippi State Univ.) on assessment of SE JV and SECAS Blueprint outputs
- Dr. Don White (University of Arkansas Monticello) regarding habitat suitability indices for Prothonotary Warblers on White and Cache Rivers
- Dr. Ashley Gramza (Playa Lakes Joint Venture) regarding human dimensions of Farm Bill program participation
- Dr. Elena Rubino (University of Arkansas Monticello) regarding human dimensions of Farm Bill program participation
- Dr. Jerod Penn (Louisiana State University) regarding human dimensions of Farm Bill program participation

LMVJV Operational Plan – Year 5 Progress

- Dr. Lisa Webb (USGS/University of Missouri) on King Rail habitat suitability model
- Dr. Hamdi A. Zurqani (University of Arkansas Monticello) regarding Emergent Wetland Assessment

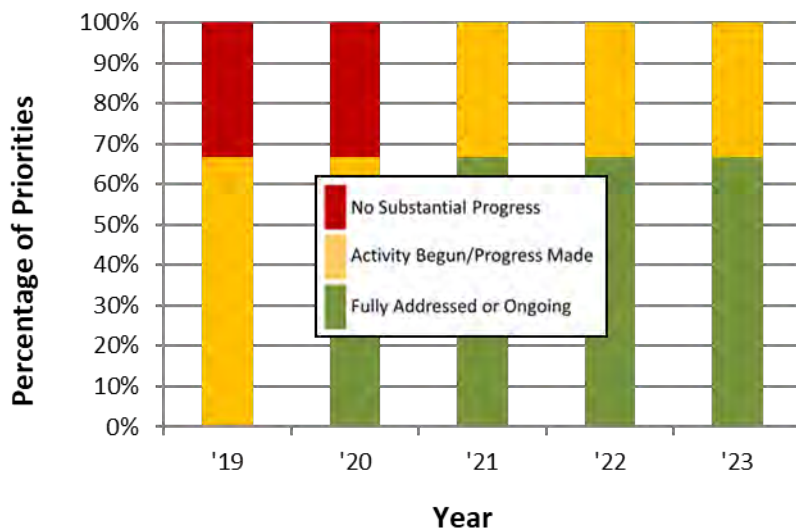
Priority C

Improve understanding of private landowner participation in conservation programs

Change from 2022: **None**

Work through and funded by the AR-LA Open Pine RCPP will address landowner hurdles and enticements to participation in Farm Bill programs and adoption of practices.

Research



Year 5 ('23) Priorities Status

- Increase Research Funds
- Build Research Scientist Participation
- Understand Priv. Landowner Participation†

LMVJV Operational Plan – Year 5 Progress

Communication, Education, and Outreach

Goal 6a: Address priority actions detailed in the 2014 LMVJV Communications Plan

Goal 6b: Revise/update 2014 Communications Plan as appropriate by 2023

Priority A

Effectively address Communications Plan priority actions

Change from 2022: **None**

See "Organizational Performance" Priority C. Assessment of Communications Plan priorities addressed separately

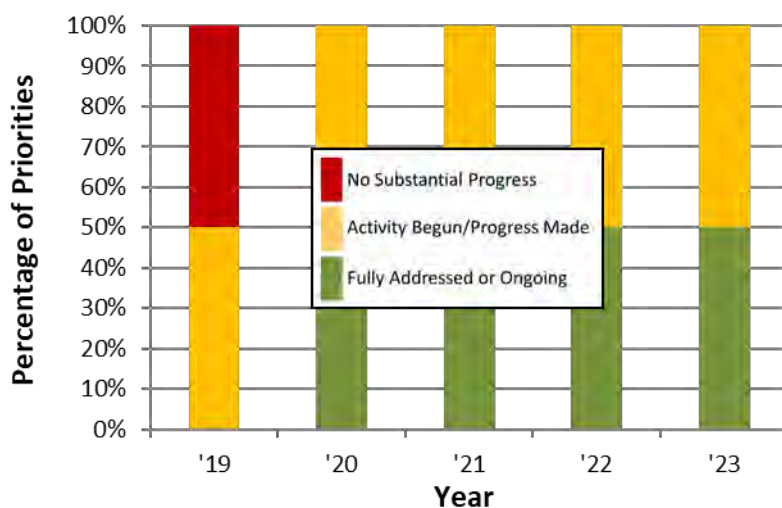
Priority B

Update Communications Plan by 2023

Change from 2022: **None**

Updated Communications Plan approved by Management board 21 October 2020.

Communication, Education & Outreach



Year 5 ('23) Priorities Status

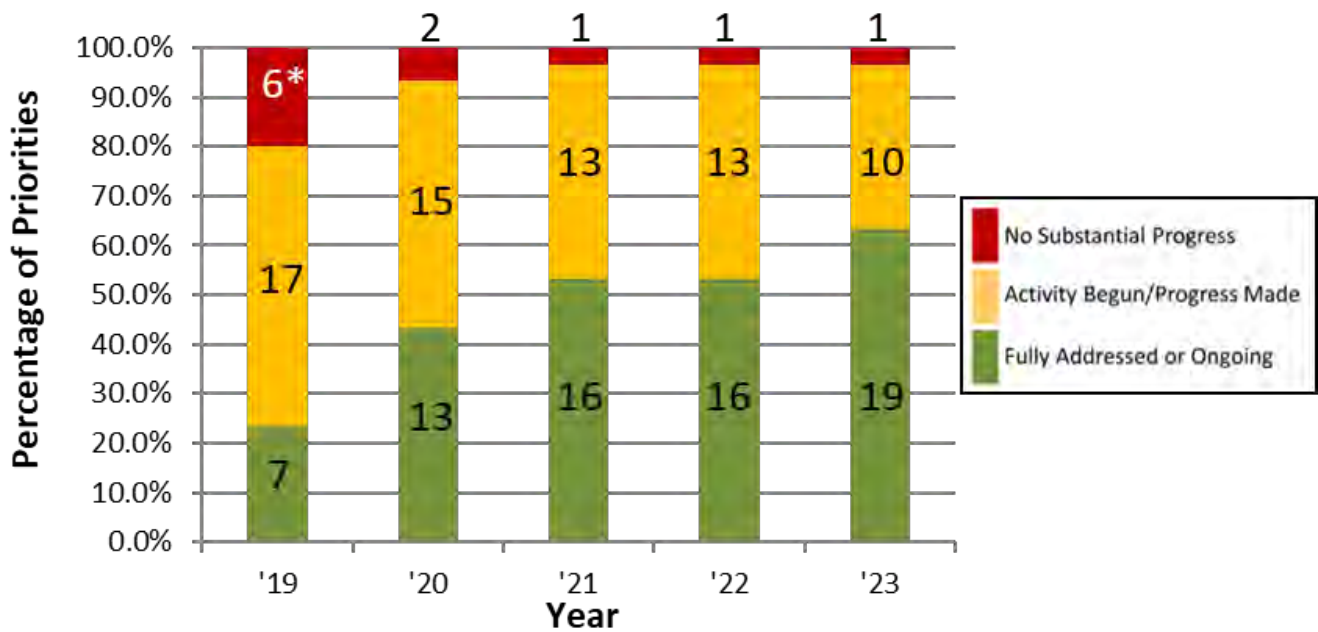
Communications Plan Activities

Updated Communications Plan

LMVJV Operational Plan – Year 5 Progress

Overall Progress

All Priority Tasks



*Number of tasks within category

LMVJV Operational Plan – Year 5 Progress

LMVJV Operational Plan Year 5 Status (2023) - Final Summary

Operational Plan Element	Status	Since '22	Op Plan Pp.
Organizational Performance			7-9
A. Board Member Involvement	Fully Addressed/Ongoing	No Change	
B. Partner Staff Involvement	Fully Addressed/Ongoing	No Change	
C. Effective Communication	Fully Addressed/Ongoing	No Change	
D. Relationship with Decisionmakers	Fully Addressed/Ongoing	No Change	
E. Cultivate New Funding	Fully Addressed/Ongoing	No Change	
F. Sufficient Support for JV Office	Fully Addressed/Ongoing	No Change	
Biological Planning			10-12
Highest: Waterbird	Begun/Progress Made	No Change	
Highest: Landbird - MAV Revision	Fully Addressed/Ongoing	No Change	
Highest: Landbird - Open Pine Revision	Fully Addressed/Ongoing	Improved	
High: Waterfowl - New Objectives	Fully Addressed/Ongoing	Improved	
Medium: Landbird - Grassland Birds	Begun/Progress Made	No Change	
Conservation Design			13-14
Highest: Waterbird	Begun/Progress Made	No Change	
Highest: Landbird - Open Pine Revision	Fully Addressed/Ongoing	Improved	
Highest: CDNs - Priorities / DSTs	Fully Addressed/Ongoing	No Change	
High: Waterfowl - New Objectives	Begun/Progress Made	No Change	
High: Waterfowl - Human Objectives	Begun/Progress Made	No Change	
High: Integration of Priorities	Begun/Progress Made	No Change	
Medium: Landbird - Grassland Birds	Begun/Progress Made	No Change	
Habitat Delivery			15-19
Highest: Support CDNs & Cooperatives			
Four Existing CDNS	Fully Addressed/Ongoing	No Change	
Tri-state Partnership	Fully Addressed/Ongoing	No Change	
Longleaf Teams (TX, LA)	Fully Addressed/Ongoing	No Change	
High: Develop Unique Opportunities	Fully Addressed/Ongoing	No Change	
Medium: Responsive to New CDN Develop.	Fully Addressed/Ongoing	No Change	
Monitoring & Evaluation			20-22
Highest: Monitoring Summary/Guide	Fully Addressed/Ongoing	No Change	
High: Pilot Public Use Study	No Substantial Progress	No Change	
Research			23-24
A: Increase Research Funds	Fully Addressed/Ongoing	No Change	
B: Research Scientist Participation	Fully Addressed/Ongoing	No Change	
C: Understand Pvt. Landowner Participation	Begun/Progress Made	No Change	
Communication, Education & Outreach			25-27
A: Address Comm. Plan Priorities	Begun/Progress Made	No Change	
B: Update Comm. Plan by 2023	Fully Addressed/Ongoing	No Change	

Lower Mississippi Valley Joint Venture Operational Plan

2024-2029

for a

*A landscape supporting healthy native bird
populations across the LMVJV*



Lower Mississippi Valley

J O I N T V E N T U R E

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DRAFT - October 2023 - DRAFT

The members of the Lower Mississippi Valley Joint Venture Management Board agree with the guiding principles, priorities, and strategies contained within the Operational Plan and are committed to its long-term implementation. This commitment, recognizing that funding is subject to annual budgetary constraints and processes of each individual agency or organization, does not obligate funding at any prescribed level.

Jeff Raasch, Chair

Texas Parks and Wildlife Department

Ron Seiss, Vice Chair

The Nature Conservancy

Kacie Bauman

National Wild Turkey Federation

Richard Beagles

Oklahoma Department of Wildlife Conservation

Kimpton Cooper

U.S. Forest Service

Dan Figert

Kentucky Department of Fish and Wildlife Resources

Wade Harrell

U.S. Fish and Wildlife Service, Region 2

Mike Langston

U.S.G.S. – Wetland and Aquatic Research Center

Patrick Lemon

Tennessee Wildlife Resources Agency

Will Meeks

U.S. Fish and Wildlife Service, Region 4

Luke Naylor

Arkansas Game and Fish Commission

Joel Porath

Missouri Department of Conservation

Mike Sullivan

U.S.D.A. Natural Resources Conservation Service

Tommy Tuma

Louisiana Department of Wildlife and Fisheries

Russ Walsh

Mississippi Department of Wildlife, Fisheries and Parks

EJ Williams

American Bird Conservancy

Tim Willis

Ducks Unlimited, Inc.

This report may be cited:

Lower Mississippi Valley Joint Venture Management Board. 2023. Lower Mississippi Valley Joint Venture Operational Plan 2024-2029. Vicksburg, Mississippi. 27 pp.



The Lower Mississippi Valley Joint Venture functions as the forum in which the private, state, federal conservation community develops a shared vision of bird conservation for the Lower Mississippi Valley region; cooperates in its implementation; and collaborates in its refinement.

Dedicated to bird habitat conservation

Committed to the use of the best science available

Believing in the power of partnership

Lower Mississippi Valley Joint Venture Operational Plan 2024

INTRODUCTION

The Lower Mississippi Valley Joint Venture (LMVJV) was formed in 1987 as a regional partnership working to achieve the goals and objectives of the North American Waterfowl Management Plan (NAWMP). In the late 1980s, the North American Bird Conservation Initiative (NABCI) emerged with the vision of “regionally-based, biologically driven, landscape-oriented partnerships delivering the full spectrum of bird conservation across the entirety of North America.” The LMVJV formally accepted responsibility for achieving the NABCI strategic conservation vision within the LMVJV region in 2001. Since that time, the LMVJV has been a leader in bird conservation planning, design, delivery, monitoring, and research. The wide acceptance and understanding of Strategic Habitat Conservation across the North American conservation community is in no small part due to the pioneering leadership of LMVJV partners, undertaking the enterprise of integrated bird conservation.

Since the inception of the LMVJV, the conservation landscape has changed (for better and worse), and many challenges remain to be addressed. This Plan articulates the collective expectations of the Management Board with respect to how the LMVJV operates, interacts, and cooperates among all its parts (office staff, partners, other partnerships), and more specifically, the essential expected outcomes over the next five years. The plan provides the LMVJV Management Board, coordinator, office staff, and partner staff a common context and reference point for making key (and perhaps tough) resource allocation decisions through 2023.

THE HIGH VALUE OF PARTNERSHIP

The conservation community in North America faces daunting challenges as we move into the future. Our reality is a rapidly changing natural environment with limited resources to address and reverse population and habitat declines. State, federal, and NGO budgets are strained to keep pace with needs. At the same time, threats to our natural systems and native bird populations multiply and intensify daily. The steady march of urban development, the vagaries of agricultural commodity markets and their effects on Farm Bill programs, a society growing less connected to the natural world, continued introduction and expansion of invasive species, and the uncertainty of the impacts of a changing climate on wildlife habitats are but a few clear reminders of the difficult task ahead for conservation.

Despite the challenges, opportunities for better, more efficient and effective conservation are being seized upon and refined. These opportunities reside not in individual organizations buckling down and working harder – but in thriving, effective partnerships. The LMVJV has a proud history of *partners truly partnering*, sharing resources and responsibility to ensure that the resources directed

toward conservation are invested wisely. The LMVJV has well-established partnership connections, enhanced and expanded by locally driven Conservation Delivery Networks and has a legacy of careful, thoughtful biological planning powered by intelligent use of technology, and guided by high expectations of results.

The partnership is committed to learning from past successes and focusing our resources, energy, and connections on an even more effective and higher functioning bird conservation partnership than ever before. The Goals and Strategies that follow will ensure the partnership continues to successfully deliver its core objectives, by remaining **Dedicated to bird habitat conservation**, **Committed to the use of the best science available**, and **Believing in the power of partnership!**

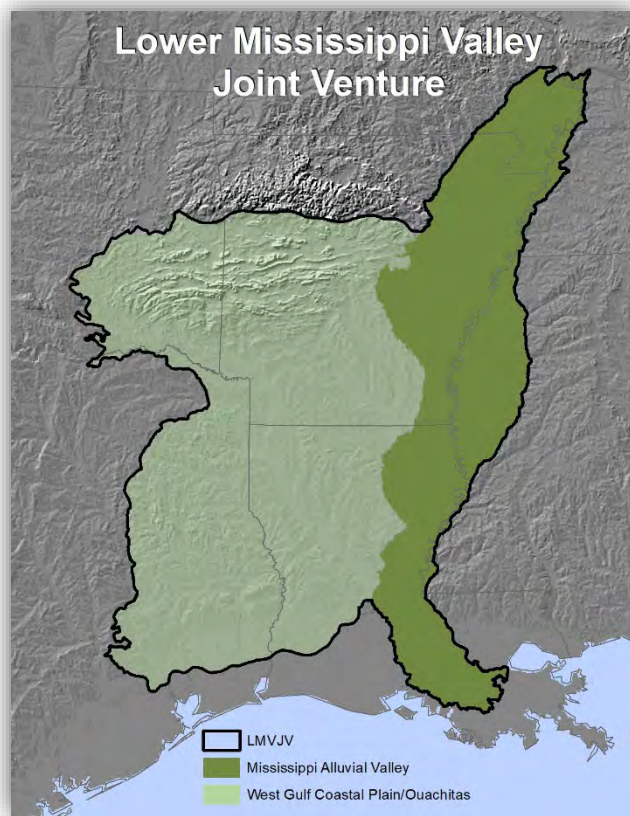
THE LMVJV CONSERVATION LANDSCAPE

The LMVJV region is composed of two distinct Bird Conservation Regions: the Mississippi Alluvial Valley (MAV) and the West Gulf Coastal Plain/Ouachitas (WGCP). Whereas bird species composition is very similar between these two ecoregions, land use, bird habitat types and juxtaposition, and major threats and disturbances to natural processes, are dissimilar. As a result, conservation partnerships, priority actions and opportunities within these two areas are regionally distinct.

Mississippi Alluvial Valley

The Mississippi Alluvial Valley (MAV) is a 22-million acre floodplain that supports a diverse and ecologically rich forested wetland ecosystem – one of the most productive in North America. It extends from the confluence of the Mississippi and Ohio Rivers, to the northern Gulf of Mexico and features a mosaic of ridges, swales, meander belts, and backswamps. Small changes in elevation (<1 foot) in the MAV are associated with large shifts in hydrology, which in turn, strongly affect plant and animal community composition and structure, making it a fertile and productive floodplain.

The rich alluvial soils of the forested floodplain proved to be a “gold mine” for the agrarian European settlers. Early clearing for agriculture focused on higher landforms that were associated with both braided stream terraces and natural levees that were partially protected from the potentially devastating and relatively frequent flooding. Expansive federally sponsored flood control and drainage projects created new opportunities for agricultural development such that by the 1950s, only 9 million acres of forested



wetlands remained – confined primarily to the more poorly drained portions of the floodplain. However, continued flood control and drainage projects along with high commodity prices over the next 30-35 years led to more than 4 million acres of the remaining forested wetlands being cleared, despite the fact that these lands were typically on poorly drained sites subject to regular flooding. By the early 1990s, less than 25% of the MAV was forested, and most of this forest occurred on the unprotected side of mainline Mississippi River levees or within the public land estate (e.g., National Wildlife Refuges and State Wildlife Management Areas). Well focused and coordinated reforestation by LMJV partners over the past 25 years has resulted in a reversal of the trend in forest loss, adding over 1 million acres of forest through various programs and efforts, most notably Wetlands Reserve, through the Farm Bill.

