



## Upper Mississippi / Great Lakes Joint Venture Science Team

Compiled minutes from three JV bird-group committee (virtual) meetings - Winter 2022

During January 2022 the JV Waterfowl (1/11-12), Waterbird (1/19-20), and Landbird (1/26-27) committees met virtually on separate dates. The purpose of these meetings was to reconnect committee members, share updates on member research and monitoring projects, discuss related ongoing scientific evaluation on birds and human dimensions, review current and changing priorities relevant to JV science foundation, and discuss progress on communications and implementation of JV habitat conservation strategies. At each committee meeting, JV Science Team Chair Greg Soulliere and JV Coordinator Doug Gorby provided regional updates covering JV-related material potentially important to each committee. A summary of regional topics is provided below, followed by minutes and action items from each bird-group committee meeting. Status of committee-assigned *action items* as of 18 February 2022 indicated in **red font**.

### Regional JV Updates (summarized topics covered at each bird-group committee meeting)

**JV/MB NOFO opportunities** (*Greg*) – The JV and Region 3 Migratory Bird Program will offer financial support for research and monitoring related to bird conservation and planning (via Notice of Funding Opportunity = NOFO). JV staff and Region 3 MB staff have been working together developing a single 2022 NOFO, which will be announced sometime during the next several weeks. There is significant overlap in the information needs of the two programs, and we decided this year’s NOFO would be funded by both programs, with about \$100K from the JV and \$100K from Migratory Birds. The NOFO will be coordinated by JV staff (administered by WSFR – Wildlife & Sport Fish Restoration program), and grant proposal review and ranking will be a collaborative effort by the JV Technical Committee and Region 3 MB biologists, similar to the process used last year.

**Building JV Conservation Delivery Networks (CDNs; Doug and Andy)** – A JV Management Board Working Group has been progressing in establishment of bird habitat delivery networks modeled after other successful JVs (LMVJV, GCJV) who presented at a 2021 JV Board meeting. There are four CDNs in various stages of development by the JV Board (*also see related presentation*):

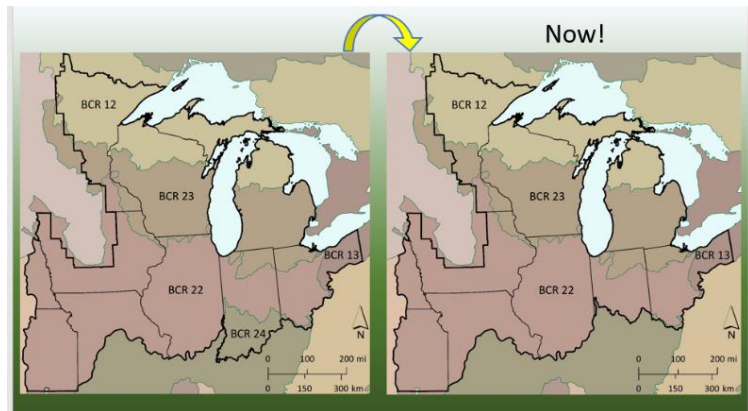
- Urban Bird Conservation Initiative / Bird Cities
- Northern Forest Birds (potentially with Pine Plains module and GWA module)
- Grasslands
- Coastal Wetlands

Doug provided a presentation describing the CDNs. Some science team members may be interested in participating on the new JV CDNs and or providing focused research to inform CDN activities. Andy Forbes mentioned the 2020 JV landbird strategy was especially influential in developing these CDNs, and there are several sub-teams of the JV Board being formed, with opportunities for science team members to engage. The Board would like to see concerted effort in implementing JV plans, addressing the “implementation gaps.” Doug reviewed how CDNs have worked in other JV regions, a typical approach to governance, leveraged funding and partner resources, and CDN goals. Potential outcomes and next steps were reviewed, beginning with establishing dialog and identify key leaders.

Success will depend on local leadership, with support for our JV staff and Science Team. This type of effort, coupled with targeted monitoring, will help our JV better complete the SHC Wheel.

**JV regional boundary change (Greg) –**

The BCR 24 portion of Indiana has been moved to the Central Hardwoods JV region, reducing the land-area size of our JV region by about 4%. JV boundaries are typically made up of a mix of political and ecological borders (state and BCR), and over the past 20 years several JVs have moved toward more ecologically-based boundaries, and this adjustment results in the full Central Hardwoods BCR falling within the administrative boundaries of the CHJV.



**Rebuilding JV Technical Committee (Greg) –** The JV Technical Committee is the oldest standing committee of the JV, established in 2003 to provide technical guidance to the partnership. The Tech Com established our bird-group committees (working groups) in 2005, with members of the tech committee serving on each of the bird-group committees. Following the JV Bylaws, members of the Tech Com must be approved by the JV Management Board and serve 3-year terms. The current slate of scientists volunteering to serve on the JV Technical Committee (below) will be voted on during the March JV Board meeting. Greg also mentioned completion of a JV Technical Report (UM/GLJV Technical Report No. 2022-1) describing qualifications and future considerations of Technical Committee members related to the JV Management Board’s desire for greater diversity and inclusion.

*Current (September 2021) Technical Committee members willing to serve if membership renewed by JV Management Board*

1. John Coluccy – Ducks Unlimited, Great Lakes / Atlantic Region
2. Michael Eichholz – Southern Illinois University
3. Robert Gates – Ohio State University
4. Frank Nelson – Missouri Department of Conservation
5. Wayne Thogmartin – U.S. Geological Survey, Upper Midwest Environmental Sciences Center (USGS scientist Bill Beatty indicated willingness to serve following Wayne’s term)

*New candidates willing to serve if appointed by JV Management Board*

1. Auriel Fournier – Forbes Biological Station Director, Illinois Natural History Survey
2. Kelly VanBeek – Migratory Bird Biologist, FWS Region 3 Migratory Bird Program
3. Kiandra Rajala – Social Scientist, FWS Region 3 Science Applications Program

*Note: Dave Luukkonen (Michigan State University), a member of the JV Technical Committee since 2005, also offered to continue serving on the committee. Unfortunately, our friend and colleague Dave lost his 5-year battle with cancer on 23 December 2021.*

**JV Technical Committee exercise “Developing a roadmap to address changing needs” (Greg) –** During 2021, the JV Technical Committee worked for several months on an exercise identifying, discussing, and ranking future JV science needs to help assure effectiveness of the partnership in achieving goals of continental bird conservation plans (e.g., PIF, NAWMP) in our JV region. Beyond a thorough

understanding of bird ecology and conservation, the committee identified JV need for expanded expertise in four primary areas: Human Dimensions, Ecological Services, Climate Change, and Communication and Outreach. A 4-person working group of the 2021 JV Tech Com is completing a technical report on this effort, which will include recommendations for our evolving science foundation.

**Assessing JV habitat accomplishments relative to landscape change** (*Greg*) – JV Staff are trying to use data collected by the JV bird habitat accomplishment reporting system to depict JV influence on primary NLCD cover classes over the past 20 years. Bird habitat accomplishments are collected from JV partners each year and reported to Congress. This is a JV requirement, but the substantial amount of work going into this reporting effort may have other values, such as roughly estimating JV influence on bird habitats. The shortcomings to partner accomplishment reports are many, such as they are very general (i.e., wetland, upland grassland, upland woodland), incompleteness (not all partners report), and the many assumptions required regarding actual bird habitat quality and retention after the conservation actions. However, there may be a crude means to relate long-term habitat accomplishments to land cover trends based on NLCD updates that occur every 3-5 years. In addition to crude assessments of JV bird habitat influence over time, the information may serve as a marketing tool to portray hypothetical land cover change with and without JV conservation actions as well as a means to inspire more thorough partner reporting. Based on initial calculations for BCR 23 (with only partial data), JV partner conservation activity during the past 20 years has helped retain more wetland bird and grassland bird habitat across the landscape (although still a net loss, especially grassland), whereas JV conservation actions related to the vast wooded areas of the BCR appear far less significant.

## **Information Specific to Bird-group Committees** (not covered in above summary)

### **Waterfowl Committee Meeting** (Chairs = John Simpson and Mike Eichholz)

Meeting dates / times (CT): 11 January (12-4PM CT) and 12 January (8AM-12PM CT)

**Committee attendance:** John Coluccy, John Simpson, Auriel Fournier, Drew Fowler, Mike Eichholz, Randy Knapik, Bob Gates, Adam Janke (day 1), Mohammed Al-Saffar, and Greg Soulliere

Absent: Jake Straub, Mitch Weegman, Heath Hagy. **Guests:** Doug Gorby (JV Coordinator), Kiandra Rajala (new FWS Region 3 Social Scientist)

**Tribute in remembrance of Dave Luukkonen** (*Greg, Mike*) – Greg provided a slide presentation consisting of Dave photos taken during the last 15 years, including several from past JV Waterfowl Committee outings. This review was followed by each member of the committee describing some enjoyable / memorable aspect of interacting with Dave. We also discussed developing a form of longer-term recognition for Dave and identified areas to explore.

- Should a scholarship / award program in Dave's name be through Michigan State with an MSU focus or should it be broader (Midwest focus and or recognition or travel award for students)?
- Should a scholarship / award have a specific focus: gamebirds, waterfowl, diving ducks, etc.?
- Can the program be administered through an organization (MSU, Midwest F&W Conference, N.A. Duck Symposium, DU, Delta, etc.) over the long-term / foreseeable future?
- Can an endowment be established, where contributions are tax-deductible and the memorial fund grows (e.g., via investment income from stock market)?
- Is there interest by members of the JV Waterfowl Committee to form a subcommittee to explore and develop this idea to an end? Yes – John C. John S. and Greg

- Are there members of the JV Waterfowl Committee willing to serve on a future review committee to rank and recommend proposals to fund? Yes – John S. and Greg, probably others