Today, the MAV continues to support significant migratory bird habitats and populations and is home to many federally listed fish, plant, invertebrate, and mammal species. Nearly 40% of North America’s waterfowl and 60% of all U.S. bird species migrate or winter in the MAV. The MAV was identified as a priority geography for waterfowl in the original North American Waterfowl Management Plan (1986), and the LMJV partnership continues its work to improve waterfowl habitat conditions, as well as habitat for songbirds, shorebirds, and wading birds in this heavily degraded landscape.

West Gulf Coastal Plain/Ouachitas

The West Gulf Coastal Plain/Ouachitas (WGCP) physiographic area occupies about 52 million acres in southwestern Arkansas, southeastern Oklahoma, western Louisiana, and eastern Texas, and lies within the humid Southeast Region of the U. S. It comprises two subregions: all of the West Gulf Coastal Plain and the Ouachita Mountain portion of the Ozarks/Ouachitas. The region is dominated by pine forests on the uplands, shortleaf to the north and longleaf and loblolly to the south, and is dissected by numerous river systems characterized by forested wetlands, largely bottomland hardwood forests. Longleaf pine-bluestem savannahs formerly dominated the uplands in southeastern Texas and southwestern Louisiana, however these forests are much less common in today's landscape, comprising less than 3% of the land area of the WGCP. Shortleaf pine mixed with oaks and hickories historically was the predominant forest type outside of the longleaf range. Today much of the shortleaf pine forest has been replaced by loblolly pines, except in the Ouachitas and the drier areas to the west. Loblolly pines were formerly confined to flatwoods in the south and along moist (mesic) slopes in other areas, but now have largely replaced shortleaf and longleaf as plantations in most areas.

Outside of pine forests, the most extensive plant community type in the WGCP is mixed pine - hardwood that is often a successional stage on lands previously occupied by other types. Bottomland hardwood forests of various oak species, black gum, sweetgum, elms, and ash are found in stream and river bottoms. Cypress and/or tupelo swamps are found in frequently to permanently flooded sites. Other wetlands dominated by herbaceous emergent and floating plants are occasionally found in permanently flooded areas.

The Federally endangered red-cockaded woodpecker is among the highest priority species in the WGCP and occurs in open, park-like pine savannahs. Other high priority species that nest in this

habitat type include Bachman's Sparrow, Northern Bobwhite, and the Brown-headed Nuthatch. Pine savannahs are a conservation priority because of the numerous bird species they support, and they continue to be impacted by urban/suburban development, conversion to pasture, conversion to pine plantations, lack of thinning, and the lack of prescribed burning and/or suppression of naturally-caused fires.

Bottomland hardwood forests, cypress/tupelo swamps, and riparian habitats are distributed widely in association with the numerous rivers and tributaries within the WGCPO, and support priority species including Acadian Flycatcher, Louisiana Waterthrush, Red-shouldered Hawk and Swainson's, Yellow-throated, and Prothonotary warblers. Bottomland forests also support substantial populations of several waterfowl species including Wood Duck and Mallard. The primary threats to these forests of high conservation priority include reservoir construction, stream modifications, poorly planned timber harvesting practices, and conversion to pine plantations, pastures, and other land uses.

GUIDING PRINCIPLES

Following are the basic principles that provide direction to the structure and work of the Lower Mississippi Valley Joint Venture.

Vision

A landscape supporting healthy native bird populations and other wildlife across the Lower Mississippi Valley region.

Mission

The Lower Mississippi Valley Joint Venture functions as the forum in which the conservation community develops a shared vision of bird conservation for the Lower Mississippi Valley region; cooperates in its implementation; and collaborates in its refinement.

Purpose

The Lower Mississippi Valley Joint Venture is a self-directed, non-regulatory conservation partnership that exists for the purpose of sustaining bird populations and their habitats within the Lower Mississippi Valley region through implementing and communicating the goals and objectives of relevant national and international bird conservation plans.

Biological Scope

The Lower Mississippi Valley Joint Venture partnership is focused on the protection, restoration, and management of birds of the Lower Mississippi Valley region and their habitats.

Operational Scope

The operational scope of the Lower Mississippi Valley Joint Venture encompasses bird biological planning, conservation design, population and habitat monitoring, evaluation and research, and implementation through a biologically driven, landscape-oriented partnership.

Geographic Scope

Lower Mississippi Valley Joint Venture planning, implementation, and evaluation are specific to Bird Conservation Regions (BCRs) as defined by the U.S. NABCI Committee. Our primary geographic focus is the two BCRs lying entirely or mostly within the LMVJV administrative boundary - the Mississippi Alluvial Valley and West Gulf Coastal Plain/Ouachitas.

FUNCTIONS, SERVICES, AND PARTNERSHIP INFRASTRUCTURE

The NABCI goal of "regionally-based, biologically driven, landscape-oriented" conservation requires that a Joint Venture partnership provide functions and services that extend across state boundaries, often transcend the jurisdictional reach and capability of any individual partner, and address the full suite of Strategic Habitat Conservation elements. Such a partnership might be characterized as a fully functioning Joint Venture. The LMVJV has adopted an Operational Compass (**Appendix A**) to clarify what this means in very practical terms, and to aid in assessing our progress towards the goal of being fully functional across the entire "Bird Conservation Enterprise". The expectations of a fully functioning Joint Venture were developed by the collective Migratory Bird Joint Venture community and are described in ***Desired Characteristics for Habitat Joint Venture Partnerships*** (the "JV Matrix"; **Appendix B**). These expectations are organized into the following seven themes:

- Organizational Performance
- Biological Planning
- Conservation Design
- Habitat Delivery
- Monitoring and Evaluation
- Assumption-based Research
- Communication, Education, and Outreach

Accordingly, our member agencies and organizations seek to provide, through their collective actions, value-added services relevant to these themes, as described in more detail in the following pages. For each theme, a succinct list of the specific expectations found in the JV Matrix is shown in separate "Coordination/Partnerships" and "Technical" boxes for easy reference.

ORGANIZATIONAL PERFORMANCE

Goal 1a: Maximum level of collaboration among LMVJV Office, partner organizations and staff in pursuit of the Mission & Vision

Goal 1b: Optimal level of communication among LMVJV Office, partner organizations and staff in pursuit of the Mission & Vision

Goal 1c: Access to sustained levels of funding necessary to achieve the Mission & Vision

The organizational structure of the LMVJV is composed generally of a **Management Board, JV Support Office, Working Groups, and Partner Organization Staff**. Each of these entities has unique and specific roles and functions, as described below. For example, it is the role of the Management Board to set the broad direction and priorities for the partnership’s shared activities, and the Support Office’s responsibility to facilitate the timely accomplishment of priorities through day-to-day coordination and attention. However, identifying and filling critical capacity gaps is the responsibility of the entire partnership, such that making decisions on how and by whom various functions are filled depends on the strengths and weaknesses in both Partner and Support Office capacity.

Coordination/Partnership Expectation

- Ongoing networking and partnership expansion
- Partnership finds and fills capacity gaps
- Participates in developing funding messages to Congress, cultivating relationships with Congressional delegation
- Management Board participation in the Association of Joint Venture Management Boards

Required Elements to Meet Expectations

- Coordination, Technical, and Administrative Staff within the JV Support Office
- Active Management Board
- Active Working Groups
- Ample Administrative/Operating Funds

Status

Management Board The LMVJV is overseen and directed by a Management Board. The Management Board membership includes agencies and organizations, which by virtue of mission or legislative authority, commit to sharing in the responsibility of implementing national and international bird conservation plans within the LMV region. Member organizations are expected to dedicate time, energy and resources to developing a shared vision of bird conservation for the LMV and coordinating their otherwise independent actions in the cooperative pursuit and refinement of that vision.

Management Board members are expected to represent their agency or organization at an administrative and policy level on matters pertaining to allocating human and financial resources toward protection, restoration, and management actions that are inherent to the sustained, long term conservation goals of the partnership.

Recognizing that the commitment of member agencies/organizations is voluntary and subservient to the organization's mission, authorities, and budgetary capabilities, Management Board members are expected to participate regularly and fully in advancing the goals and objectives of the LMVJV. Board members are expected to attend two Management Board meetings a year, participate in conference calls or *ad hoc* working groups, and fulfill other such responsibilities in the course of a year as may be deemed appropriate by the Board as a whole.

As further described in the *LMVJV Operating Procedures (Appendix C)*, the Board is open, on an adjunct basis, to agencies, organizations, or individuals whose mission may not lend itself to sharing fully in the broad spectrum of conservation actions inherent in implementing national and international bird conservation plans, yet have an abiding interest in a joint commitment of energies and resources on specific areas of mutual concern.

LMVJV Support Office In furthering the purpose and mission of the Joint Venture, the Management Board is supported by a full time professional and technical staff. While the Joint Venture Support Office may receive funding and staff from other partners, the Office will operate as a field station of the U.S. Fish and Wildlife Service in the service of the LMVJV Management Board. The Joint Venture Coordinator and associated staff will be responsible for facilitating, guiding, and leading the various working groups created by the Board in pursuing all facets of Joint Venture implementation.

Working Groups Management Board representatives engage their professional and technical staff in the various facets of Joint Venture implementation through the forum of permanent or *ad hoc* Working Groups, Technical Committees, Teams, Conservation Delivery Networks, and/or networks and active sub-partnerships.

Technical Expectations

- *MB* – Members bring significant resources to the partnership
- *MB* – Process in place for periodic self-assessment
- *Budget/Grant/Admin* – Admin staff capable of handling grants, etc.
- *Budget/Grant/Admin* – Grant writing capacity (partners and/or staff)
- *Budget/Grant/Admin* – Cultivates new sources of funding
- *Budget/Grant/Admin* – Annual and long-range development planning
- *Technical* – Science Coordinator & Geospatial Technician
- *Technical* – Functional Technical Committees with full partnership participation

Priorities

High

- a) Consistent, high-level engagement and involvement from Management Board members
- b) Consistent, high-level engagement and involvement from partner staff in both technical and delivery related activities
- c) Effective two-way communication of LMVJV activities, accomplishments, and needs by JV Support Offices staff among Management Board members, their organizations' staff, and other partners
- d) Effective two-way communication of LMVJV activities, accomplishments, and needs by Management Board members within their organizations
- e) Cultivating relationships with key decision-makers and governmental delegations contributing to the policy and funding mechanisms that support the broader conservation objectives of the joint venture partnership
- f) Cultivate existing and capitalize on new sources of funds
- g) Sufficient JV Office budget to support staff, travel, and activities

Strategies

Achieving all but priority G above is largely a function of effective communication. These issues are addressed within the "Communication, Education, and Outreach" section of this document, and detailed in the LMVJV's 2020 Communications Plan. Joint Venture partnership accomplishment tracking will continue to focus on elements of Desired Characteristics for Habitat Joint Venture Partnerships (Appendix B) and the LMVJV Operational Compass (Appendix A).

JV Support Office staff will continue to dialogue with partners and potential funders (foundations, federal grants, state grants, other private sources) to craft messages depicting conservation action within the LMVJV partnership as a well-organized, science grounded, and trustworthy investment. In particular, the LMVJV's approach to conservation design along with the existence of highly functional Conservation Delivery Networks provides a "complete package" that is attractive to funders.

BIOLOGICAL PLANNING

Goal 2: Landscape-oriented, biologically driven, partner vetted, up-to-date population objectives for priority species within all bird guilds in both BCRs by 2029

Establishing biologically-based, landscape-scale, transparent population and habitat objectives has been central to the work of the LMVJV for over three decades.

Appendix A summarizes an assessment of the progress/status to date of each functional element within the Bird Conservation Enterprise, organized by BCR. LMVJV accomplishments in Biological Planning, particularly for waterfowl, landbirds, and shorebirds, have been extraordinary. Such progress largely has been the product of partner commitment (evidenced by investment of staff time and other resources) coupled with JV Support Office staff technical expertise and leadership. It is important to understand that **one does not get very far without the other**. Success in biological planning has been characterized by the commitment of JV Support Office staff co-leadership with a partner “chair” and significant intellectual input by partner staff, technical input by partner staff where available and appropriate, and significant technical input by JV Support Office staff. Closing the existing gaps (and remaining current) in biological planning requires similar, continued commitment and effort by the partnership.

Coordination/Partnership Expectations

- JV partners integrate JV biological objectives with relevant work of their agency

Technical Expectations

- *Biological Planning Unit* – Biological Planning Units defined as BCR or sub-BCR
- *Priority Species* – Final list of priority birds
- *Population Objectives* – Explicitly set with documentation of the process and identification of uncertainties
- *Limiting Factors* – Demographic factors targeted by habitat management actions
- *Species/Habitat Relationships* – Explicitly stated population-habitat models with assumptions documented as testable hypotheses

Required Elements to Meet Expectations

- Science Coordination
- Partner leads for each bird guild (waterfowl, landbirds, etc.)
- Identification and provision of Working Group participants by Management Board members
- Other subject experts
- Sufficient, relevant biological information
- Technical capacity for modeling, analysis, etc.

Status

Solid progress has been made over the past five years in reducing deficiencies in Biological Planning, particularly in the WGCPO. The largest remaining deficiency in biological planning occurs in Waterbirds. However, we also recognize the importance of timely update and revision to outdated plans (Waterfowl, Landbirds within Open Pine in the WGCPO).

Priorities

Perhaps chief among the criteria for prioritizing biological objective activities is the degree to which the lack of (or need for updating) biological planning hampers the effective delivery of conservation in support of priority birds. Posed as a question, where would LMVJV strategic Biological Planning have the greatest influence to increase our partners' ability to focus effort, garner additional resources, and achieve results in bird habitat conservation? This logic would suggest the following priorities:



Strategies

A community of scientists thoroughly familiar with and contributing to the science needs of the LMVJV is critical. Achieving significant progress towards setting and/or refining LMVJV biological objectives depends upon a critical mass of subject matter experts to help assemble the available information, evaluate the range of approaches, then apply their expertise to arrive at useful and defensible objectives. The Science Team is encouraged to reach out to, cultivate, and organize an array of science specialists composed of long-standing contributors as well as scientists who are new

to the LMVJV partnership. In addition, JV staff will coordinate and collaborate with other Joint Ventures as appropriate.

The Senior Science Coordinator, Avian Ecologist, and/or representative of the Science Team should report at least annually to the Management Board on progress towards meeting the partnerships' Biological Planning objectives. Identification and discussion of barriers to achieving priority tasks would afford the Management Board an opportunity to better understand challenges and endeavor to find solutions to specific problems.

CONSERVATION DESIGN

Goal 3a: Up-to-date habitat objectives for priority species within each bird guild in both BCRs by 2029

Goal 3b: Effective decision support tools to link and integrate habitat objectives for priority species in each bird guild and other relevant resource concerns, useful for delivery action by 2029

Conservation Design, in its simplest form, makes the first tangible connection between biological objectives and the landscape those objectives are meant to affect. Hence, this aspect of the conservation enterprise is often key to our ability to successfully translate biological objectives into effective action “on the ground”.

As with Biological Planning, the LMVJV has been relatively productive in this aspect of the conservation enterprise. In fact, across bird taxa and BCRs, Conservation Design expectations

are among the most up-to-date of all the conservation functions (**Appendix A**). The MAV Forest Breeding Bird Decision Support Tool, stepped-down waterfowl objectives, Conservation Layers Planning Tool, and Potential Natural Vegetation models are but a few examples.

Coordination/Partnership Expectations

- Implements strategies to use JV science products to target and enhance delivery programs
- MB members build strong linkages to decision makers to strengthen their understanding of JV capabilities and activities

Required Elements to Meet Expectations

In addition to the obvious bird-focused tools and models, Conservation Design can be applied to facilitate understanding of the partnership’s bird objectives and priorities in light of other natural resources and/or socioeconomic goods and services. A relevant example here is the spatial analysis of the nexus of bird habitat priorities alongside other relevant ecological/sociological interests of delivery partners found in CDN Delivery Priority Tools. Such analyses require not only bird conservation expertise, but effective collaboration with scientists familiar with the variety of other available data. This example (and many others) highlights the reality that capturing all reasonable types of knowledge and expertise in a single Science Coordinator, or even Science Team, is not possible. A natural extension of this reality is the need to (1) establish and cultivate positive working relationships with other entities possessing necessary expertise (e.g., other JVs, etc.) and to (2) identify and engage expertise and capacity within partner organizations.

- Science Coordination
- Partner Lead (“Chairperson” in some instances) for Working Groups
- Partner Subject Experts
- Biological Objectives
- Existing, relevant biological information
- Technical Capacity (JV Support Office and/or Partner)

Status

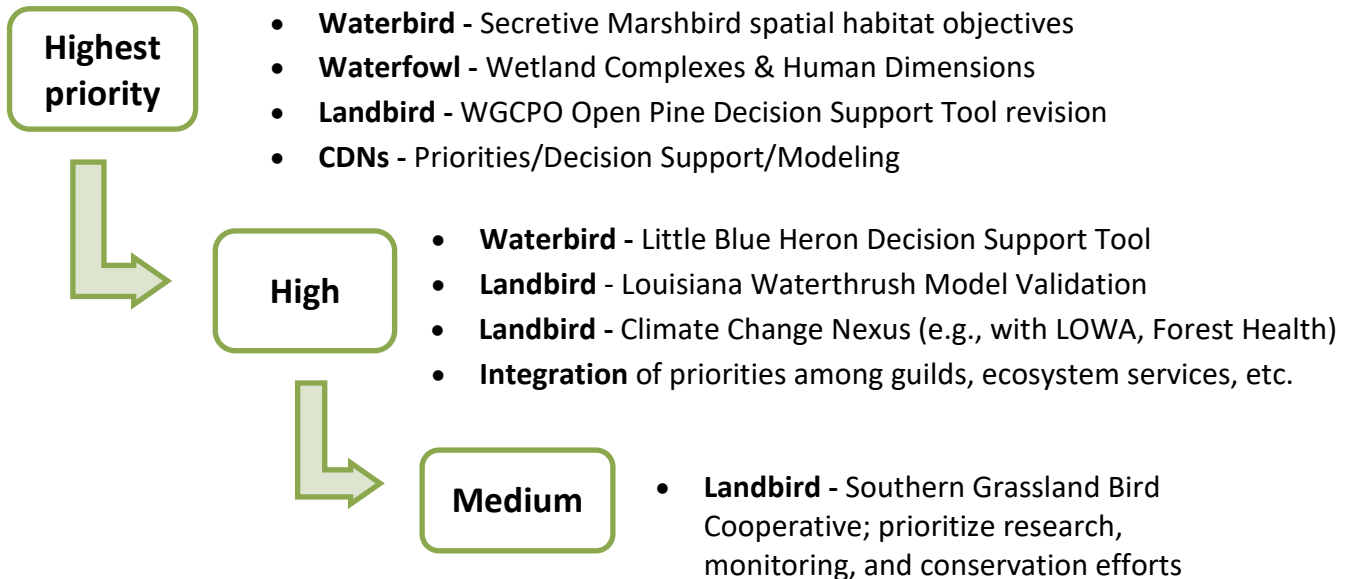
The largest deficiencies in conservation design occur in both the MAV and WGCPD for Waterbirds. Integration of multiple species objectives logically depends upon the existence of multiple objectives, and so will continue to be an area of deficiency until a threshold of various objectives exists. Varying degrees of update are needed in several other areas of Conservation Design within the matrix.