#### **Reviewed status of five action items from 2021 Waterfowl Committee meeting (Greg)**

- 1) Following this (1/21) meeting, Mike Eichholz will co-chair the JV Waterfowl Committee for three years. Thank you Mike and Thank You John Coluccy for co-chairing since this committee was established. *Done - This is the only JV bird-taxa committee to have co-chair terms of service.*
- 2) By 15 March, Mike will explore ideas for how we might expand JV expertise (Science Team and or Management Board), especially for HD/social sciences to help with outreach, understanding social behaviors and drivers, and actively implementing JV habitat conservation objectives. He will develop a list of subjects (and skill sets), providing a basis for future committee discussion. *Initiated, but a topic of discussion for this meeting. Topic largely turned over to the JV Tech Committee, but Mike, Bob, Dave Ewert, and Greg formed a TC working group to complete a JV report documenting a TC exercise to identify and prioritize areas of expertise that we should consider. The report will have recommendations for the Science Team and Management Board, including ideas and discussion from our 2022 waterfowl and other bird-group committee meetings.*
- 3) By 5 March, Greg will forward current lists of waterfowl research and monitoring priorities to assistant JVC Anna Sidie-Slittedahl to be included on the JV web site, letting her know that current prioritization (H, M, L) on waterfowl lists is adequate for now. *Done - But our co-chairs still wanted to have an in-person committee meeting to more thoroughly review and update the list, especially in light of ongoing discussions regarding ES and HD science needs.*
- 4) By 1 April, Greg and Bob will compose an email to let Great Lakes Audubon (via Sarah) about Waterfowl Committee interest in the NFWF monitoring project and the potential for multiple committee members to collaborate if Audubon is also interested in this type of partnering opportunity. We would be especially interested in work related to testing planning assumptions in the JV Waterfowl (and waterbird) Habitat Conservation Strategy. *Done - (Greg or Bob) Response from Stephanie Beilke: Thanks so much for reaching out regarding potential collaboration between Audubon Great Lakes' work on the NFWF Monitoring & Evaluation Project and the JV. We are excited to launch this new project and we are definitely interested in keeping the JV informed on how we are using monitoring to assess the effectiveness of wetland restoration in the Great Lakes and the potential for this project to have broader implications. At this point, we are still in initial stages of the project launch and have yet to finalize our contract. So hopefully you do not mind staying tuned for the moment. We'll be in touch with you in the next couple of months when we're ready to share our progress. Note: Stephanie Beilke (Audubon) did not provide the promised progress report and related information regarding the NFWF funded wetland-restoration evaluation project.*
- 5) By mid-August, co-chairs John S and Mike will determine whether an in-person fall meeting will be possible (travel-approval wise) for at least most of the committee. We determined an in-person meeting is preferred to effectively review, deliberate, refine, and rank lists of waterfowl research and monitoring needs. From that list, the group will also determine how best to move one or more of the collective high-priority research efforts forward in 2022. Note: The next meeting of the Waterfowl Committee (and Science Team) will likely occur at the next planned Midwest Fish and Wildlife Conference, currently scheduled for Des Moines IA in February 2022, and Adam has offered to assist with JV meeting planning. *Due to continued meeting restrictions resulting from the corona virus pandemic, the 12 October 2021 committee meeting was a virtual meeting. We did not focus on updating research and monitoring needs. Rather, we had a general update on several topics, especially on work of the NSST (Priority Landscapes Committee, Value Model) and reports from graduate students. We also discussed current methods and assumptions used to develop non-*

*breeding habitat objectives and the potential to further integrate ecological services into our waterfowl conservation planning.*

**UMGLJV Management Board and 2021 NAWMP reporting (Doug)** – Regarding the Management Board (MB), Kansas has re-engaged on the MB. We now have 22 members on the Board, which is capped at 25 based on MB by-laws, so we have three slots that can be filled. Board currently thinking about tribal or corporate / industry representation. Board meeting planned for mid to late March, will likely be virtual. Waterfowl Committee can let Doug or Greg know if they have topics to present. Our JV reported partnership progress to the NAWMP Committee during summer, as we do every three years. All funding comes from the NAWMP and we take the reporting seriously. NAWMP Committee was happy with our work, especially the science aspects of our planning, but pointed out continued progress needed in implementation and communication.

**Black Duck JV (John C)** – The BDJV November meeting was virtual. The Management Board covered several topics in detail, including updates on banding (pre-season and post-season), transmitter black duck / mallard project, population abundance surveys (how will breeding-plot surveys be used), habitat conservation decision tools, graduate-student projects, and the Chesapeake Bay project. There was high mortality on initial 50 marked (transmittered) birds at the Finger Lakes; bald eagles were primary suspects. The ACJV / BDJV working together on decision tool based on energetics model. Currently running the model in the Mississippi Flyway. Chesapeake Bay project has a habitat-based goal using energetics model, with goal to support 100K wintering black ducks. EHJV (Canada) developing a new 10-year implementation plan, with focus on breeding ducks only. Currently have post-docs leading on model development.

**Sea Duck JV (Greg)** – The Sea Duck JV is one of the three NAWMP species JVs, and Greg serves on the JV Management Board, representing the US Great Lakes region. Much like the BDJV, and unlike the habitat JVs, the SDJV is focused on research, monitoring, and information sharing to inform management. The vision of the SDJV is to maintain sustainable populations of North American sea ducks throughout their ranges. Margaret Campbell (CWS) and Kate Martin (FWS) are the JV Coordinators and Ken Richkus (FWS) and Garry Donaldson (CWS) are the Management Board co-chairs. The SDJV Board met three times in 2021 with a focus on:

- Research needs and the 2022 NOFO (300K normally): #1 objective out of 6 is improving understanding of migratory connectivity and habitat use of sea ducks to improve survey design, harvest management, and development of conservation actions.
- Establishing a Student Fellowship Program. This was in response to the North American Waterfowl Professional Education Plan (NAWPEP), calling for academic institutions to increase opportunities for undergraduate- and graduate-level students interested in waterfowl research and management (Eggeman et al. 2020). *To help address this need, the Sea Duck Joint Venture in collaboration with [Ducks Unlimited, Inc.](#) announced a graduate student fellowship program to support research on North American sea ducks. The goal of the program is to increase the number of skilled early career professionals interested in sea duck research, management, and conservation. Master's students are eligible for one year of funding. Ph.D. students are eligible for two years of funding, depending on funding availability and satisfactory progress in their first year. Three to five awards of \$10,000 USD each will be made annually, depending on funding availability. Currently have a 5-year agreement with DU for administration (DU in-kind).*
- Updating the JV Strategic Plan (10-year iterations), which Board members have had at least one reviewing opportunity. Part of the planning effort includes a key-habitat sites atlas of most

important sea duck areas across NA. The SDJV has discussed rolling out this tool as a step to improving communications with habitat JVs.

- Also have a communications plan they are revising, with greater emphasis on improved communication and collaboration with indigenous people and with habitat JVs.
- Coordination of triennial Sea Duck Conference, currently planned for 2023 (either Alaska or Nova Scotia), but still with potential to be part of NADS 9 in Oregon, fall 2023. The meeting will likely be an in-person meeting, but with a virtual option to increase participation.

**Progress implementing 2017 JV Waterfowl Strategy (Doug)** – How are partners using the JV plans to their conservation work? JV partners have used the regional plan, and in some cases developed a step-down plan (WI); MI is currently doing a step-down plan. Greg and Mo worked with FWS refuge staff on northern OH, plus the FWS Region 3 Partners Program, to provide waterfowl habitat guidance. Maybe different audiences and different approaches are needed to capture the various stakeholder groups. How do we inspire society and key stakeholders to embrace and support waterfowl habitat conservation? NRCS seems like a key player, but they operate differently in each state.

Discussion: Kiandra – the more carefully you identify your audience, the more effectively you can frame and conduct communication campaigns. For example, the Harvard Endowment is one of the largest landowners in the JV region; can we identify meaningful co-benefits that might achieve what they want with bird habitats. Mike – this topic might be a discussion for the JV Board. Doug -- We do not have communication expertise in the JV, and we recognize the need for this effort. Adam – Maybe Ag. agencies can use our information related to water quality and bird habitats. There seems to be this interest in IA. Randy – We have all championed the waterfowl plan but need to better identify those willing to use the information (they often do not know our plan existed). Drew – WI and MN DNR are currently redoing a rapid assessment tool for wetland restoration and mitigation. Bob – accomplishment reporting may be a way to communicate JV value to potential partners. John C – there is a national conservation lands database with up-to-date protected-land polygons. Current effort right now to catalog all protected acres associated with the America the Beautiful effort (30 x 30 Initiative).

Doug – The JV Management Board identified a need for conservation delivery networks (CDNs) to implement our very robust and meaningful JV plans. We need to be more intentional translating plans into delivery mechanisms. Not necessarily hiring Farm-Bill bios, but better coordination and communication. Have been reviewing other approaches of other JVs, including the LMJV and GCJV, with their initiative areas, bringing the key partners together at smaller scales. Our JV has identified four CDN habitat focus areas: GL coastal (mostly wetlands), Upper Miss grasslands (mostly west portion of JV region), northern forest, and urban birds (heavy reliance on social science). JV Board is very early in defining these networks, so there is a lot of work to be done. Each CDN will be relatively independent, even if supported by JV. Communication to stakeholders and varied approaches will be part of the CDNs charge. Regarding the JV goals for reversing the regional decline in hunter numbers, there is no easy answer to reversing this trend. We first need to understand it.

**Ecological Services / Human Dimensions integration (Mike)** – Mike presented background on how NAWMP-related population and habitat objectives were developed, including how 1970s population abundance was perceived to be satisfactory to hunters. However, the NAWMP goals and hunter demand has been decoupled (now, mean BPOP and 80% of the mean BPOP are NAWMP objectives). The JV approach is best reflected in “Option 5” of Mike’s presentation, by generating habitat objectives based on population objectives, then targeting our work using recreational demand and ES. However, the JV strategy did not develop separate restoration vs retention DSTs like the state of WI plan. Often,

ES includes “recreational demands” and potentially other social / quality of life values. What we are ultimately interested in doing is growing support for wetlands conservation, not necessarily recreational demand. It may be time to revise our approach to generate habitat objectives, but remaining linked to the NAWMP (continental population objectives) seems essential to a regional NAWMP JV. There are many categories within ES, and this is a body of research gaining traction. For example, flood abatement is an ES of growing importance in the big river systems, and there are abiotic and other functional processes associated with wetlands that are important to people.