Technical Expectations

- *Landscape Characterization/Assessment* – Rigorous analysis of K based on population models
- *Landscape Characterization/Assessment* – Assess historic and predicted future K
- *Landscape Characterization/Assessment* – Assessment of Conservation Estate, updated at 5-yr interval
- *Decision Support Tools* – Spatially-explicit DSTs for specific actions to overcome limiting factors, distributed to appropriate partners
- *Habitat Objectives* – Explicit, linked to pop. objectives, and stepped down as appropriate
- *Integration of Avian DSTs* – Documented process or integrating priorities among all priority species

Priorities

The criteria for prioritizing Conservation Design activities are the same as those described for Biological Objectives – “where would LMVJV Conservation Design best facilitate the partners’ ability to focus effort, garner additional resources, and achieve results in bird habitat conservation?” This logic would suggest the following priorities:



Strategies

Please see Biological Objectives Strategies (pp. 11-12)

HABITAT DELIVERY

Goal 4a: Actively seek and foster existing and emerging opportunities for coordinated and increased habitat delivery in support of LMVJV objectives

Goal 4b: Fully support the functionality and productivity of existing Conservation Delivery Networks, Tri-state Conservation Partnership, and AR-LA RCPP

Biological Objectives and Conservation Design are only useful to the extent they inform Habitat Delivery in a meaningful way. To this end, the LMVJV partnership has increasingly strengthened its capacity to advance our collective goals and objectives through informed and coordinated delivery professionals in the field. Conservation Delivery Networks (CDNs) were conceived and developed by the LMVJV to address the need to effectively support and improve habitat delivery for migratory birds.

Coordination/Partnership Expectations

- Provides structure and process that generates, attracts, leverages, and implements habitat delivery in support of LMVJV objectives

Partners fully recognize the value in leveraging and sharing resources, focusing collectively on common priorities, and sharing information. CDNs provide fertile ground for these and other productive partnership activities. CDNs are forums whereby members of the Joint Venture and other appropriate conservation organizations coordinate on-the-ground delivery of their otherwise independent efforts, with the scope of coordination intended to include not only the implementation of individual projects, but also the refinement of programs as partners deal with emerging challenges such as urban sprawl, habitat loss and degradation, altered hydrology and changing

Technical Expectations

- *Program Objectives* – Translate bird habitat objectives into explicit program-specific objectives
- *Conservation Actions* – Comprehensive list and documentation of habitat conservation actions, tools, and treatments being deployed by the partnership, including quantification of how they are expected to affect biological outcomes
- *Delivery Capacity* – Fully developed partnership delivering on-the-ground bird conservation explicitly linked to JV objectives

societal attitudes and norms. They provide a functional link for translating biological planning and conservation design tools (science at landscape scales) to effective action on the ground. Importantly, this link also facilitates enhanced feedback from delivery staff to planners.

The role of CDNs, with assistance and coordination provided by Partnership Coordinators, is to:

- (1) facilitate effective exchange of information between planners and delivery staff (e.g., professionals on-the-ground), and
- (2) facilitate more effective communication, coordination, and collaboration among the full spectrum of conservation organizations working to positively impact the landscape for wildlife populations within the Lower Mississippi Valley Joint Venture region.

Addressing these two core tenants through the work of CDNs also results in enhanced utilization of shared resources and leveraging of capacities (i.e., staff, equipment/facilities and funding).

Required Elements to Meet Expectations

Conservation programs of LMVJV partners form the operational link, both individually and collectively, between the JV's ecoregional-scale biological planning and its site-scale and project-scale delivery of conservation. Investment in capacity by the entire JV partnership (e.g., JV Support Office, individual partner organizations) is necessary to coordinate the suite of protection, restoration, and management practices offered within the JV geography. Jointly supported and strategically focused capacity is considered vitally important to successfully maintaining and enhancing the synergies of partner programs. The success of CDNs is demonstrated through the ongoing commitment of partner staff and operational capacity toward achieving the shared conservation goals emanating from these unique collaborative networks. Essential elements include:

- Partnership Coordinator – Mississippi Alluvial Valley BCR
- **?????**Delivery Coordinator – Mississippi Alluvial Valley BCR **?????**
- Partnership Coordinator – West Gulf Coastal Plain/Ouachitas BCR
- Delivery Coordinator – West Gulf Coastal Plain/Ouachitas BCR
- Partner Leads (Chair and Vice-chair per CDN)
- Partner Delivery Personnel
- Biological Objectives, particularly as reflected in landscape scale Decision Support Models
- Technical Capacity (JV Support Office and/or Partner) – particularly geo-spatial information
- Funds to support delivery action

Status

Since the establishment of the first CDN in 2010, formation and support for these eco-regional networks to foster and support the partnership's delivery objectives has proven to be an effective strategy. Over the past 13 years, the partnership has benefited from establishment of these unique delivery focused forums. Although the initial goal of creating eight CDNs across the LMVJV region (four in each BCR), has not yet been achieved, the four that have been established have proven their value to the partnership, and are represented by two within the MAV and two within the WGCP.

The first CDN was formed in the MAV of Arkansas in the fall of 2010 (AR MAV CDN). In the summer of 2012, a two-state CDN was initiated in the Delta of Mississippi and Northeast Louisiana (LA-MS MAV CDN). The NE Texas CDN was initiated in the fall of 2012, followed by formation of the AR-LA WGCP CDN in late 2014. These four networks have provided a unique forum for delivery professionals to meet, collaborate and fellowship several times per year, where there was sporadic or no opportunity before. The tangible outcomes and beneficial accomplishments of these partner led groups are too numerous to list, and there are untold intangible benefits that are difficult to pin down, and may never be documented. These CDNs have successfully worked to increase delivery funding, which has in turn served to support the accomplishment of numerous on-the-ground conservation actions. These partner networks benefit from enhanced knowledge and awareness of past and current research, and have provided practical training to hundreds of delivery professionals. With these successes and continuing efforts, what was originally envisioned has proven successful.

In addition, several partnerships exist that perform many of the desired functions of LMVJV CDNs. For example, Longleaf Initiative Teams in Louisiana and Texas effectively facilitate coordination, communication, and funding for longleaf pine habitat conservation delivery within their respective landscapes. LMVJV partner staff are heavily engaged in these teams, and JV Office staff maintain communication and coordination, as appropriate and practical, serving on the Steering Committee of each team.

Finally, in the spring of 2013, LMVJV partners agreed that significant benefits could result from increasing the level of coordination among NRCS organizations in Arkansas, Louisiana, and Mississippi, and other LMVJV partners in those states. What began as a concept to enhance coordination, has evolved into a well-established three-state collaboration; the Tri-state Conservation Partnership (TCP). The fundamental purpose of this unique effort is to mutually identify specific Farm Bill program delivery elements for which the NRCS could benefit from added support and coordination with its conservation partners. This purpose is coupled with the mutual recognition that the LMVJV's core objectives can be greatly advanced by strengthening coordination and support of NRCS program delivery.

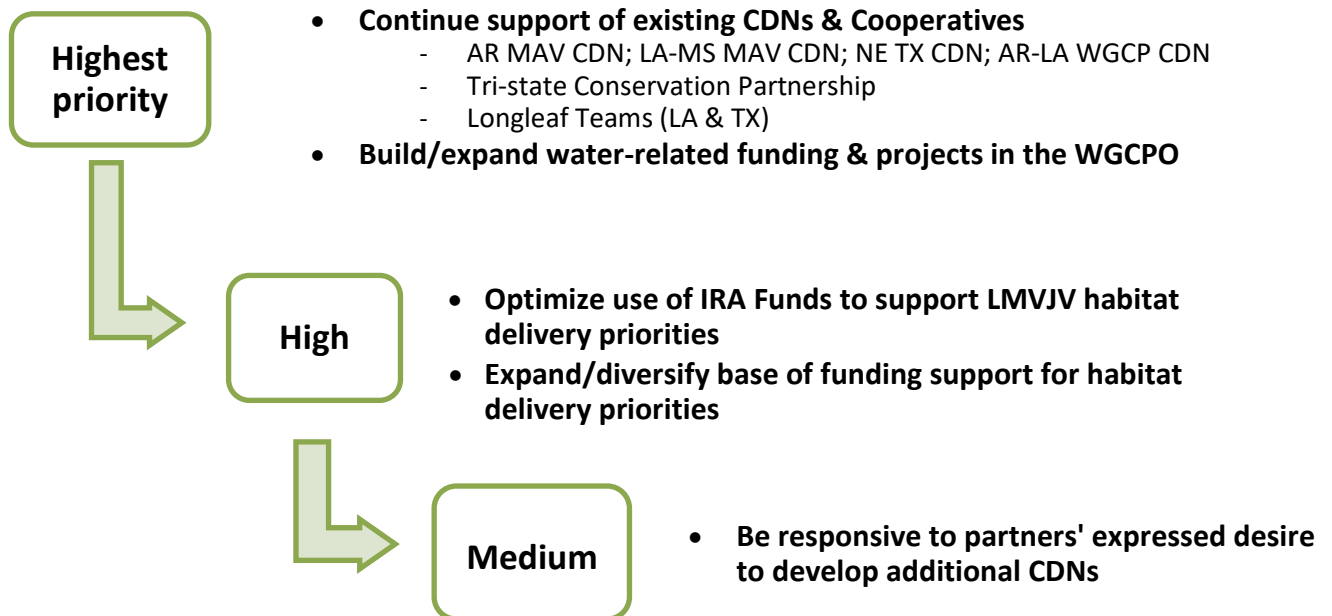
Over the ten years since its establishment, the TCP's collaborative efforts have enjoyed growing support of all involved partners. This has resulted in numerous shared conservation successes including supporting both the establishment and stewardship of Wetland Reserve Easements by obtaining increased funding (e.g., multiple awards of funding for the Wetland Reserve Enhancement Partnership Program [WREP]), developing video and printed materials to support WRE management for landowners and technical professionals, supporting JV NGO partners working to advance Farm Bill policy related to WRE, and working to support NRCS State Offices in the administrative functions associated with WRE restoration and management. Similar to the cooperative work associated with CDNs, the TCP has effectively supported the growth, development, and objectives of the partnership, proving invaluable to meeting long-term MAV delivery objectives of the LMVJV.

Priorities

Continuing to support and advance the existing CDNs, TCP, and Longleaf Teams is a top priority for the LMVJV over the next five years. These established networks have proven extraordinarily valuable to supporting the accomplishment of JV's mission and have great potential for continued success in ensuring that partner investments in conservation are not only delivered efficiently and effectively, but also leveraged to garner additional support. Such additional support potentially comes from a diversity of sources, and making it a reality requires consistent attention, support, and leadership by both JV Office staff and partner staff. Within the MAV, the TCP has become a key asset to both supporting the work of the CDNs as well as helping to directly address core LMVJV priorities and conservation objectives, particularly related to the significant and tangible benefits of the WRE program. Therefore, continuing to support the growth and development of this partnership is considered of equal importance to CDNs within the MAV.

In the WGCP, many partners and potential funders are focused on conservation of water quality and quantity, and the natural nexus between these issues and forest conservation. Hence, the LMVJV will place highest priority on connecting forest bird-related habitat/science and funding opportunities focused on water issues.

Forming new CDNs is a priority for the LMVJV. However, the geographic location, pace of formation, and capacity dedicated to establishment of each is ultimately a function of the support, interest, objectives, and priorities of JV partner organizations within a given geography.



Strategies

To meet the functional goals of the CDNs, the JV partnership will continue to make significant capacity investments in the established networks, particularly regarding support provided by the JV Office staff. LMVJV commitments to supporting and developing existing CDNs, as well as focusing efforts to establish additional networks, will primarily be the responsibility of the JV's two Partnership Coordinators. However, experience has demonstrated that the development of these networks also requires the support of JV technical staff, primarily in the form of conservation delivery-based GIS planning and products. It will be critical, therefore, for the JV to maintain and continue developing its core geospatial technical capacity both within the JV Office and through GIS support of LMVJV partner organizations.

Supporting the development of field technical staff (e.g., private lands biologist, Partners for Fish and Wildlife Biologists, etc.), as well as that of private non-industrial landowners through training and workshops is key to advancing the work of CDNs. The JV Partnership Coordinators will continue to support local partner organizations, as appropriate, in delivering these important developmental opportunities.

Each established CDN is compelled, through direction of the LMVJV's Conservation Delivery Network Charter, to report progress annually to the Management Board. In particular, identification and discussion of barriers to achieving priority tasks would afford the Management Board an opportunity to better understand challenges and endeavor to find solutions to specific problems.

The LMVJVs Charter of the Tri-state Conservation Coordination Committee (now Tri-state Conservation Partnership, "TCP"), along with the Declaration of Partnership with the NRCS in Arkansas, Louisiana and Mississippi, demonstrates an unanticipated yet proven delivery mechanism for the LMVJV. The TCP not only supports the successful functioning of CDNs, it also encourages and facilitates delivery collaboration among JV partners across the MAV and beyond. Therefore, directly supporting the work and success of this partnership will continue to be a core responsibility of the MAV Partnership Coordinator.

MONITORING & EVALUATION

Goal 5a: Monitor and evaluate priority species populations and habitat status at appropriate time intervals across the LMVJV region

Goal 5b: Capitalize on opportunities for effects monitoring that support LMVJV priority habitat conservation actions

Monitoring and evaluation are key elements of strategic conservation because they (1) provide the essential feedback loop which allows for measuring success

Coordination/Partnership Expectations

- Provides structure and process to generate, attract, leverage, and implement outcome-based monitoring in support of JV objectives

towards objectives, and (2) supply much of the raw material for testing important assumptions made in the Biological Objectives and Conservation Design phases. In reality, however, these elements tend to be the most consistently ignored and/or underfunded of all the strategic conservation activities. Fulfilling the expectations of Monitoring and Evaluation will require that the LMVJV address several basic issues, as described in strategies below.

Technical Expectations

- *Conservation Tracking System* – In place, with explicit description of linkage to models for assessment
- *Habitat I&M* – Documentation of objectives and parameters to be inventoried and monitored, with expected process and time interval, and description of how information will be used to inform decisions
- *Habitat I&M* – Net change in habitat conditions assessment every 5 years
- *Population Monitoring* – Documentation of demographic parameters monitored with expected process and time interval, and description of how information will be used to inform decisions

Required Elements to Meet Expectations

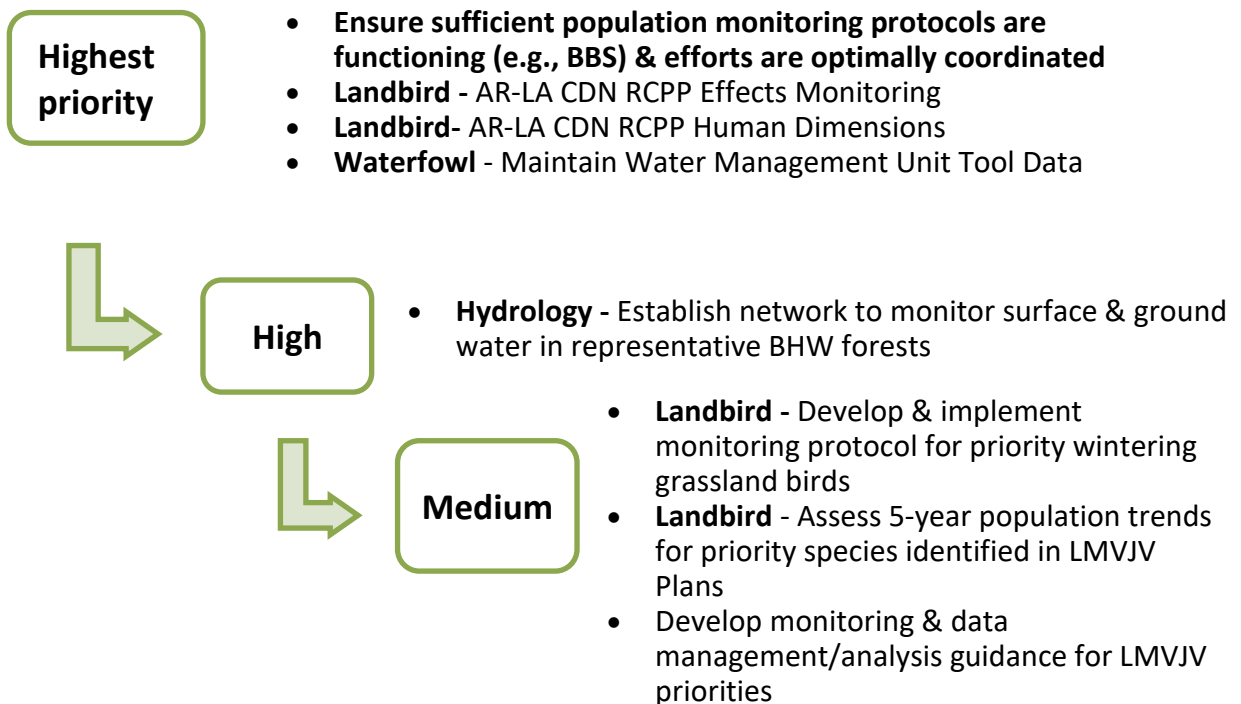
- Science Coordination
- Biological Objectives and Conservation Design elements with clearly defined assumptions
- Monitoring and Evaluation Plan
- Active and effective network of LMVJV partners involved in all facets of key monitoring and evaluation activities

Status

A Monitoring & Evaluation Plan was approved in 2020. Biological Planning and Conservation Design supporting Waterfowl and Landbird conservation in both BCRs are fairly well supported by existing monitoring approaches (e.g., Breeding Bird Survey, LMVJV Wetland Management Unit Tool). The greatest deficiencies in biological monitoring occur for Waterbirds and Shorebirds in both BCRs.

Priorities

Prioritizing monitoring and evaluation requires a thorough review of the partnership’s planning and design assumptions, coupled with an assessment of ongoing and developing monitoring networks and systems. It is expected that priority actions emerging from the 2020 Monitoring & Evaluation Plan will be carried out as feasible.