ES / HD discussion continued – The group spent time reviewing yesterday’s progress with this topic then continued with next steps, including a discussion about identifying ES priorities and how they relate. The model (Option 5) was further developed / refined with discussion such as better linking recreational demand and ES to generate / target waterfowl habitat objectives. We also reviewed the idea of estimating recreational carrying capacity – consider hunter use days, similar to our calculations of duck use days. We discussed the problem of having habitat objectives that are simply “pie-in-the-sky” vs. objectives tied to the NAWMP but actually achievable in the context of current trends in landscape change. We may be able to learn from PHJV / DU initiatives in Canada, evaluating the many benefits (beyond ducks) of waterfowl habitat.

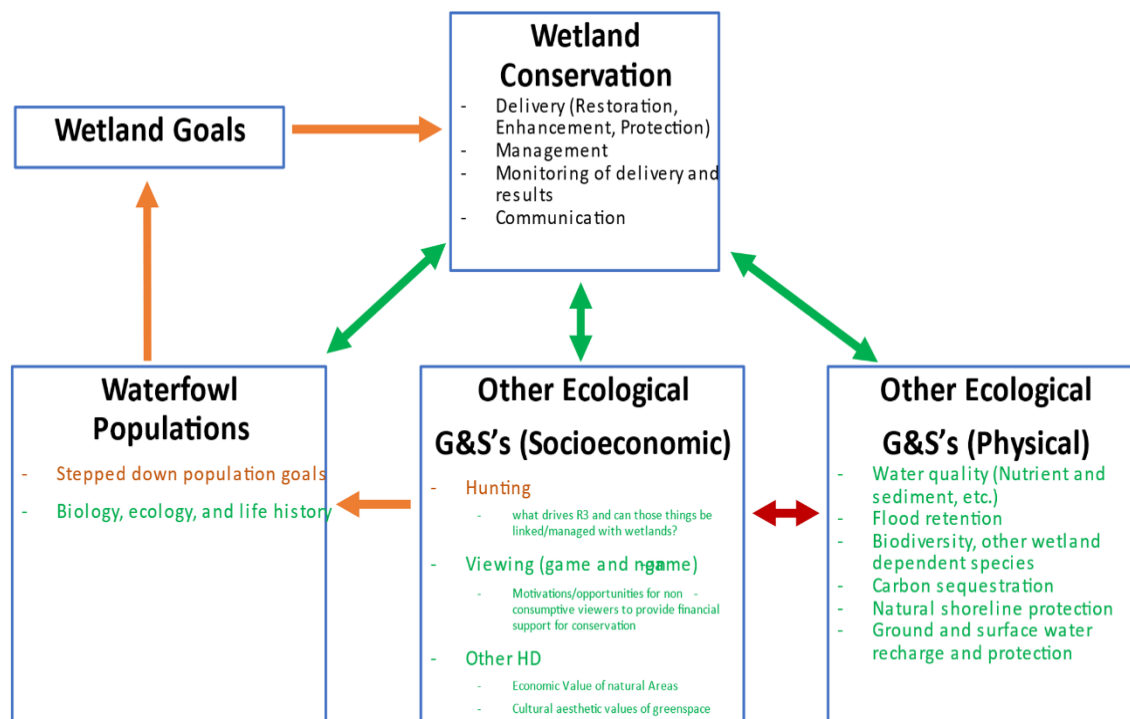


Figure depicts the **first draft** of proposed factors (and linkages between those factors) influencing future wetland conservation objectives and prioritization in the UM/GL JV region. The primary proposed change from our current approach is a more formal recognition and stronger weighting of Ecological Goods and Services (G&S's) when spatially prioritizing wetland conservation activities. As depicted by the orange arrows, waterfowl population-abundance targets, which are influenced by consumptive and non-consumptive recreational demand, will continue serving as the primary mechanism to quantify wetland conservation objectives. Green arrows indicate factors that would influence spatial prioritization (placement) of wetland conservation throughout the JV region. The red arrow indicates our recognition that both boxes depict Ecological Goods and Services but we chose to separate them to facilitate recognition of recreational opportunity as a priority of the NAWMP.

**Strategy step-down efforts / Ohio BCI update (Mohammed)** – Mohammed provided a review of the process used to develop high-resolution maps for breeding and non-breeding ducks, hunting activity, and distribution of people in response to Ohio partners revising the Ohio Bird Conservation Initiative planning document.

**Action items and due dates** (reviewed at close of meeting)

**Action Item:** By 1 February, **John Simpson** will send a Doodle Poll to committee members regarding our next meeting, with dates between early June to mid-July. **Done (meeting is 7-9 June at WPMC)**

**Action Item:** By 1 February, **Mike and John Simpson** will finalize model diagram Option 5, including arrow directions and colors. They will also add a brief narrative, including explanation that Ecological Services typically include recreation and other economic values, but our model includes a separate box for emphasis. **Done**

**Action Item:** In the coming years, the **Waterfowl Committee** (maybe full Science Team) will build from this basic model (with likely variation among bird groups) to:

- 1) Identify and recruit ES/HD technical experts who can provide JV guidance in this effort,
- 2) Identify a complete list(s) of primary ES provided by bird habitats in the JV region,
- 3) Define each primary ES and its related value to people (re: provisioning, regulating, cultural, supporting),
- 4) Determine which ES are most important to people in this region (with likely variation by stakeholder group),
- 5) Determine how best to target JV bird habitat conservation (and communications) to achieve most desired / effective ES with the ultimate goal of growing public support for bird habitat conservation. **On-going long-term effort**