Strategies

The LMVJV must continue to be vigilant in clearly stating and documenting assumptions made in developing biological objectives and conservation design. Success in monitoring and evaluation is partially predicated on how thoroughly and succinctly the partnership tracks and accounts for important biological responses (habitat quantity/quality, key population metrics, etc.) across our taxa and regions of responsibility. Partners and staff should understand, coordinate with, and where possible, influence ongoing and developing monitoring schemes, systems, and networks to optimize the collective “data collection” efforts. The Breeding Bird Survey, USFWS Refuge Information & Monitoring program, Avian Knowledge Network, and Integrated Waterbird Monitoring & Management program are a few examples of monitoring and evaluation efforts that currently provide or hold promise for providing capacity and organization towards meeting LMVJV information needs. Many LMVJV partners already are involved in these and other efforts. To be successful, a great deal of communication, coordination, and cooperation are needed now and into the future. Hence, strong leadership from the Senior Science Coordinator, Avian Ecologist, and Science Team are necessary to identify opportunities to address high priority Monitoring and Evaluation needs. Deliberate and disciplined execution of the Monitoring and Evaluation plan offers the most reasonable and effective approach to fulfilling our Monitoring and Evaluation goals.

The Senior Science Coordinator and/or representative of the Science Team should report at least annually to the Management Board on progress towards meeting the partnership’s Monitoring & Evaluation objectives. Identification and discussion of barriers to achieving priority tasks would afford the Management Board an opportunity to better understand challenges and endeavor to find solutions to specific problems.

Conservation Plans slated for completion and/or revision during the next five years should include needs and recommendations for population and habitat monitoring priorities.

RESEARCH

Goal 6a: Update and prioritize assumption-driven research needs by 2029

Goal 6b: Active engagement by key research professionals in assumption testing and other applicable research for each bird guild, EGS, and human dimensions in both BCRs

Assumption-driven research applied to issues of importance to the LMJV partnership is necessary for shoring up knowledge gaps and for testing key assumptions made in biological planning and conservation design.

Required Elements to Meet Expectations

- Science Coordination
- Science Team
- Research Strategy
- Diverse and active community of research scientists well aware of LMJV Science Priorities

Coordination/Partnership Expectations

- Provides structure and process generates, attracts, leverages, and implements assumption-driven research activities in support of JV biological targets
- Strong relationship with USGS and universities

Status

The LMJV *Developing and Refining the Biological Foundation of the Lower Mississippi Valley Joint Venture: an Assessment of Biological Planning, Monitoring, and Evaluation Issues* (2002) document was updated in 2014 and 2022 as the *LMJV Science Priorities* document. The Senior Science Coordinator is now actively engaged as an informal advisor and graduate committee member in several relevant research efforts.

Technical Expectations

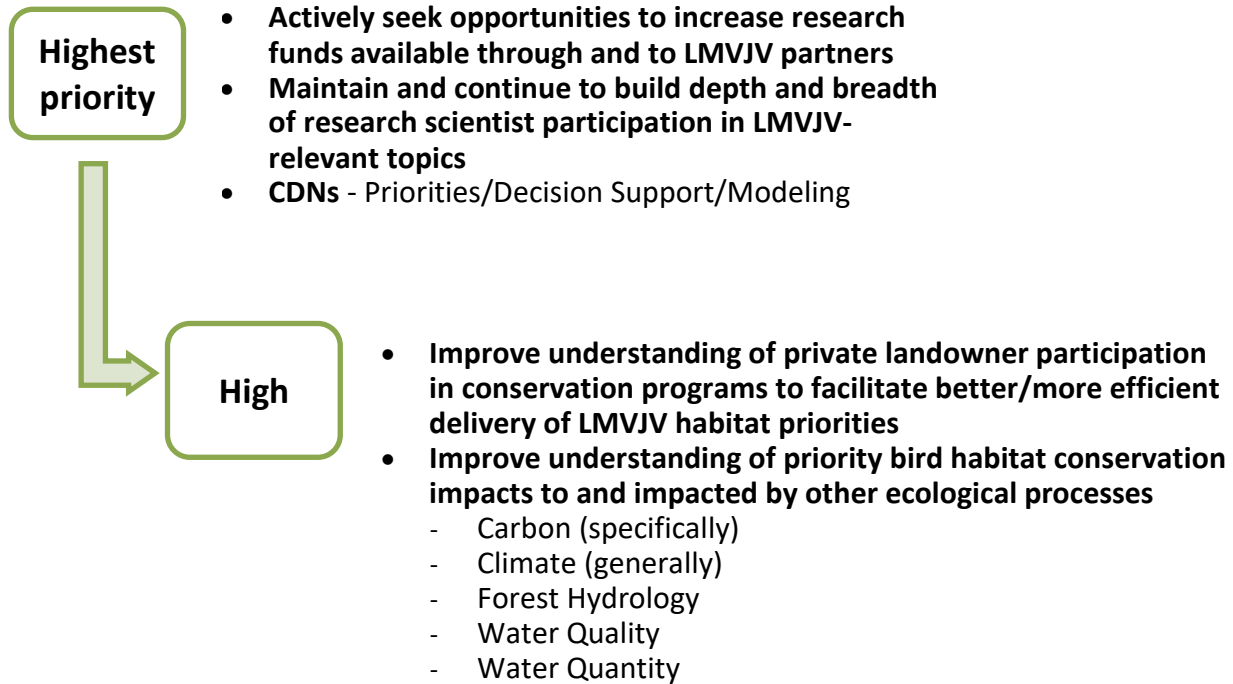
- *Species/Habitat Model Assumptions* – Prioritized, targeted research needed to address uncertainties
- *Conservation Treatment Assumptions* – Prioritized, targeted research needed to address uncertainties about conservation treatments on vital rates/abundance
- *Sensitivity Analyses* – Statistical analysis of key parameters influence on model results
- *Spatial Data Analyses* – Rigorous statistical analyses, and associated refinement, of key uncertainties in spatial data used for planning or monitoring

Research continues at many institutions on subjects that can inform LMJV biological planning and conservation design. Work by faculty, students, and post-docs at the University of Missouri, University of Arkansas Monticello, Mississippi State University, Stephen F. Austin State University,

Louisiana State University, the U.S. Forest Service’s Hardwoods Lab, and U.S. Geological Survey are current examples.

Priorities

The highest priorities for achieving assumption-driven research expectations of the LMVJV are as follows:



Strategies

Joint Venture Support Office staff and JV partners should remain alert to funding sources and other opportunities to address LMVJV science needs within the research community. The Senior Science Coordinator, Avian Ecologist, and Science Team should continue to actively seek out research professionals with geographic and functional areas of interest, facilitating greater knowledge of and participation in the science needs of the LMVJV.

As a practical means of exploring useful avenues in which the LMVJV can contribute to “people” objectives of major bird plans, partners and staff continue to work towards understanding private landowner motivations in conservation program participation. This is most logically accomplished via research in partnership with scientists well versed in Human Dimensions Science.

The Senior Science Coordinator, Avian Ecologist, and/or representative of the Science Team should report annually to the Management Board on progress towards meeting the partnerships’ research objectives. Identification and discussion of barriers to achieving priority tasks would afford the Management Board an opportunity to better understand challenges and endeavor to find solutions to specific problems.

COMMUNICATION, EDUCATION, AND OUTREACH

Goal 7: Address priority actions detailed in the 2020 LMVJV Communications Plan

Communication is central to effective implementation of every aspect of adaptive management and lies at the heart of a fully functional and successful Joint Venture partnership. However, communication takes on different forms, has many different potential audiences, and can operate to address any number of goals and objectives. An effective Communications, Education, and Outreach (CEO) Plan, complete with identification of critical needs and strategies to meet them, enables the LMVJV leadership to clearly understand and enumerate the highest priority issues and provide a means to ensure that we are accountable to those expectations. Both priorities stated below compel the Management Board and Office Staff to carefully determine the highest priorities for action over the next five years, considering all the other priorities (above) that compete for limited staff resources.

Coordination/Partnership Expectations

- Develops effective communications, education, and outreach products and strategies to attract, engage and inform partners, raise awareness, change attitudes and behaviors of key JV audiences
- JV identifies gaps in capabilities and fortifies those as appropriate

Required Elements to Meet Expectations

- JV Office Staff Coordination
- Management Board Participation
- Communication, Education, and Outreach Strategy Developed by National CEOT
- CEO Expertise
- LMVJV-Specific CEO Plan
- LMVJV-dedicated CEP Expertise (e.g., contracted communications professional)

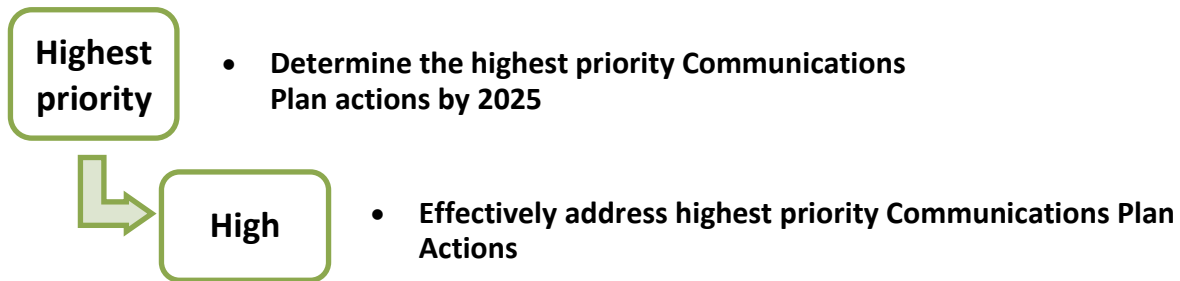
Technical Expectations

- *Priority Audiences* – JV Communication Plan
- *Priority Audiences* – Multiple means of communications established such as partner newsletters, public website, news releases, project tours, meetings, presentations & workshops – each with an associated evaluation plan
- *Audience Objectives* – Correlate audience objectives with bird conservation goals to determine how much and where increases in audience awareness, etc. are necessary to reach conservation objectives
- *Audience Assessment* – Regular formal assessments of priority audiences

Status

The JV completed a revised Communications Plan in 2020 and continues to assemble and disseminate data and technical tools (e.g., MAV Forest Breeding Bird Reforestation Decision Support Model, LMVJV Conservation Layers Planning Tool, on-line Water Management Tool), and share these directly with the conservation community. The LMVJV maintains and updates the lmvjv.org website, providing useful background, biological foundation, literature, objectives, and tools to partners and the public. Distribution of updates and points of general interest to the partnership (e.g., online *News & Updates*) has been accomplished quarterly, as planned. In addition, the LMVJV began distributing a private landowner quarterly newsletter, *Leaders on the Land*, in Summer 2021, continuing through Summer 2022. The LMVJV has not maintained a consistent and comprehensive approach to government outreach.

Priorities



Strategies

Website maintenance and frequent updates are well within the capacity of existing JV Support Office staff and will continue. However, achieving distribution of quarterly News & Updates and other forms of more sophisticated and/or regular communication require at least a modest amount of additional capacity.

Past government outreach by LMVJV partners on behalf of the Joint Venture largely has been opportunistically associated with the annual Association of Joint Venture Management Boards (AJVMB) meeting in Washington D.C., as well as several focused meetings with State NRCS staff and Regional USFWS staff. A more strategic and consistent outreach approach that fosters relationship-building among LMVJV partner staff and key governmental staff likely will prove more effective in garnering future support. The LMVJV Staff and Management Board members will continue to seek

appropriate ways to remain engaged in AJVMB activities and communication and be alert for opportunities for effective outreach and in reach afforded by the AJVMB. These efforts will be guided largely by the National JV Communications, Education, and Outreach Team's Communications Plan. It is critical here to note that many of these AJVMB-related outreach efforts must be lead and conducted by our NGO partners.

The 2012 NAWMP and 2013 Action Plan compels joint ventures to consider and act more explicitly on the human dimensions aspects of waterfowl and natural resource conservation. As the NAWMP partner community develops more tangible human dimensions expectations and actions, the LMVJV will be engaged in these discussions that likely will help shape additional communication, education, and outreach needs.

APPENDIX A. LMVJV OPERATIONAL COMPASS

2024 LMVJV Operational Compass: Strategic Habitat Conservation To Sustain Bird Populations										
SHC Framework	Element/Product	NAWMP	PIF	USSCP	NAWP	NAWMP	PIF	USSCP	NAWP	
Biological Planning	Biological Planning Unit	MAV				WGCPD				
	Priority Species									
	Population Objectives	- ¹				-				81 % ²
	Limiting Factors									-4% ³
	Species/Habitat Models	-			+	-			+	
Conservation Design	Landscape/Habitat Assessment	-			+	-	+		+	
	Assessment of Conservation Estate	-				-				78 %
	Decision Support Tools	-								-2%
	Habitat Objectives	-			+		++		+	
	Integrate Multiple Species Objectives									
Delivery (Action)	Conservation Treatments						++	+		75 %
	Program Objectives						+	+		+5%
Outcome-based Monitoring	Conservation Tracking System	-								
	Habitat Inventory and Monitoring Program	-				-	+			50 %
	Population Monitoring Program	-	++							+27%
Assumption-driven Research	Species/Habitat Model Assumptions	-				-				
	Conservation Treatment Assumptions		+				+			56 %
	Keyfactor/Sensitivity Analyses		+							+3%
	Spatial Data Analyses	--	+			--	+			
Overarching Disciplines ⁴	Hydrological Science									
	Climate Nexus									0 %
	Social Science									
		59 %				58 %				58 %
		-8%				-6%				-7%

¹ Change in status from 2018: "+" = increase by one degree; "++" = increase by two degrees; "-" = decrease by one degree; "--" = decrease by two degrees; Note: Overarching Disciplines were not in the 2018 Operational Compass

² Percent of cells within the group that are green or light green

³ Percent change since 2018 (Northern Bobwhite were collapsed into PIF in 2023, somewhat blurring the interpretation of "percent change")

⁴ Overarching Disciplines were not addressed within the Operational Compass in the 2018 Plan

	Reliable information exists; good mechanisms in place
	Some reliable information exists, but needs to be updated; mechanisms in development
	Not much information available or recognized by JV; needs significant attention; and/or lacking in some guilds within the bird group
	Information absent or of little value; little/no attention paid to this by the JV

APPENDIX B. DESIRED CHARACTERISTICS FOR HABITAT JOINT VENTURE PARTNERSHIPS

DESIRED CHARACTERISTICS FOR HABITAT JOINT VENTURE PARTNERSHIPS

COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
Minimal Content	Comprehensive Content	Minimal Content- Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)	Comprehensive Content- JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics
<p>Joint venture partnership develops a vision for the JV's future; establishes and implements strategies to achieve that vision. Joint venture develops and maintains strategic regional alliances, consistent with the JV's mission. Joint Venture Office provides leadership to develop, with the Management Board, a strategic implementation plan to define and achieve the goals of the partnership.</p>	<p>Joint Venture Office and Management Board actively look to broaden the external partnership with relevant individuals and organizations. JV maintains strong professional contacts and connections, networking to keep the JV abreast of current conservation issues, techniques, etc. Joint Venture Office identifies partner capabilities and works with partners to address any missing capabilities through additional staff, partners, contracts or training. The JV participates in development of common JV funding messages to Congress and cultivates informational relationships with its Congressional delegation and staff. One or more Management Board members regularly participate in the Association of Joint Venture Management Boards and contribute to the health and vitality of that organization.</p>	<p>Joint Venture Office supports Management Board by advising and informing Board members. Management Board has broad representation within the JV geographic region (Fed, State, Non-Profit, Private) and members regularly participate in meetings. Member organizations commit energy and resources to developing a shared vision of bird conservation for the JV and coordinate their otherwise independent actions in the cooperative pursuit and refinement of that vision.</p>	<p>Management Board members bring significant resources to the JV partnership, engage in current issues facing the JV, share responsibilities for JV progress, follow through on commitments and responsibly use their influence for the betterment of the JV. Management Board develops and adopts a process for periodic self assessment that includes relevant goals and metrics for both programmatic and organizational performance.</p>
<p>Joint venture financial system is sophisticated enough to manage grant/contract funds as appropriate. Administrative personnel are on or available to JV staff. Joint venture has grant-writing capacity available in staff and or partner organizations. Joint venture develops and implements fundraising strategies for approaching and cultivating new sources of major support, including foundation and corporate grant programs, and partner contributions. Working with the Management Board, JV Office directs the preparation of annual and long-range development planning.</p>	<p>Financial management system is in place. Administrative support is available to the JV office/staff either directly or through JV partners. Mechanisms exist to receive and expend federal funding in compliance with OMB Circular A-133. Joint Venture Office keeps the Management Board fully informed on the status of the JV's operations and finances. Maintains working knowledge of pertinent funding opportunities.</p>	<p>Joint venture financial system is sophisticated enough to manage grant/contract funds as appropriate. Administrative personnel are on or available to JV staff. Joint venture has grant-writing capacity available in staff and or partner organizations. Joint venture develops and implements fundraising strategies for approaching and cultivating new sources of major support, including foundation and corporate grant programs, and partner contributions. Working with the Management Board, JV Office directs the preparation of annual and long-range development planning.</p>	<p>Joint venture financial system is sophisticated enough to manage grant/contract funds as appropriate. Administrative personnel are on or available to JV staff. Joint venture has grant-writing capacity available in staff and or partner organizations. Joint venture develops and implements fundraising strategies for approaching and cultivating new sources of major support, including foundation and corporate grant programs, and partner contributions. Working with the Management Board, JV Office directs the preparation of annual and long-range development planning.</p>
<p>Technical expertise needs are identified. Joint venture has access to technical staff either directly or through partnership.</p>	<p>Technical expertise needs are identified. Joint venture has access to technical staff either directly or through partnership.</p>	<p>Technical expertise needs are identified. Joint venture has access to technical staff either directly or through partnership.</p>	<p>Joint venture has science coordinator and geospatial technician on staff or available through partners as appropriate. Technical committees for specific bird conservation science needs are in place with full participation from partnership organizations. Technical committees are improving the science of the JV.</p>
Sub Element/ Product	Management Board	Budgeting/ Granting/ Administration/ Funding	Technical Community