**Action Item:** By 15 Feb **John S, John C, and Greg** will investigate opportunities and examples for an endowment or award program for university students in Dave's name. **Done (building an endowment)**

**Action Item:** By 15 February, **Greg, Auriel, and Bob** will develop and send a note to Stephanie Beilke (Audubon), reminding her of our interest in the NFWF-supported wetland evaluation project, especially as it relates to testing JV wetland-bird planning assumptions and the success of various conservation actions that might inform JV planning. **Done (update presentation planned for June committee meeting)**

**Action Item:** By 28 February, **Mike** will present the refined "Option 5 Model" for prioritizing future JV conservation planning and implementation to the Mississippi Flyway Technical Section and seek their input, and by 31 March, **Mike** will present the information to the JV Management Board for their feedback and ideas.

**Action Item:** By 1 May, **John C and Randy** will explore open water / Great Lakes waterbird distribution and abundance data and data sources as they relate to future JV planning (wind energy placement, shipping / boat disturbance, underwater pipeline risk, etc.).

**Action Item:** By January 2023, John Simpson's 3-year co-chair commitment will be completed. Other **committee members** should consider this opportunity to co-chair in one year from now if we continue our 3-year chairing periods.



## **Waterbird Committee Meeting (Chairs = Rachael Pierce and Mike Monfils)**

Meeting dates / times (CT): 19 and 20 January (9-12 AM ET)

**Committee attendance:** Mike Monfils, Rachael Pierce, Auriel Fournier, Sarah Saunders, Dan Holm, Brian Loges, Sumner Mattson, Frank Nelson, Brendan Shirkey, Anna Sidie-Slettedahl, Mohammed Al-Saffar, and Greg Soulliere. **Guests:** Doug Gorby (JV Coordinator), Kiandra Rajala (FWS Region 3 Social Scientist)

### **Committee research/management updates**

*Auriel Fournier:* spring and fall migration research on SORA and VIRA using geotags; also body condition study and relating methods to actual estimates from dead birds; BLRA study in Gulf and CO; KIRA study in AR; student defense (using marsh bird nest survival to inform wetland management)

*Mohammed Al-Saffar:* Mohammed described his work with the OH BCI update, developing higher resolution maps of breeding and non-breeding wetland birds across Ohio (i.e., stepping down and refining JV regional maps from 2018 strategy). He also provided examples of the model-based maps for waterbird watching activity based on eBird reporting of JV waterbird focal species.

*Brendan Shirkey:* two OSU students recently finished and working on manuscripts (testing assumptions of marsh bird survey); Brendan will ensure these manuscripts go out to the group when they are complete. Should be submitted in the next month or so. Currently supporting Ph.D. student from CMU looking at questions regarding KIRAs (habitat at detection sites vs random sites). Managing nesting platforms for COTEs. Involved with waterbird portion of the OH-BCI plan and is working on the wetland bird chapter, with a few OH colleagues.

*Dan Holm:* no new updates from IL.

*Frank Nelson:* Lisa Webb and Doreen Mengel are working on natural history project (LEBI); exploring an update of IL's NWI in the coming years. LIDAR project in Central Hardwoods and Lower Mississippi to quantify bottomland hardwood forest structure to get at ecological services. Discussions with ethnobotanists to assess importance of species to indigenous peoples. Used Feb 2 (Groundhog Day and International Wetlands Day) to promote wetlands.

*Brian Loges:* emerging from multi-year refuge planning effort; next will be working through priorities for surveys at refuges. Secretive marsh bird surveys a high priority but not a lot of activity to report yet.

*Sarah Saunders:* focused on BLTE and other marsh bird surveys. Deploying nanotags on pre-fledged black terns at Wigwam Bay and St. Clair Flats in MI. Good information on fledging bird movements and survival. Also working on another project to expand BLTE monitoring in N. MI --> will be adding 12 sites in UP. Audubon is developing a BLTE data hub. Marsh bird and waterfowl habitat management at St. Clair Flats and efforts to increase BLTE nesting.

*Anna Sidie-Slettedahl:* NOFO coming out soon and she is available to help people with submissions if there is ever a need.

*Sumner Matteson:* Working to publish the results of the WI Breeding Bird Atlas; writing up results of ??colonial waterbird?? study; involved with monitoring a small but significant colony of Black-necked Stilts (~30+ pairs) in Horicon (this colony is outside of its range and is likely the result of climate change); also working on a competitive SWG grant proposal on rare terns for fall submission.

*Mike Monfils:* Finished study with CMU to assess ecological effects of European frog-bit on wetland functioning and biodiversity (included non-breeding bird component); finishing study of the effects of Phragmites and associated management on marsh bird use and plant diversity in Saginaw Bay.

*Rachael Pierce:* Been focused on developing DCCO monitoring plan with multiple states. Still working on colonial waterbird monitoring, with more to come this year. Exploring development of a COTE working group to identify information gaps and determine where to conduct management and monitoring.