ORGANIZATIONAL PERFORMANCE

COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
<i>Element</i>	Minimal Content	Sub Element/Product	Minimal Content- Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)
<p style="text-align: center;">BIOLOGICAL PLANNING</p> <p>Joint venture partnership leads a collaborative effort, often through a technical committee appointed by the Management Board, to build a biological foundation of bird conservation needs that is both based on, and informs, continental, national, or regional bird conservation initiatives</p> <p>Joint venture partners seek opportunities and venues to integrate JV biological planning with relevant work of their agency/organization and with the relevant work of other agencies and organizations active within the JV area. Priority examples include state wildlife action plans, National Wildlife Refuge Comprehensive Conservation Plans, TNC Ecoregional Plans, FWS Migratory Bird Focal Species plans, and National Fish and Wildlife Foundation Keystone initiatives.</p>	Comprehensive Content	Biological Planning Unit (Spatial and Temporal Scales)	<p>Comprehensive Content- JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics</p> <p>Biological Planning Units identified at BCR or sub-BCR scales. Explicit treatment of overlapping planning units within multiple JV admin boundaries.</p>
	Priority Species	<p>A preliminary list of priority bird species or suites of species are identified and justified.</p>	<p>Final list of priority bird species/populations, considering all relevant FWS Birds of Management Concern. Explanation if priority species/populations deviate from priorities in latest bird plan updates.</p>
	Population Objectives	<p>Anticipated population objective variables (abundance, vital rates, etc.) identified. General description of the process that will likely be used to develop population objectives. Description of how those objectives will link to bird plans' continental objectives.</p>	<p>Explicit set of population objectives. Include flexible population objectives as appropriate to account for environmental or seasonal variability. Documentation of the process for deriving population objectives and identification of major sources of uncertainty.</p>
	Limiting Factors	<p>A list of potential factors thought to limit birds in planning unit.</p>	<p>Demographic parameters (e.g., survival rate, recruitment rate) targeted by habitat management actions.</p>
	Species/Habitat Relationships	<p>Type of population-habitat model expected to be developed that will explicitly relate population response to limiting factors (empirical, conceptual).</p>	<p>Explicitly stated population-habitat models. Assumptions documented as testable hypotheses.</p>

CONSERVATION DESIGN

Element	COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
	Minimal Content	Comprehensive Content	Sub Element/Product	Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)
	Commitment of JV partnership to develop technical capacities and planning tools for conservation design.	Joint venture partnership develops and implements strategies to utilize JV science products to better target and enhance conservation programs at the regional level to benefit migratory birds. Joint venture office and/or Management Board members build strong relations with decision makers in state and federal public institutions, private industry, and partner organizations to strengthen their understanding of the joint venture's conservation activities and capabilities.	Landscape/Habitat Characterization and Assessment	General description of ecological setting relative to bird habitat. List of major drivers impacting bird habitat with links to assumed limiting factors and population-habitat relationships. Set of implications to bird population in the absence of partnership intervention. Preliminary summary of bird habitat (acres) protected, managed, and restored in the planning unit. This includes an assessment of all conservation lands that will benefit birds.
			Assessment of the Conservation Estate	
			Decision Support Tools	Description of how the partnership might develop spatially explicit decision support models/tools to guide specific management actions suitable to overcome limiting factors. If deemed appropriate, develop a preliminary set of spatially-explicit focus areas to guide interim conservation delivery activities.
			Habitat Objectives	General estimation of the magnitude of habitat protection, restoration, and enhancement that might be expected of the partnership.
			Integration of avian decision-support tools	Articulate anticipated approach for integrating habitat objectives among species-groups and management treatments for priority avian species/groups.
			Sub Element/Product	Minimal Content- Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)
				Comprehensive Content- JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics
				A rigorous analysis of landscape/habitat carrying capacity based on explicit population-habitat models. Where possible conduct retrospective analysis of carrying capacity (e.g., prior to 1986). Where possible forecast expected carrying capacity with and without partnership intervention and predict impacts of expected major changes (e.g., urban growth, climate change). Thorough analysis of existing bird habitat under protection, management, or enhancement throughout the planning unit. Information should be presented by ownership, state, etc. where applicable. Assessment of the net change in the conservation landscape since the inception of the Joint Venture conducted at <5 year intervals.
				Spatially-explicit decision support tools for specific management actions suitable to overcome limiting factors. Tools distributed to partnership based on population-habitat models where appropriate. Documented analytical process and model assumptions.
				Explicit set of habitat objectives linked to population objectives and based on population-habitat models, carrying capacity, assessment of conservation estate, and decision support models as available. Habitat objectives should be partitioned among sources of habitat (ownership, state) where appropriate.
				Document process for integrating habitat objectives and spatial priorities for all priority species/groups and management treatments. Describe decision-rules for conflict resolution. Describe extent of spatial/temporal overlap in conservation activities.

<i>Element</i>	COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
	Minimal Content	Comprehensive Content	Sub Element/ Product	Minimal Content- Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)
HABITAT DELIVERY	Joint Venture informs and influences partner organizations implementing habitat conservation programs.	Joint Venture provides a structure and process that generates, attracts, leverages, and implements habitat conservation actions in support of JV-established biological targets	Program Objectives	<p>Describe how conservation programs (e.g., Farm Bill, land purchase and restoration programs, etc.) will be linked to biologically-derived bird habitat objectives.</p> <p>General description of anticipated conservation actions, tools, and treatments the partnership expects to deliver to meet the needs of birds.</p>
			Conservation Actions	<p>Translate bird habitat objectives into explicit program-specific objectives (e.g., NAWCA, CRP, WRP, NWR, WMAs, etc.). If appropriate, describe ranking systems developed to inform prioritization and decision-making.</p> <p>Comprehensive list and documented description of habitat conservation actions, tools, and treatments being deployed by partnership, including quantification of how specific conservation actions are expected to affect bird abundance and/or vital rates and to what degree.</p>
			Delivery Capacity	<p>Individual JV partners develop projects to deliver on-the-ground habitat conservation through existing programs</p> <p>Fully developed partnership delivering on-the-ground bird conservation explicitly linked to JV biological planning/conservation design.</p>
				<p>Comprehensive Content- JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics</p>

COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
<i>Element</i>	Minimal Content	Comprehensive Content	Sub Element/ Product
MONITORING	Joint Venture informs and influences partner organizations implementing monitoring programs.	Joint Venture provide a structure and process that generates, attracts, leverages, and implements outcome-based monitoring activities in support of JV-established biological targets	Conservation Tracking System
			Habitat Inventory & Monitoring Programs
			Population Monitoring Program
RESEARCH	Priority research needs are identified and distributed to JV partners and regional research institutions.	Joint Venture provides a structure and process that generates, attracts, leverages, and implements assumption-driven research activities in support of JV-established biological targets. Strong relationship with USGS and universities.	Species/Habitat Model Assumptions
			Conservation Treatment Assumptions
			Sensitivity Analyses
			Spatial Data Analyses

Minimal Content-
Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)

Comprehensive Content-
JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics

Conservation tracking system in place. Explicit description of how information will be used to inform decisions (e.g., increasing performance for Program X). Explanation of linkage between tracking system and biological models so that biological accomplishments can be assessed and reported.

General description of anticipated need for tracking partnership activities (gross partnership accomplishments). A vision for creating that capability among partners. The JV Coordinator solicits information on accomplishments from JV partners, organizes and submits the information to appropriate managers of national databases.

Documentation of habitat monitoring objectives and habitat parameters that will be inventoried and monitored over time. Expected process (e.g., remote sensing) and time interval for data collection. Explicit description of how information will be used to inform decisions (e.g., refining habitat or population objectives). Assessment of the net change in Joint Venture landscape conditions conducted at <5 year intervals.

Documentation of demographic parameters monitored specific to each objective. Expected process (e.g., aerial surveys, nest survival) and time interval for data collection. Explicit description of how new information collected from monitoring programs will be used to inform future planning decisions (i.e., identify the feedback loop).

Prioritized, targeted research needed to address key uncertainties within models (prioritized based on value of better information).

A list of assumptions for population and habitat parameters used in models (e.g., priority species' limiting factors, predicted densities, habitat quality).

A list of assumptions inherent to the conservation actions/treatments of being implemented by JV partners.

A list of key parameters most likely to influence 1) population response variables or 2) habitat objectives.

Prioritized, targeted research needed to address key uncertainties about the impacts of conservation treatments on bird abundance/vital rates.

A list of concerns relating to the limitations of current spatial databases as they may affect conservation planning.

Statistical analysis of key parameters to examine their influence on population or habitat model results based on a range (e.g., confidence intervals) of assumed values (e.g., distance to edge).

Rigorous statistical analyses, and associated refinement, of key uncertainties related to spatial data used for planning or monitoring

Element	COORDINATION/ PARTNERSHIPS		TECHNICAL EXPECTATIONS	
	Minimal Content	Comprehensive Content	Sub Element/ Product	Minimal Content- Expected characteristics and level of performance for newly established and/or minimally-funded JVs (<\$300K)
COMMUNICATION, EDUCATION AND OUTREACH	Mechanisms exist to facilitate communication between Management Board, JV office and broader JV partnership members. Appropriate JV partners or staff represents the JV to the conservation community, resource agencies, and elected officials, both regionally and nationally. The JV maintains an up-to-date website.	Develops effective communication, education, and outreach products and strategies to attract, engage and inform partners, raise awareness, change attitudes, and change behaviors among JV priority audiences to support bird habitat conservation. JV assesses various contributions partners can make to CEO, and has identified gaps in capabilities and fortified those gaps as appropriate.	Priority Audiences	JV has evaluated the efficacy and applicability of education and outreach to achieve its conservation objectives. And has identified priority internal and external audiences and key messages.
			Audience Objectives	JV conducts basic audience objective setting to determine what are the desired levels of awareness, attitudes and changes in behaviors necessary to achieve bird habitat conservation goals and objectives of the JV.
			Audience Assessment	JV conducts informal assessment of priority audiences to determine their baseline level of awareness, attitudes, and behaviors affecting bird conservation in the JV.
				JV correlates audience objectives with bird habitat conservation goals and objectives to determine how much and where increases in audience awareness, changes in attitudes/behaviors are necessary to help reach bird conservation objectives.
				JV conducts regular, formal assessments of priority audiences to measure change in awareness, attitudes and behaviors over time. Assessments can be in the form of focus groups, surveys, interviews or other systematic means of gathering audience data. The results of which are used to revise communications products to be more effective.
				Comprehensive Content- JV Partnership should move toward this content as a Joint Venture matures. Increases in FWS funding are contingent on demonstrated progress toward these characteristics
				A JV Communications Plan is guided by information from biological planning, conservation design, habitat delivery, monitoring and research to target communications geographically, programmatically and to the highest priority conservation need. JV has established multiple means of communications to priority audiences such as, but not limited to: partner newsletters, public website, news releases, project tours, meetings, presentations and workshops. Each tactic has an associated evaluation plan to guide development and assess effectiveness of communications product.

APPENDIX C. LMVJV OPERATIONAL PROCEDURES

Lower Mississippi Valley Joint Venture Operational Procedures

MEMBERSHIP

The LMV Joint Venture is overseen and directed by a private, state, federal Management Board. The LMV Joint Venture comprises three membership options based on an organization's autonomous mission or legislative authority, level of commitment, and breath of accepted responsibility in furthering the conservation goals of the LMV Joint Venture. Regardless of Membership level, it is acknowledged that the commitment of Member agencies/organizations is voluntary and subservient to the organization's mission, authorities, and budgetary capabilities.

Executive Member: Executive Membership is open to any agency or organization that by virtue of mission or legislative authority commits to sharing in the responsibility of implementing national and international bird conservation plans within the LMV region. Executive Member organizations are expected to commit energy and resources to developing a shared vision of bird conservation for the LMV and coordinating their otherwise independent actions in the cooperative pursuit and refinement of that vision.

Executive Member organizations will assign a representative to serve on the Management Board. Executive Board Members are expected to represent their agency or organization at an administrative and policy level on matters pertaining to allocating human and financial resources to the protection, restoration, and management actions that are inherent to sustained, long term conservation.

New Executive Members will be considered by the Board upon receipt of a written request by the Chair from the agency or organization that documents its interest in participating and identifies the individual that would be representing such organization. Consensus of the Management Board is required for acceptance of membership.

Associate Member: The LMV Joint Venture Management Board is open on an Associate basis to other agencies, organizations, or individuals whose mission may not lend itself to sharing fully in the broad spectrum of conservation actions inherent in implementing national and international bird conservation plans but yet has a long-term and abiding interest in a specific facet of Joint Venture implementation (e.g. carbon sequestration, sustainable forestry, wetland restoration, water quality enhancement), and is committed to furthering that aspect of JV implementation through a joint commitment of energies and efforts.

Associate Members will be non-voting but will be invited to participate in all Management Board meetings and in Working Group meetings as appropriate to their area of interest/expertise. With the

exception of non-voting status, only their level of interest and commitment will limit the participation of Associate Members in the development of conservation goals and objectives and the formulation and execution of conservation strategies.

Agencies, organizations, or individuals will be considered for Associate Membership upon receipt by the Chair of a letter documenting the organization's interest and area of expertise in furthering a particular aspect of Joint Venture implementation. Additionally, the Chair may with approval of the Board solicit an organization's participation as an Associate Member. On an annual basis, the Board will review the participation of Associate Members and may, with due notification and at its discretion, remove an agency, organization, or individual from Associate Membership status in the interest of maintaining an active and engaged Management Board.

Cooperating Member: A Cooperating Member is any person, organization, or agency working with an Executive or Associate Member agency/organization in the planning, implementation, monitoring, or evaluation of a specific project or task recognized by the Management Board as advancing the goals and objectives of the LMV Joint Venture. A person, organization, or agency will be deemed a Cooperator by virtue of being identified in any project or proposal or being a party to any management agreement implemented or developed with the specific intent of advancing the goals, objectives, and conservation strategies of the LMV Joint Venture. Cooperators will not routinely be notified of or expected to participate in Management Board or Working Group meetings.

MANAGEMENT BOARD OFFICERS

The LMV Joint Venture Management Board shall be comprised of a Chairperson and a Vice-chairperson. The Management Board will elect both officers to serve 3-year terms with no term limit. The Chairperson will organize and conduct the business meetings of the Management Board. The Vice-chairperson shall preside in the absence of the Chairperson. The Joint Venture Coordinator will assist officers in the preparation and conduction of Management Board meetings. The Joint Venture Coordinator will also record and act upon Management Board actions, serve as custodian of Management Board records, distribute information relating to Joint Venture activities, and maintain and report on Joint Venture accomplishments.

MEETINGS AND ATTENDANCE

Two regular meetings will be held annually (Spring/Summer and Fall/Winter) and shall be of sufficient length to ensure time for full discussion of relevant issues. Additional meetings may be called at the discretion of the Management Board Chairperson. Management Board Executive Members are expected to participate regularly and fully in advancing the goals and objectives of the LMV Joint Venture. Executive Members (or a recognized alternative) will be expected to attend two Management Board meetings a year; participate in conference calls or ad hoc working groups; and fulfill other such responsibilities in the course of a year as may be deemed appropriate by the Board as a whole. If an Executive Board Member misses two consecutive meetings, a letter will be sent by

the Chair to the organization inquiring as to their interest in remaining on the Board. In the event three consecutive meetings are missed, the Board Member/organization will be placed in inactive status until such time as the organization recommits to participate.

Management Board meetings shall be open to Associate Members, Cooperators, staff, or other invitee of Management Board members, members of standing committees, and any other interested party.

DECISION MAKING

Each Executive Member organization carries one vote. The Management Board Officers will participate in all votes. In situations in which consensus is not achieved and the Management Board Chairperson determines that a decision is required, a motion will pass by a simple majority vote of Board members (see quorum). Items requiring a decision or vote must be provided to all Management Board members not less than ten (10) days prior to a Management Board meeting. Decisions/votes may also be conducted via teleconference or e-mail provided there has been 10-days prior notice.

QUORUM

There will be no official business completed by the Management Board via a meeting, teleconference or e-mail without the participation of 8 or more Executive Board Members (including those represented by alternates or proxies).

EXECUTIVE COMMITTEE

Membership on the Executive Committee will be through volunteerism, with formal approval by the full Management Board. The Executive Committee will be composed of ≥ 1 state agency, federal agency, and NGO representative, with total Executive Committee membership not exceeding in number 50% of the full Management Board membership.

The Executive Committee will function to advise LMVJV Office Staff on issues and tasks that

- a) Require quick turn-around, and/or
- b) Benefit from detailed attention by a group smaller than the full Management Board.

Advice from the Executive Committee may take the form of approval, review/comment, and a recommendation to place before the full Management Board.

All substantive decisions and actions of the Executive Committee must be reported to the full Management Board in a timeframe appropriate to the decision or action.

SUPPORT LETTER ENDORSEMENT

Many effective conservation actions require or benefit greatly from expression of support from partners. In fact, the increasing emphasis on broad partnership in granting programs and cost assistance programs places a premium on letters of support and other “endorsements” of projects, efforts, and programs. Not surprisingly then, the LMVJV is asked frequently to provide written support in the form of “letters of support” and other similar documents. This can be especially delicate in matters of government policy, rule-making, etc.

The LMVJV seeks the greatest possible efficiency in responding to such requests so as to minimize the administrative burden on JV partners and staff, while providing support for worthy efforts in a timely manner.

Procedure. To fairly and expeditiously respond to “sign-on” requests, following are the necessary steps:

1. Coordinator receives electronic version of letter, proposal, etc., along with a request for LMVJV endorsement/signature.
2. Coordinator determines compatibility of the document’s content with LMVJV goals and objectives.
 - a. If the content is perceived to be in conflict with LMVJV goals and objectives, the Coordinator will respond with explanation to the sender/originator that, in its present form, the JV cannot provide formal support for the document’s content.
 - b. If the content relates to proposed conservation, research, monitoring, and/or evaluation efforts which are consistent with established LMVJV goals and objectives, the Coordinator will provide a letter simply stating that consistency.
 - c. If the content relates to policy or related matters and is perceived to be consistent with LMVJV goals and objectives, the Coordinator will proceed to step 3.
3. Coordinator will distribute the document via email to the full Management Board, with appropriate explanation, if necessary.
4. Management Board members have 10 full business days to respond with one of the following three responses:
 - a. Support Approved
 - b. Support Not Approved; with (at least) brief reasons for opposition
 - c. Abstain (no response within 10 business days will be considered abstention)
5. Reasonable effort will be given by the Coordinator (time permitting) to attempt resolution of problem issues if a minority of responses is “Support Not Approved”.