### **Monitoring status update – Sarah and Mike**

- Sarah Saunders provided an update on marsh surveys being conducted by Audubon (both BLTE surveys, marshbird surveys in the Calumet region, and NFWF funded which have not started yet); presentation available upon request.
- Mike Monfils gave a presentation regarding the Midwest Secretive Marsh Bird Survey. This survey is no longer being conducted in MN and WI; MI has conducted few routes due to Covid; Mike provided an overview of recommendations from the Jan 2020 monitoring workshop. Work on this has essentially come to a halt since Covid. Presentation available upon request.

### **Building JV conservation delivery networks (waterbird discussion) – Doug**

- The JV Management Board has been discussing implementation with more focus on translating the plans into conservation delivery. Planning to stand up four CDN's initially → Grassland, Forest, Coastal, & Urban; room to grow in the future. For instance, a Big Rivers CDN is a possibility.
- Expected Outcomes: CDNs should lead to better communication and greater delivery of habitat work. Hope to get more people engaged, increase communication among partners, better integration with SHC, provide more focus on efforts where positive outcomes are most likely, increase resources, and ultimately see measurable on the ground results.
- Next Steps: seek input from other partners on what a CDN should look like, define needs for each CDN, establish how CDN's should operate, identify barriers to participation and also to regional conservation, find key leaders for CDN's.
- Kiandra informed the group that ES has developed a GL Coastal Wetland Conservation Framework and there might be room to partner with this program or at least leverage what they have already started for our coastal CDN. Their framework has the following objectives:
  - Establish existing baseline extent and condition of Great Lakes coastal wetlands
  - Determine extent and condition of coastal wetland types needed to help achieve healthy Great Lakes and coastal communities
  - Identify where to focus coastal wetland efforts to achieve healthy Great Lakes and coastal communities

### **Links to socioeconomic tools**

Based on various conversations about social science throughout the day, Kiandra provided the following links to tools, freely available to partners:

- USFWS socio-economic indicators profile tool which allows customization around FWS units, states, counties, or census tracts: <https://headwaterseconomics.org/tools/usfws-indicators/>
- Another helpful socio-economic resource: [USDA ERS - Atlas of Rural and Small-Town America](#)
- Audubon Great Lakes marsh bird data hub: <https://greatlakesbirds-audubon.hub.arcgis.com/>

**GLRI opportunities (Doug)** – Doug reviewed his idea for a potential GLRI Marsh Bird Implementation Strategy. In the past, the JV has received \$800K - \$1M in GLRI funding. Prior to Covid, Doug requested an increase to GLRI funds and was approved. In the current fiscal year, the JV received \$1.4M which is available to be used for the marsh bird program. There is a need to develop this strategy so that we are taking a more coordinated approach to answering marsh bird questions across our region. Development of the proposed marshbird strategy needs to include many partners across the JV region, taking an SHC approach, and should focus on identifying research and monitoring needs, conservation design and

planning, and perhaps needs for implementation of coordinated habitat delivery. Need to start making headway on this plan because money needs to be spent. Looking for help on how to roll this out. Where do we start? What do we need? Coordination could be part of this funding to add needed capacity, such as a shared position or term position if necessary.

#### **GLRI Discussion - All**

- Infrastructure bill is going to direct a new slug of money into GLRI and may result in more \$\$ being distributed to species/habitat. This money might be able to be used to implement delivery after we develop a strategy for addressing marshbird needs.
- This GLRI money can be used for monitoring if monitoring is identified as a critical need in an implementation strategy.
- Distribution timeline is two years, but Doug wants to get some of it earmarked this year; the intention is to keep getting this money annually and maybe even asking for more if we think we need it. First, we must be able to spend what we have!
- Not entirely sure how this GLRI money will be allocated or rolled out (e.g. RFP? Cooperative agreements?) Nor have we 100% worked out who will be eligible to apply for this pot of money. For instance, need to check on Tribes since they are already getting GLRI funds of their own.
  - Can we start on the implementation side while we continue to learn? We do not want to let perfect get in the way of good! We probably have enough information to take some action now and we can continue to adapt along the way.
- When will communication announcement go out more broadly?
  - Not set yet because Doug is not sure what the communication should be. He first wants to understand what needs to be focused on. We are in the “HOW” stage. Thus, the importance of developing a plan. Investors are more willing to invest if we can show them a plan for how their money will be used and allocated to priorities.
  - Next part of our discussion should help to inform this topic and refine thinking.
- May want to include migratory marsh birds as well as breeding marsh bird habitat since recent data suggests that our region may be more important for migration; past survey data may be biased due to inclusion of migrant birds during breeding bird surveys. This needs to be better fleshed out especially for the southern part of the basin.
- Some questions in need of answers:
  - What does management focused on waterfowl mean for waterbirds? Waterfowl pops are at all-time highs, but marshbirds do not seem to be doing well. If our actions for waterfowl are good for marshbirds why this discrepancy? We need an improved understanding of what is going on out there.
  - Understanding these discrepancies gives us more opportunities to pursue funding for marshbird research and habitat implementation instead of allowing marshbirds to simply ride the coattails of waterfowl restoration.
  - Perhaps this GLRI support will allow better adaptive management, learning (with sound monitoring) what best works for marsh bird population response.