LMVJV FY2023 Budget Final

Income/Expense Summary		Partner Contributed ("PC") Funds Summary	
Income		Carryover from FY2022	
FY23 Mig Bird Joint Venture (1234) <i>estimate</i>	\$915,772		\$38,516
Partner Contribution & Agreement Funds		FY23 Contributions	
To Agreements		LDWF	\$17,500
Staff Support	\$25,000	AGFC	
Science Project Support	\$0	NRCS	(\$16,347 in 5-year balance carryover)
		ODWC	\$5,000
		MDC*	\$8,000
		MDWFP	\$5,000
		TPWD*	\$25,000
		TPWD	\$12,000 in kind (office space)
		TWRA*	\$11,250
Income Total	\$940,772	<i>subtotal</i>	<u>\$56,250</u>
Expenses			
Salary & Benefits (USFWS) <i>estimated</i>	\$525,000		
Travel	\$11,000		
Operational	\$10,915	<i>FY23 Subtotal</i>	\$27,500
Regional Office Support (@12.64%)	\$115,793	Total Available	\$66,016
Office Space	\$28,200	Withdrawal: Agreement/Project	-\$25,000
ABC Agreement - Staff (PC, SS, AE)	\$141,024	Balance	\$41,016
ABC Agreement - Comm. Contract	\$10,000	*MDC (\$8,000), TPWD (\$25,000), TWRA (\$11,250) directly to ABC; accounted as reduction in total ABC JV Staff Expense	
Science Project Support	\$78,976		
Expense Total	\$920,908		
Balance	\$19,864		

Agreement / Activity	From PC	From 1234	TOTAL
ABC - Partnership Coordination	\$0	\$21,024	\$21,024
ABC - Science Coordination	\$15,000	\$52,000	\$67,000
ABC - Avian Ecologist	\$10,000	\$43,000	\$53,000
ABC - Communications Contract	\$0	\$10,000	\$10,000
Science Project Support	\$0	\$78,976	\$78,976
	\$25,000	\$205,000	\$230,000

LMVJV FY2024 Budget Forecast

Income/Expense Summary

<i>Income</i>	
FY24 Mig Bird Joint Venture (1234) -8%	\$842,510
FY23 Carryover	\$19,864
Partner Contribution & Agreement Funds	
To Agreements	
Staff Support	\$0
Science Project Support	\$45,000
Income Total	\$907,375
<i>Expenses</i>	
Salary & Benefits (USFWS) 4.73% increase	\$495,509
Travel	\$15,000
Operational	\$15,000
Regional Office Support (@12.64%)	\$115,793
Office Space	\$28,200
ABC Agreement - Staff (PC, SS, AE)	\$150,000
ABC Agreement - Comm. Contract	\$10,000
Science Project Support	\$70,000
Expense Total	\$899,501
Balance	\$7,874

Partner Contributed ("PC") Funds Summary

Carryover from FY2023		\$41,016
FY24 Contributions		
Source	To ABC	Pending
LDWF		\$17,500
AGFC		
NRCS	<i>(FY24 funds already in ABC agreement)</i>	
ODWC		\$5,000
MDC*	\$8,000	
MDWFP		\$5,000
TPWD*	\$25,000	
TPWD	<i>\$12,000 in kind (office space)</i>	
TWRA*	\$11,250	
<i>subtotal</i>	<u>\$56,250</u>	<u>\$10,000</u>
FY24 Subtotal		\$17,500
Total Available		\$58,516
Withdrawal: Agreement/Project		-\$45,000
Balance		\$13,516

*MDC (\$8,000), TPWD (\$25,000), TWRA (\$11,250) directly to ABC; accounted as reduction in total ABC JV Staff Expense

Agreement / Activity	From PC	From 1234	TOTAL
ABC - Partnership Coordination	\$0	\$25,000	\$25,000
ABC - Science Coordination	\$0	\$50,000	\$50,000
ABC - Avian Ecologist	\$0	\$75,000	\$75,000
ABC - Communications Contract	\$0	\$10,000	\$10,000
ABC - WGCPD Delivery Coordination	\$0	\$0	\$0
Science Project Support	\$45,000	\$25,000	\$70,000
	\$45,000	\$185,000	\$230,000



Science

Secretive Marsh Bird Breeding Population and Habitat Objectives Summary

1 INTRODUCTION

Secretive marsh birds include members of the rail, grebe, bittern and coot families that are strongly associated with emergent wetlands. Many of these species are difficult to observe and are not monitored effectively unless through specialized, targeted surveys. The 2022 State of the Birds report noted that, although many wetland-dependent species such as waterfowl are experiencing population increases, almost one-third of waterbirds, including secretive marsh bird species, are in decline (North American Bird Conservation Initiative 2022).

Secretive marsh birds are a high priority bird guild for the Lower Mississippi Valley Joint Venture (LMVJV) partnership. In 2006, the Southeast Waterbird Plan (SEWP) outlined population estimates, population goals, and habitat goals at that time (Hunter et al. 2006). The SEWP has served as the planning foundation for the LMVJV for waterbirds. The lack of updated planning until now represents the paucity of data and biological information for this bird guild, especially in the LMVJV geography. The LMVJV geography includes two Bird Conservation Regions (BCR) – the Mississippi Alluvial Valley (MAV) and West Gulf Coastal Plain/Ouachitas (WGCP). The LMVJV currently has a project underway to better understand King Rail (*Rallus elegans*) habitat needs and associations. However, in the interim, the LMVJV has a need to set population and habitat objectives for secretive marsh birds.

1.1 PRIORITY SPECIES

Based on the SEWP and confirmation from waterbird experts, the LMVJV has selected a suite of priority breeding and non-breeding secretive marsh birds. Information is much more limited for non-breeding secretive marsh birds. Non-breeding waterbirds will be discussed in a future comprehensive secretive marsh bird plan. Therefore, our current objectives are focused on population and habitat goals for breeding secretive marsh birds. Priority breeding marsh bird species include: King Rail, Least Bittern (*Ixobrychus exilis*), Purple Gallinule (*Porphyrio martinicus*), Pie-billed Grebe (*Podilymbus podiceps*), Common Gallinule (*Gallinula galeata*), and American Coot (*Fulica americana*; Table 1).

King Rail are of significant conservation concern continentally, labeled as a Yellow Watch List species (Panjabi et al. 2022) and Tipping Point species (North American Bird Conservation Initiative 2022). They are also of greatest conservation concern regionally, classified as Immediate Management need (IM) in the MAV and Management Attention (MA) in the WGCP (Panjabi et al. 2021; Table 1). Designation as IM signifies species of regional concern that have high regional threat scores combined with a large population decline. Conservation action is recommended to reverse or stabilize significant, long-term population declines where lack of action may put species at risk of extirpation. Designation as MA signifies species of regional concern with moderate threats and undergoing moderate to large declines. Management and conservation actions are recommended to reverse or stabilize significant, long-term population declines where threats are moderate (Panjabi et al. 2021).

Priority status for the other secretive marsh bird species results from uncertainty or small decreases in their population trajectory and threats which are not well-known. Although other priority species do not rank as high in regional concern score, they are an important planning responsibility for the LMVJV. Additionally, we need to work towards a better understanding of their population status in our geography.

Table 1. Priority breeding secretive marsh bird species in the Lower Mississippi Valley Joint Venture region listed in order of regional concern scores. Population trends are described qualitatively based on the Avian Conservation Assessment Database scoring. Regional Concern Scores represent the combination of population size, threats during the breeding season, population trends, and breeding density. Higher concern score indicates a greater degree of known threats or decreasing trends. MA represents Management Attention is warranted and IM presents Immediate Management is needed.

Species	Population Trend	Regional Concern Score (WGCP/MAV)
King Rail	Significant large decrease to moderate decrease	16 (MA)/17(IM)
Least Bittern	Uncertain to small decrease	13/14
Purple Gallinule	Uncertain to small decrease	13/13
Pied-billed Grebe	Uncertain to small decrease	11/12
Common Gallinule	Uncertain to small decrease	11/11
American Coot	Uncertain to small decrease	10/11

2 METHODS AND RESULTS

We used a step-down process for establishing regional breeding population estimates and deriving regional habitat goals. We first established a U.S. and Canada based total population estimate, then estimated the percent of the U.S. and Canada population in our LMVJV region to derive a regional population estimate.

$$\text{Total U.S. \& Canada Population} * \text{Regional Percent Population} = \text{Regional Population Estimate}$$

From the regional population estimate, we then calculated a regional habitat goal based on the species with the greatest documented territory/home range size requirement. The regional habitat goal serves as our overarching habitat objective for breeding secretive marsh bird species.

$$\text{Regional Population Estimate} * \text{Habitat Requirement} = \text{Regional Habitat Goal}$$

Next we estimated current habitat for breeding secretive marsh birds. This represents the portion of the goal that should be actively maintained as secretive marsh bird habitat. We then used our estimates of amounts of emergent wetland habitat compared to the regional habitat goal to calculate a goal of additional habitat needed.

$$\text{Estimated Current Habitat} - \text{Regional Habitat Goal} = \text{Additional Regional Habitat Goal}$$

Given the uncertainty in population estimates for this suite of species, we generated a conservative regional habitat goal. Our overall goal is to provide and maintain sufficient high quality emergent

wetland habitat for the estimated regional population. Methodology for calculating specific components of our estimates are described below.

2.1 TOTAL POPULATION ESTIMATES

In order to establish regional population estimates, we first used total population estimates from the U.S. and Canada. The most reliable published source of these population estimates was from Rosenberg et al. (2019), which we compared to the SEWP (Table 5a) estimates derived from BBS data. Rosenberg et al. (2019) relied heavily on BBS information with updated modeling and estimation approaches as described in Stanton et al. (2019). Our Waterbird Working Group agreed with moving forward using the total population estimates from Rosenberg et al. (2019) in Table 2.

Table 2. Population estimates (number of individuals) for priority secretive marshbird species based on Breeding Bird Survey (BBS) data in Rosenberg et al. (2019) for U.S. and Canada.

Species	Population Estimate in U.S. and Canada (number of individuals)
King Rail	63,219
Least Bittern	131,773
Purple Gallinule	19,522
Pied-billed Grebe	1,138,963
Common Gallinule	500,214
American Coot	5,517,522

2.2 PERCENT POPULATION IN LMVJV REGION

Three sources were available to derive a percent of the total U.S. and Canada population that is estimated to be in the LMVJV region. These three sources included the SEWP, Avian Conservation Assessment Database (ACAD), and eBird. Specific descriptions of how each calculates percent population is described below.

SEWP: Population estimates (pairs within each state or BCR) were based on expert opinion, and were then grouped into categories. General population estimates from Breeding Bird Survey (BBS) were used to calculate percent of the regional population represented by each BCR, as well comparing the region to total U.S. and Canada combined and global populations.

ACAD: This percent population was derived from global population and global percent breeding. We calculated a U.S. based population estimate based on estimates (global pop*global percent breeding) in Bird Conservation Regions. Then we re-calculated the percent of the US population in each BCR. The percent of US population in LMVJV represents the combination of BCR 25 and 26. Global population estimates were based on either: 1) eBird derived percent pop (years: 1970-2017); 2) BBS derived percent pop (years: 2005-2014); or 3) eBird and BBS derived percent pop. Percent global population for King Rail, Least Bittern, and Purple Gallinule were based on eBird frequencies; Pied-billed Grebe and Common Gallinule were based on BBS data; and American Coot was based on eBird and BBS.

eBird: We used STEM Relative Abundance (RA) estimates for each species, summed the relative abundance estimates (breeding season mean relative abundance) from STEM models across the LMVJV region (BCR 25 & 26) and then divided it by the sum of the relative abundance estimates across all US/CA BCRs (similar to the eBird global percent population that uses the entire breeding range). The

STEM model RA is based on 2021 habitat data. For each species the breeding season dates to achieve a breeding season mean relative abundance were: COGA: 24 May - 6 Jul; PUGA: 10 May-24 Aug; KIRA: 17 May-20 Jul; PBGR: 31 May-28 Jun; LEBI: 7 Jun-20 Jul; AMCO: 31 May-7 Sep.

Table 3 compares estimates of percent population in the LMVJV (WGCP & MAV) from the SEWP, with ACAD derived percent population for the U.S. and Canada, and eBird STEM RA for the U.S. and Canada. Given the uncertainty in determining a regional percent population, the Waterbird Working Group agreed to use the average of all three sources.

Table 3. Percent of total breeding population (U.S. and Canada) estimated in the LMVJV region (WGCP & MAV) based on three data sources: estimated breeding percent in the Southeast Waterbird Plan (SEWP), estimated breeding percent based on Avian Conservation Assessment Database (ACAD), and eBird STEM relative abundance (RA) for breeding as well as the average of all three sources.

Species	SEWP Percent of US/CA breeding population in LMVJV	ACAD Percent of US/CA breeding population in LMVJV	eBird RA Percent of US/CA breeding population in LMVJV	Average percent of sources
King Rail	2.0	10.5	1.9	4.79
Least Bittern	2.3	8.06	9.4	6.59
Purple Gallinule	0.06	17.26	10.2	9.17
Pied-billed Grebe	0.12	0.47	3.8	1.46
Common Gallinule	0.98	4.18	8.1	4.42
American Coot	0.04	0.01	0.08	0.04

2.3 REGIONAL POPULATION ESTIMATES

Using population estimates from Rosenberg et al. (2019), and given the uncertainty in determining a regional percent population, we calculated a LMVJV-wide population estimate for breeding pairs using the average of the percent population (Table 4). When compared to estimated number of pairs stated in the SEWP (KIRA: 803; LEBI: 3,377; PUGA: 100; PBGR: 1,700; COGA: 900; AMCO: 1,198), experts felt that the numbers in Table 4 were a reasonable starting point for determining habitat needs.

Table 4. Proposed regional LMVJV population breeding estimates for priority secretive marshbird species based on percent population estimates from Table 3. Estimated population values are represented as pairs.

Species	LMVJV estimate (pairs) using average percent population in the region
King Rail	1,514
Least Bittern	4,340
Purple Gallinule	895
Pied-billed Grebe	8,333
Common Gallinule	11,055
American Coot	1,195

2.4 REGIONAL HABITAT ESTIMATES AND GOALS

We determined the number of acres of potential emergent wetland habitat using a remotely-sensed classification produced by the LMVJV (https://static1.squarespace.com/static/5bb3865d2727be6f94acf2fc/t/631a6648c8168c60cb29bb55/1662674506346/Emergent+Marsh+Classification+Summary_final.pdf). The target habitat in the classification was palustrine emergent wetland with minimal woody vegetation and open water, namely marshy areas with erect, rooted, herbaceous hydrophytes, with <10% woody vegetation cover and <10% open water. The association of this palustrine emergent wetland with sufficient open water is important for some marsh bird species, but our classification was targeted at finding the areas of sufficiently dense emergent vegetation. Our emergent wetland layer was then adjusted for the needs of secretive marsh bird home ranges.

Based on a literature review of territory size and home ranges, of which notably limited information was available, we calculated habitat acreages to support the estimated number of breeding pairs based on the population estimates in Table 4. Assuming the needs of the species with the greatest habitat requirement within emergent marsh, Least Bittern, would satisfy the need of all species, the total habitat goal is 42,095 ha (103,975 ac). This represents a baseline objective of emergent marsh in suitable condition for secretive marsh bird species.

Table 5. Habitat requirements of priority secretive marsh bird species based on estimated LMVJV population size and average territory size or home range from the literature review. Species are listed in order of the size of their habitat requirement.

Species	LMVJV Pair Estimate	Territory size or home range (ha) per pair	Habitat Requirement per species (ha)	Habitat Requirement per species (ac)
Least Bittern ¹	4,340	9.7	42,095	103,975
Common Gallinule ²	11,055	1.2	13,266	32,766
Pied-billed Grebe ³	8,333	1.31	10,917	26,964
King Rail ⁴	1,514	4.4	6,662	16,455
American Coot ⁵	1,195	1	1,195	2,953
Purple Gallinule ⁶	895	1.03	922	2,278

¹Mean home range was 9.7 ha (range 1.8-35.7 ha), depending on whether the birds used one or two areas during the breeding season (Bognar and Balsadarré 2002).

²In Louisiana, mean home range sizes determined by radiotelemetry were: nesting adults, 1.2 ha (n = 12); non-nesting adults, 5.7 ha (n = 2); juveniles, 6.0 ha (n = 6; Matthews 1983)

³Average home range 1.31 ha (n = 44; Glover 1953)

⁴Home range sizes at 3 sites were 4.4 ha ± 0.6 SE; 11.9 ± 4.1 SE; and 27.3 ha ± 5.5 SE depending on the amount of open water (Pickens and King 2013). We chose the more conservative value given small sample sizes.

⁵Home range size dependent on habitat, but not area sensitive so used 1 ha minimum wetland size (Brown and Dinsmore 1986)

⁶Home range (minimum polygon method) for 4 nesting Purple Gallinules as established by radiotelemetry was 1.03 ha in a Louisiana impoundment (range 0.63–1.68; Matthews 1983)

According to our emergent wetland data layer, there is a total of 89,964 acres of emergent marsh that is approximately 10 ha (25 ac) or greater in size. Based on a preliminary assessment, the wetland classification has an accuracy of approximately 65%. Therefore, we reduced the estimated available amount by 35%, resulting in total emergent wetland of 25 ac or greater estimated to be 58,477 acres.

With an estimated overall habitat goal for secretive marsh birds of 103,975 acres and the estimated existing habitat of 58,477 acres, an additional 45,498 acres of emergent wetland habitat is needed, and the current 58,477 acres need to be maintained in suitable condition for secretive marsh birds.

3 DISCUSSION AND NEXT STEPS

Emergent wetland habitat is not a common habitat feature within the LMJV region. However, the LMJV partnership recognizes that emergent marsh, such as permanent and semi-permanent wetland composed of sedges, rushes, arrowhead, etc., is an important habitat component for a variety of birds and other wildlife. Most wetland habitat is provided as annual waterfowl habitat or through flooded forested wetlands. Recently, Malone et al. (2023) outlined a number of management strategies for waterfowl that complement management for secretive marsh birds, as well as practices that may not be compatible but could be altered to benefit secretive marsh birds. With the current estimated habitat need of 103,975 acres, it is important for partners to consider their ability to improve current habitat to achieve our objectives for secretive marsh birds.

We recognize that there is a degree of uncertainty with parameters that have been used in estimating population and habitat goals. The Waterbird Working Group will continue to address uncertainties in our biological planning for secretive marsh birds, especially uncertainty in population statuses and estimates. We will refine habitat estimates based on occupancy models and habitat needs, as new/improved data are available. We will continue validation of emergent marsh data layer, and we will continue to promote habitat management for secretive marsh bird species.

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Lower Mississippi Valley Joint Venture Forest Hydrology Working Group

DRAFT Charter

Purpose:

The LMV Joint Venture Forest Hydrology Working Group (hereafter “Working Group”) will serve as the technical forum for coordination among Joint Venture partners on the science and management of surface and subsurface hydrological processes that impact forest health and conservation. The Working Group will strive to assemble a diversity of members to ensure that Joint Venture partners have access to the most relevant forest hydrology information. The Working Group will also seek to ensure that the conservation actions and programs of Joint Venture partners are informed by the best possible understanding of the forest health and conservation nexus, considering both contemporary and future hydrology.

The Working Group is empowered to:

- 1) Assemble and synthesize relevant hydrological information towards a comprehensive understanding of the interrelationships among forest health, forest management, reforestation & afforestation efficacy, and hydrological processes.
- 2) Translate this understanding into products that provide guidance to the management goals and objectives of Joint Venture partners.
- 3) Develop and ensure maintenance of a system of surface and subsurface monitoring sites contributing directly to a central model framework focused on increasing understanding of hydrological processes and how these impact forest function. It is anticipated that this framework will lend itself to incorporation of models that predict climate and anthropogenic drivers of hydrological change.
- 4) Identify research issues and needs pertinent to building the LMVJV forest hydrology base of knowledge, and facilitate the development and implementation of associated research projects.
- 5) Reach beyond traditional LMVJV partner Organizations (e.g., Agriculture, Engineering, etc.) and Divisions (e.g., Fisheries, Aquatics, etc.) for WG membership and participation.
- 6) Organize such *ad hoc* or standing sub-committees or working groups as deemed necessary in accomplishing its purpose.

Membership:

Management Board Members will appoint at their discretion one to two Standing Working Group Members. Such members should have a strong

background in conservation-based forestry and/or hydrological management and science. Additionally, the LMVJV Senior Science Coordinator will serve as a Standing Member. Standing Members of the Working Group so appointed, are empowered and encouraged to enlist other such members to the Working Group, and as deemed appropriate to the creation and operation of *ad hoc* or standing subcommittees.

Process:

The Working Group will operate under the broad guidance and direction of the Management Board and with operational oversight provided on behalf of the Board from the Joint Venture Coordinator. The Working Group should operate with an annual work plan that identifies priorities consistent with the purpose of the Joint Venture, and the mission, authorities, and responsibilities of its member agencies and organizations.

The Working Group is expected to select a Chairperson who will, in tandem with the Senior Science Coordinator or other designated Joint Venture Office staff, provide leadership to the Working Group. Leadership activities will include but are not limited to organizing Working Group calls & in-person meetings, communicating activities and needs to the Working Group, drafting meeting agendas, and drafting annual reports.

***Reporting
Responsibilities
And Relationships:***

The Working Group will submit an annual report through the Joint Venture Coordinator to the Management Board at least 15 working days prior to the Board's Fall Meeting. Report topics should include progress and activities associated with the current year's work plan and priorities, issues, findings or recommendations, and a proposed work plan for the ensuing 12 months.

October 12, 2023

OPEN PINE BIRD PRIORITIZATION MODEL v 3.0

Purpose Statement

This decision support tool is intended to help guide management actions supporting conservation of open pine habitat. Specifically, this tool provides information helpful in targeting open pine management (e.g., prescribed fire, thinning) and protection efforts in locations where they have the greatest chance of supporting viable populations of open pine priority bird species (Bachman's Sparrow, Brown-headed Nuthatch, Red-cockaded Woodpecker). Areas indicated as high priority represent areas that most likely have the existing potential to support viable populations of these priority species – they DO NOT guarantee species presence, but rather the likelihood of species presence based on a suite of environmental characteristics.

Species Distribution Modeling

This version of the LMVJV Open Pine Decision Support Tool is built upon ensemble species distribution model (ESM) outputs developed by researchers at Mississippi State University for three open pine priority bird species: Bachman's Sparrow (BACS), Brown-headed Nuthatch (BHNU), and Red-cockaded Woodpecker (RCWO). These foundational distribution models were developed using USFS bird presence data for each species in addition to a separate dataset providing presence points for Bachman's Sparrow provided by LSU, with 15 predictor variables (Table 1). The ESM approach synthesized the output from three distribution modeling techniques including: generalized additive model (GAM), generalized boosted model (GBM) and maximum entropy (MaxEnt). Each species-specific ESM represents the weighted average of these three separate modelling approaches. Each species-specific ESM passed external validation using eBird data and, therefore, were deemed appropriate for downstream processing. See Chapter III in ["Spatial conservation planning in the southeastern United States: alignments and opportunities"](#) (Bradley S. Thornton, 2022) for further details regarding this methodology.

Post-model Processing

Habitat area requirements

Estimates of habitat area requirements and dispersal potential for each focal species are presented in the LMVJV's 2011 Open Pine Landbird Plan (Table 9). To mask out areas that did not meet minimum patch requirements for each species we first generated a forest patch layer, which included the reclassification the most recent NLCD layer (2019) into a binary raster (forest/non-forest) where '1' indicates evergreen (NLCD 42), deciduous (NLCD 41), or mixed (NLCD 43) forest, and '0' indicates all other classes. We then used the 'Region Group' tool in ArcMap v10.8.2 to identify contiguous groups of pixels classified as forest, using the four-neighbor rule. From this output, we used 'field calculator' to calculate the area (in hectares) of each identified patch of contiguous pixels. We then used 'Raster Calculator' to generate species-specific patch

files based on minimum habitat area requirements calculated for each species in the LMVJV 2011 Open Pine Landbird Plan (Table 2). Each species-specific patch layer was then polygonised and buffered using half of the dispersal potential estimated for each species (Table 2). The resulting shapefiles were used to mask each species-specific ESM, so that pixels that did not meet the buffered minimum area requirements were removed.

Thresholding

Thresholding was used to generate a binary raster layer (presence/absence) from each species-specific ESM. We used the maxSSS (maximum sum of specificity and sensitivity) approach, which was shown to produce more consistent results when compared with the other thresholding approaches considered (Liu 2016; Vale, Tarroso, & Brito, 2014). Species-specific cut-off values used were 0.28 (BACS), 0.19 (BHNU), and 0.14 (RCWO). Pixels with values lower than the respective cut-off value for each species were assigned a value of 0 (absent) while pixels with values equal to or above the cut-off value were assigned a value of 1 (present).

Final models

Local scale:

To create a final model at a fine resolution (“local” scale; Figure 1), we calculated, for each pixel, the sum of the three species-specific thresholded models so that a pixel value of ‘0’ indicates unsuitability for all three species, ‘1’ indicates suitability for one of the three species, ‘2’ indicates suitability for two of the species, and ‘3’ indicates suitability for all three species.

Landscape scale:

To incorporate the overall priority of the surrounding landscape for any given pixel, we performed three species-specific focal statistics analyses using the binary layers in ArcMap v. 10.8.2. Using a circle neighborhood with a radius equal to the dispersal potential for each species, we calculated the mean priority value for each neighborhood (Figure 2). We then calculated the sum of the three species-specific outputs and normalized this output by dividing each pixel by the maximum pixel value (Figure 3).

Known Issues and Assumptions

Several known issues and assumptions should be considered when working with this open pine decision support tool. Given that the foundation of this tool consists of species distribution modeling, we must consider the following associated assumptions. First, species distribution modeling methods assume that the species is present throughout the area of interest at all places where climate conditions are suitable, therefore ignoring biotic interactions and dispersal limitations (Guisan and Thuiller 2005). Second, species distribution models assume a stable climatic niche (Guisan and Thuiller 2005). Finally, these models assume that the training data used represent the full range of environmental conditions throughout the species’ current range (Guisan and Thuiller 2005). Given that much of training data were provided by U.S. Forest

Service and obtained through monitoring efforts within federally managed lands, model predictions likely provide a more conservative estimate of suitability, especially considering the proportion of the region that is privately owned. However, the incorporation of additional Bachman's Sparrow presence points from non-government lands works to address this bias.

Other issues to consider when applying this tool include spatial and temporal scale. Temporally, this tool was largely developed using data from 2016 (Table 1). Now that we've provided a framework, future efforts should be made to update this tool, as species presence and geospatial data layers become available. Furthermore, environmental layers used were derived from a variety of sources at varying spatial scales. To address this inconsistency, layers were resampled as necessary to match a 30-meter resolution. As a result of this resampling, some spatial accuracy may have been compromised.

Limited availability of data at the spatial extent of our region of interest restricted our effort to include all of the environmental characteristics shown to be relevant for our focal species. Most notably, these included basal area, herbaceous understory vegetation, and midstory structure. While (when possible) we used a proxy - specifically live tree biomass as an estimate for basal area - it is important to consider these gaps when interpreting predicted suitability.

Finally, with regards to Red-cockaded Woodpecker management, this tool does not reflect all known RCW colonies within the region. Given that natural dispersal of this species is closely tied to existing colonies, proximity to these known colony locations should be considered when attempting to facilitate the establishment of new populations.

This revision of the LMVJV open pine decision support tool was developed to indicate where suitable habitat for three priority species (Bachman's Sparrow, Brown-headed Nuthatch, Red-cockaded Woodpecker) currently exists within the geography of the West Gulf Coastal Plain. As such, this tool can help conservation stakeholders focus efforts on areas where we expect the most meaningful impact (e.g. large, contiguous tracts of "high priority" areas). However, it is crucial to consider management goals and objectives when interpreting the tool, and that restoration and habitat improvement efforts may consider even "low priority" areas depending on proximity to priority hotspots.

LINK: Open Pine Bird Prioritization Model v 3.0

Both the "local" and final "landscape" scale models are available on ArcGIS Online using this link:

<https://abcbirds.maps.arcgis.com/apps/mapviewer/index.html?webmap=090402d5ee22495bb0c30bb1f9bd804c>

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Table 1. Predictor variables used in ESM development.

Predictor	Description	Source	Date
Evergreen Forest	Mean proportion of evergreen forest cover within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Evergreen Forest (5 km)	Mean proportion of evergreen forest cover within landscape neighborhood (approx. 20 km ²)	NLCD ^a	2016
Deciduous Forest	Mean proportion of deciduous forest cover within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Mixed Forest	Mean proportion of mixed evergreen-deciduous forest cover within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Canopy Cover	Mean canopy cover (%) within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Herbaceous	Mean proportion of herbaceous cover within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Shrub	Mean proportion of shrub cover within local neighborhood (approx. 0.025 km ²)	NLCD ^a	2016
Existing Open Pine	Mean proportion of broadly defined open pine forest cover within local neighborhood (approx. 0.025 km ²)	Landfire ^b / USFWS ^c	2016
Live Tree Biomass	Mean aboveground live tree biomass (tons) within local neighborhood (approx. 0.025 km ²)	USFS ^e	2014-2018
Understory Biomass	Mean aboveground understory tree biomass (tons) within local neighborhood (approx. 0.025 km ²)	USFS ^e	2014-2018
Standing Dead Biomass	Mean standing dead tree biomass (tons) within local neighborhood (approx. 0.025 km ²)	USFS ^e	2014-2018
Fire Frequency	Mean fire return interval between (2013-2020) within local neighborhood (approx. 0.025 km ²)	USFWS ^f	2013-2020
NDVI	Mean breeding season (April – June) normalized difference vegetation index within local neighborhood (approx. 25.5 km ²)	Landsat 7 & 8 ^g	2016
Max Temperature	Average maximum daily temperature during breeding season (April – June) within local neighborhood (approx. 0.025 km ²)	Daymet ^h	2007-2016
Max Precipitation	Average maximum daily precipitation during breeding season (April – June) within local neighborhood (approx. 0.025 km ²)	Daymet ^h	2007-2016

^a National Land Cover Database 2016 Land Cover Science Product (Dewitz & U.S. Geological

^b LANDFIRE 2.0.0, Existing Vegetation Type Layer (U.S. Geological Survey and U.S. Department of Agriculture, 2016)

^c Broadly defined terrestrial habitat in the Mid-South (SECAS, 2019)

^d National Land Cover Database 2016 Tree Canopy (Coulston et al., 2019)

^e U.S. Forest Service Forest Inventory Analysis (Wilson et al., 2018)

^f Southeast Blueprint Fire Frequency Indicator (SECAS, 2022)

^g Landsat satellite imagery collections on Google Earth Engine (Gorelick et al., 2017)

^h National Aeronautics and Space Administration (Thornton et al., 2022)

Table 2. Summary of Table 9 from the LMVJV Open Pine Landbird Plan for the West Gulf Coastal Plain and Ouchitas.

Species	Density (ha/pair)	Minimum viable population (no. of pair)	Area of suitable habitat required (ha)	Dispersal potential (km)
BACS	3.00	50	150	3.00
BHNU	3.50	28	99	0.92
RCWO	50.00	20	1,000	8.00

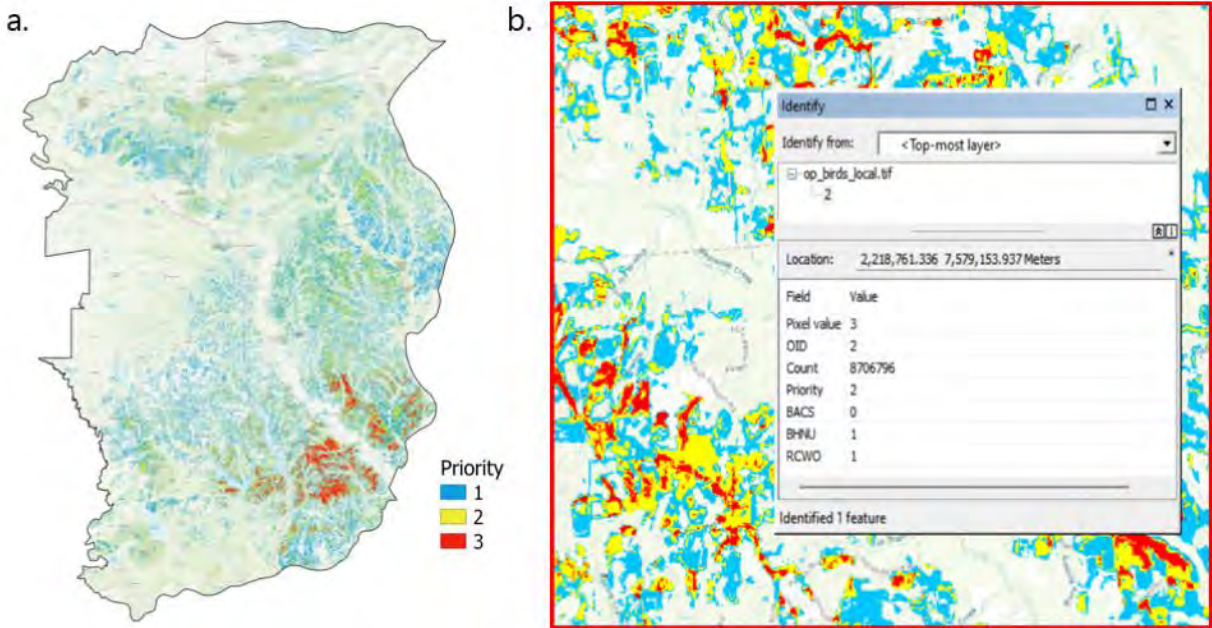


Figure 1. “Local” scale output for the West Gulf Coastal Plain and Ouchitas and the NETX CDN showing the combined priority for three focal species (a). Species-specific absence (0)/ presence (1) data are stored in each 30 by 30-meter pixel (b)

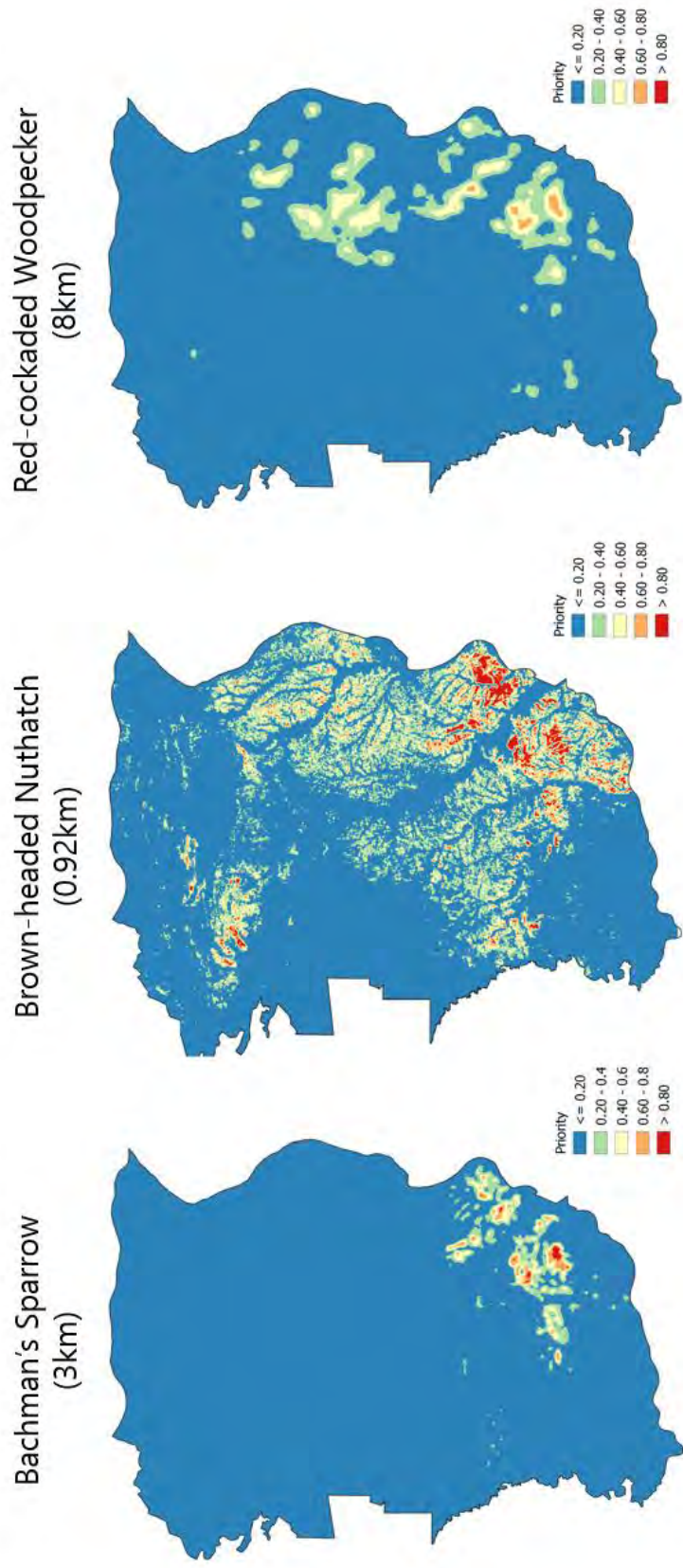


Figure 2. Outputs from the species-specific focal neighborhood mean priority analysis for the West Gulf Coastal Plain and Ouchitas and the Northeast Texas CDN.

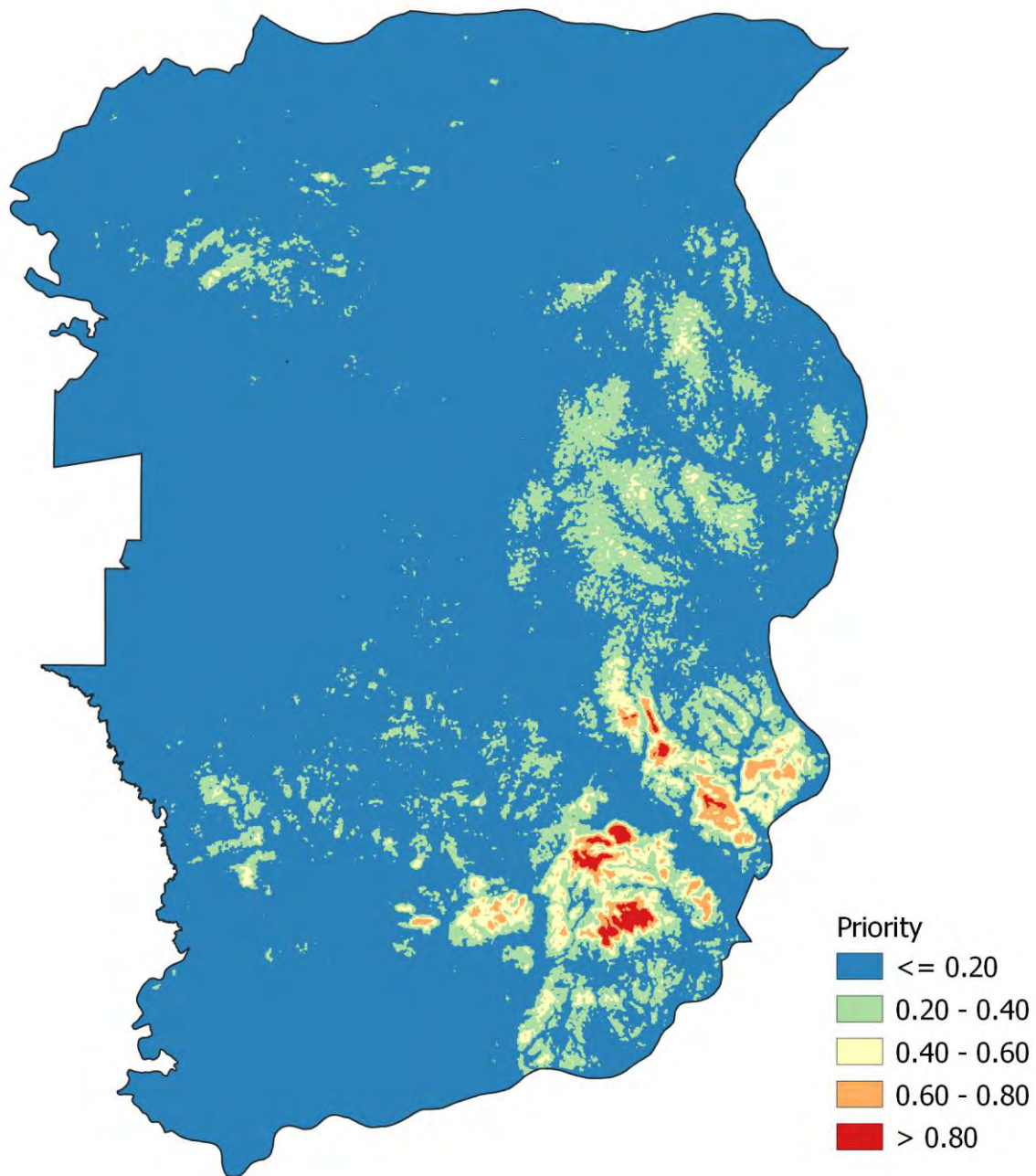


Figure 3. Final output representing the sum of species-specific average priority at the landscape scale for the West Gulf Coastal Plain and Ouchitas and the Northeast Texas CDN. Raw sum values were normalized to create a scale of 0-1.



Delivery

Highlights of WGCPO - LMVJV Delivery Coordination May to October 2023

In the West Gulf Coastal Plain & Ouachitas (WGCPO; BCR 25) of the Lower Mississippi Valley Joint Venture (LMVJV), partners are enhancing open pine and bottomland hardwood habitat, with a focus on restoring shortleaf and longleaf pine ecosystems through four partner networks. The Northeast Texas and Arkansas-Louisiana Conservation Delivery Networks (CDNs), and the Texas and Louisiana Longleaf Implementation Teams, support forest habitat conservation efforts that benefit LMVJV priority open pine species across the 4 states in BCR 25, and among its many partner-members. [Goggins' Farm Open Pine Video](#)

Arkansas-Louisiana Conservation Delivery Network

After two very engaging years of work on the RCPP project nearly full-time, the **Arkansas-Louisiana (AR-LA) CDN** partnership set aside a day at Chemin'-A-Haute State Park near Bastrop, Louisiana, to convene its full Steering Committee and discuss current and future direction. This valuable time together yielded important **Actions, Tasks, and Recommendations as follows:**

- Approved an additional Steering Member – USFWS Partners Program (Seth Bordelon)
- Revised Membership in the **Delivery Prioritization Working Group (DPWG)**
- AR-LA CDN Steering Committee tasked the Delivery Priority Working Group in 2022 to re-initiate review of the Open Pine Decision Support Model (DST) with the following tasks:
 - Compare the old and new DST ;
 - Define how the DST would be used to prioritize/inform habitat delivery (e.g., RCPP map);
 - Identify “Subject Matter Experts” to engage when needed; and
 - Determine options for connecting the DST to AR and LA State Wildlife Action Plans
- **Environmental Outcomes Working Group** was developed in 2021 for identifying monitoring needs of the RCPP. This group will re-convene to discuss the first season of field work; specifically, Rapid Assessment process, (645), and the Bird Recordings (ARU) process led by Janine Antalffy. They will specifically assess, consider adjustments, and review questions about data collection, etc., to prepare for next year’s 2024 Spring-Summer monitoring, to include other partners able to help with set-up in 2024, and Spring-Summer data collection.
- Convene a Full **CDN Membership meeting every 6 months** (Jan-Feb; Mid-Summer); each to be theme-based on continuing education, with at least two field days each year, scheduled Spring and Fall.
 - New Open Pine Fact Sheet for practitioners – delivery personnel.
 - Initial Field Day would be December 2023 with open pine theme.

Highlights of WGCPD - LMOVJ Delivery Coordination May to October 2023



The **Open Pine Regional Conservation Partnership Program (RCPP) Project** continues to be a “learn through experience” effort with significant turnover of delivery personnel. However, with close coordination among the 19 RCPP contributing partners and CDN Steering Committee, project outreach and application process in 2023 was successful. Contributions continue to exceed our expectations, with the collaborative fully engaged. **In 2023 the Open Pine RCPP project received 60 applications, resulting in 8 contracts in LA and 10 contracts in AR.** Demand and potential for this landowner-focused conservation program continues to remain high, however due to insufficient funding, many landowners must re-submit applications in future years and the potential for application burnout is a concern. Outreach to targeted areas of underserved counties and parishes is continuing. Due to turnover, training of new delivery personnel to provide RCPP technical assistance has been a constant. The Steering Committee and NRCS believe that Open Pine Field Days are extremely helpful, and more are planned in 2024. Much has been learned through the first two years, with the engagement and sharing lessons learned among partners providing valuable experiences.

2023 - Steps to RCPP Contract Execution

2023 Arkansas RCPP					2023 Louisiana RCPP				
County	#App	#Rank	Open	Funded	Parish	#App	#Rank	Open	Funded
Ashley	6	0	6	0	Bienville	1	1	0	1
Bradley	1	1	1	0	Claiborne	12	2	10	1
Calhoun	0	0	0	0	Jackson	2	1	0	1
Clark	5	5	2	3	Lincoln	12	3	9	3
Drew	10	9	4	6	Morehouse	5	1	0	1
Lincoln	0	0	0	0	Ouachita	0	0	0	0
Nevada	0	0	0	0	Union	4	2	2	1
Ouachita	3	3	2	1	Webster	0	0	0	0
TOTAL	25	19	15	10	TOTAL	34	10	21	8

NOTE - 59 applications 2023 with 109 in 2022.

See the 2-page [Bird-Friendly Working Forest Fact Sheet](#) at the end of WGCPD section.

Highlights of WGCPD - LMVJV Delivery Coordination May to October 2023

West-central Louisiana Ecosystem Partnership

The **West-Central Louisiana Ecosystem Partnership (WLEP)** hosted the Forestland Stewards Stakeholder Forum and Longleaf Partnership Council Meeting on September 19 - 21, 2023 in Nachitoches, LA.



The Forum was designed to encourage exchange of ideas and opportunities among partners for SE forestlands and conservation restoration of unique habitats. The field tour built upon the themes and discussions from *The Forum*, including managing forests for wildlife and multiple objective opportunities, to strengthen the

connection between public and private landowners/managers. View the *Kisatchie National Forest Video* via your camera.



Highlights of the field tour included private land opportunity, and stressed the value to working with public lands in partnership to secure both forest habitats and species. Discussion demonstrated the value of landscape-scale public-private partnerships working to help advance forest and wildlife conservation across the longleaf range.

WLEP and the LMVJV continue to work together in support the WLEP presence on our LMVJV website. In an effort to combine resources for information sharing about WLEP, you can now find the material through the WLEP link on the JV website: <https://www.lmvjv.org/louisiana-longleaf-flatwoods-cdn>.



WLEP & AR-LA CDN Partnership Events May-December 2023

- NFWF Forestland Stewards & Longleaf Council 9/19-21/23 Nachitoches, LA
- 7th Arkansas Private Lands Conference, 9/27-28/23, Lake DeGray State Park, AR
- Louisiana Learn to Burn Workshop, 10/3-4/23, Ruston, LA
- **Caney Ranger District – Open Pine Field Day 12/7/23 Minden-Homer LA**

Highlights of WGCPD - LMVJV Delivery Coordination May to October 2023

Wildfires and Value of Open Pine – Longleaf and Shortleaf

Texas, along with much of the WGCPD (especially Louisiana Longleaf Parishes) was impacted by significant drought conditions in July and August 2023. In many of the affected areas, efforts are underway to support reforestation with longleaf or shortleaf pine, which is proven more resilient to the drought and wildfire conditions experienced this year.



NETX CDN Past Chair and Texas A&M Forest Service Fuels Coordinator evaluating structure loss from the 3,000 acre Sherwood Creek Wildfire – Jasper County, Texas 9/27/2023.



Wildfire recovery is dependent on previous fire history and fire-adapted species

Highlights of WGCPD - LMVJV Delivery Coordination May to October 2023

Texas Longleaf Team

During 2023, the **Texas Longleaf Team (TLT)** was engaged in not only promoting longleaf pine restoration and enhancement efforts, but worked with cooperators affected by wildfire. Numerous wildfires – many impacting previous conservation investments – have been significant. Whereas the effects of wildfire on traditional loblolly pine plantations was devastating. Longleaf pine, although impacted, showed resilience to the severe fire conditions from seedling to pole size plantings of the past 20 years. Both the TLT and NETX CDN partners are defining areas of impact to quantify the effects of the fires, and to document previous practices and management (prescribed fire and fuels reduction) that have improved the survival and resilience of pine.



Wildfire impacts on Longleaf Pine with Rx Fire History vs Loblolly Pine with no fire history!

In addition to continued excellence in outreach and communication, TLT's successful Spring and Fall RFPs continued with significant interest and success, providing incentives to landowners for restoring longleaf pine. The Fall application deadline was Sept. 30, with projects to be awarded later in October (the TLT process is described here: <https://bit.ly/3clJ9Xx>). TLT's continuing partnership with Texan by Nature, and the refinement of the website by Texas A&M Natural Resource Institute partners, has provided great communication and connection with landowners (see <https://txlongleaf.org/>). TLT's Spring and Fall RFPs provided incentives to landowners for restoring longleaf pine, awarding 17 projects in April (**\$248,140 impacting 5,128 acres**) to restore and enhance longleaf pine. The Fall RFP is expected to yield similar projects; see the map tool current and cumulative totals on our new [TX Longleaf Team Project Story Map](#).

Highlights of WGCPD - LMVJV Delivery Coordination May to October 2023

Northeast Texas Conservation Delivery Network

The **Northeast Texas Conservation Delivery Network (NETX CDN)** convened a **successful “Guided Field Day”** for **CDN and Texas Longleaf Team (TLT) members on September 13, 2023, with 73 participants**. The group was hosted by Boggy Slough Conservation Area (BSCA) Staff and CDN leadership. Boggy Slough Conservation Area is owned by the T.L.L. Temple Foundation, whose commitment to conservation is noteworthy. The Foundation’s donation of an almost 20,000-acre conservation easement has ensured that the land will be protected and managed sustainably as a working forest in perpetuity. BSCA is positioned within the Neches River Corridor, and includes an 18-mile frontage on the Neches River.

<https://www.boggysloughconservation.org/>



Robert Sanders, BSCA Director of Forest & Wildlife Management (left) explains thinning techniques to promote outcome-oriented stand characteristics during Stop #1, as Steve Jack (BSCA Executive Director; right) looks on during the 9/13/2023 BSCA Field Day.

The NETX CDN remains committed to collaboration, working closely with adjacent partnerships to ensure that wildlife habitat conservation is connected. The NETX CDN Steering Committee met on 29 March, and again on 28 June, to establish business priorities and guidelines for the RFP, including these significant actions:

- Revised Operations Plan expanded our Delivery Area to include for flexibility;
- Outlined a process for a new Strategic Plan and priority habitat model;
- Recognized the 2-year leadership of Chair, Andy McCrady;
- Transition of Vice Chair to Chair, Reuben Gay;
- Approved the top 29 scored project proposals to develop HIP agreements;
- Proposed consolidation of Red, Sulphur, & Big Cypress watershed work groups;
- Expanded Steering Committee Membership from 9 to 11; and
- Formally designated Alternates for SC members.

Highlights of WGCPD - LMVJV Delivery Coordination May to October 2023

Significant changes were made in the delivery area (see map below), and the Steering Committee approved those changes in a new Operations Guide ([link here](#)). The SC named two new members – Boggy Slough Conservation Area (represented by Executive Director, Steve Jack) and the Texas Longleaf Team (represented by Coordinator, Jenny Sanders). Final actions for 2023 included the RFP approval of ranked and scored projects.

YEAR	DOLLARS	ACRES
FY17	\$187,599	942
FY18/19	\$210,827	6,442
FY20	\$140,215	3,543
FY21	\$241,583	5,225
FY22	\$149,326	4,217
FY23	\$262,122	4,951
TOTAL	\$1,191,672	25,320

Entering into its 8th year of the Habitat Incentive Program (HIP), the NETX CDN is continuing to provide coordination and leadership for partner agencies and organizations to promote conservation of open pine habitat. Total HIP funds and conservation completed to date are **\$1,191,672 and 25,320 acres**, respectively.

The 2023 RFP was announced April 21, with RFP process closing June 9. Draft ranks were provided to Steering Committee on June 26, and the NETX CDN Steering Committee convened to approve projects for HIP funding on June 28. The 2023 RFP resulted in another record number of proposals (63), with almost \$900k in conservation project requests from private landowners. Funding is primarily through Texas Parks and Wildlife Department upland game bird stamps and federal aid; of the 63 proposals received, 29 projects were approved. These projects are projected to impact 9,257 acres of habitat at a cost of \$412,998. Because of the number and quality of unfunded projects, there was a significant effort by partners in NRCS and TLT to work closely with the NETX CDN project managers to find funding for additional projects. Two projects, having a total conservation improvement cost of almost \$100k, will be funded through close coordination with the TLT and Texan by Nature, via corporate funding sources. This close relationship with TLT and Texan by Nature is promising to be a significant alternative and diversifying approach to augmenting our base funding streams.

Bird-friendly Working Forests

It is possible to manage your forestland for better habitat, increased wildlife, and more enjoyment!



6-year-old shortleaf pine with prescribed fire - Jason Ellis, Fairchild State Forest



Open pine with quality shrubs - Austin Klais

Shortleaf pines thrive with prescribed fire, and young trees can resprout after fire if top-killed, increasing the ability to manage for an open understory at young ages.

Periodic thinning and prescribed fire maintains native grasses, wildflowers, and shrubs that encourage Northern Bobwhite Quail and Eastern Wild Turkey to move in and stay.



Northern Bobwhite-James Childress



Prairie Warbler-James Childress



Eastern Wild Turkey-James Childress

Leaving a few standing dead trees is good for cavity nesters such as the Brown-headed Nuthatch and Red-headed Woodpecker shown at right.



Brown-headed Nuthatch-J. Childress



Red-headed Woodpecker-J. Childress

How would you like to take your pine plantation from this ...

to this?



Dense pine plantation - Bill Bartush



Native wildflower understory in open pine - by Austin Klais



The AR-LA Open Pine Regional Conservation Partnership Program (RCPP)

This program helps eligible landowners restore dense forest lands to open woodland, savannah, or prairie with native grasses and wildflowers that support many species of wildlife. Funding is available through 2027 in the counties and parishes shown here for three stewardship tools used to manage open pine:

- Forest/Woodland Stand Improvements (Full forest treatment—commercial thinning, mechanical, chemical)
- Prescribed fire (excellent in combination with mid-rotation thinning)
- Bird Monitoring (to identify the effects and need for additional work)

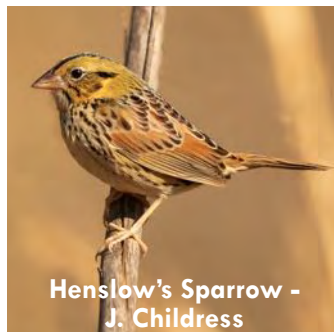
These practices help wildlife and also reduce hazardous fuels and the threat of wildfire while improving watershed conditions. Learn how to apply through Natural Resources Conservation Service county offices [<https://tinyurl.com/Ar-LaRCPP>] or partner biologists.



“Almost 40 years to the day, we went without quail on this property. We didn't see them, didn't hear them, and just this past Memorial Day weekend...we heard some quail! In less than three years time, we've been able to work with these partners in conservation, and after a 40 year absence a species has returned!”

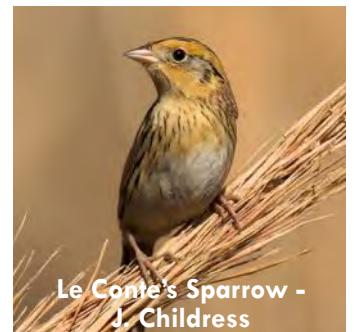
-Miles Goggans,
Arkansas landowner

CONTACT:



Henslow's Sparrow - J. Childress

Open pine and prairie are the preferred habitats for many migratory birds that overwinter in the South, such as Henslow's and Le Conte's Sparrows.



Le Conte's Sparrow - J. Childress