**Exercise for prioritizing Research and Monitoring needs** (*Mike and Rachael*) – Rachael reviewed the spreadsheet of ranked Research and Monitoring project ideas, but first we discussed the process used to

review and rank proposal ideas. We have evolved as a committee, and our approach – although not perfect – is much more informed than just 10 years ago.

### General Thoughts

- Some struggled to rank the priorities due to unclear meanings and/or redundancy (e.g., several priorities seemed to be the same thing).
- Some individuals used a particular lens when ranking (e.g., would the JV invest \$\$ towards the project; if a partner or JV staff could address a project it was ranked lower).
- Some of the monitoring/research priorities were difficult to prioritize due to some members having limited expertise with other guilds (e.g., CWBs). While there was general awareness of needs, did not know how to prioritize importance relative to things they were more familiar with.
- It's important to remember that the project list are just ideas that, if implemented, will get us closer to achieving the overall objective; the list is meant to evolve over time; in 2-3 years we will reevaluate, rescore, and generate new ideas/needs.
- Although there was concern about the process, we are the experts and probably the best group to develop the evaluation priorities. *Do not let barriers stop us from thinking about what best to do.*

### Process and Discussion

- In some ways, trying to rank ALL the priorities felt like we were falling into the trap of wanting to have too many options; this is going to limit our ability to do what Doug outlined; we need to grab a few things (or maybe just 1 or 2 things) so we can plan to do them. We cannot do 14+24 things at the same time.
  - If everything is a priority, nothing is a priority; need to decide which projects on the list will move the needle the most on our ability to deliver meaningful conservation
  - Do not let funding frame what we want to accomplish; instead figure out what we most WANT to do then we can figure out how to get it done.
- While some priorities clearly rose to the top following the ranking exercise, there was a wide range on how people ranked and rated different priorities (e.g., most projects had scores in which some deemed them the “most important” and some considered them the “least important”). This led to a lot of discussion about different processes we could use to come to a consensus. Some ideas considered included:
  - Identifying whether a listed priority/project represents an information gap. If so, maybe it is ranked higher.
  - Determine ONE project within each of the 4-5 overarching objective categories that we want to work on. This would still be 8-10 projects overall though which seemed like too many.
  - Refining by category (biological [breeding, nonbreeding], social) and then selecting projects within these broader categories.
  - Identify a small number of potential projects that we want to prioritize for funding over the next 3-5 years.

**DECISION:** Instead of ranking 14+24, we used a modified ranking approach in which each team member had 4 votes (2 for each guild - CWB and marshbirds). We each decided on the top 2 projects for each guild for both monitoring AND research (so each member had a total of 8 votes). Projects with the most “votes” were the ones we agreed were the most important.

## Results

The following projects had the most votes (7 monitoring projects and 7 research projects). Projects with < 2 votes were eliminated from further consideration at this time. The team will continue to refine this list until we have identified a shorter list of projects to move forward over the next 3-5 years.

### Monitoring

1. Identify critical migration staging areas, migration corridors, and migration timing for waterbird species of greatest conservation concern to inform planning for non-breeding habitat (9 votes)
2. Assess migration stopovers, key wintering areas, and factors affecting movements and distribution of waterbirds during non-breeding periods. (5 votes)
  - a. Team did not know how Objectives 1 and 2 were different; these could likely be combined into a single objective.
3. Identify strategies to retain and refine the Marsh Bird Monitoring Program. (8 votes)
  - a. Team should modify the wording of this objective to ensure development of Marshbird Strategy is included.
4. Identify common monitoring needs and opportunities across JV regions; develop a process to better integrate monitoring/planning across JV regions, beginning with a survey of all JVs to determine current priority databases and level of collaboration among JV regions. (7 votes)
  - a. There seemed to be confusion about what this objective meant. This should be revisited during next call to determine whether this project should remain in the short-list.
5. Develop a framework for a coordinated Colonial Waterbird Survey in the Great Lakes region every 2-3 years. (5 votes)
6. Identify and evaluate relationships between waterbird occurrence monitoring and other environmental monitoring to determine whether other environmental features can serve as a metric for waterbird habitat quality and conservation planning. (4 votes)
7. Investigate alternative monitoring strategies to detect rare marshbird species. (3 votes)

### Research

1. Assess non-breeding habitats having greatest influence on survival and recruitment of waterbirds breeding in JV region. Identify limiting factors during the full life cycle of individual species breeding and migrating through the JV. (9 votes)
  - a. This seems like it could be two stand-alone objectives. Should they split? If they are, should both be on the short-list?
2. Develop long-term, experimental research focusing on how management actions for waterfowl have differing costs and benefits to other guilds (secretive marshbirds and shorebirds). (6 votes)
3. Determine the relationship between wetland conservation actions and waterbird population responses, plus potential tradeoffs between species for a given action. (6 votes)
4. Test assumption "JV focal species" adequately reflect needs of other waterbird and waterfowl species represented in associated habitat guilds. (3 votes)
5. Develop criteria to evaluate tradeoffs for wetland bird species related to common wetland management with emphasis on larger scales (e.g., marsh bird response to intensive management for migrating waterfowl or waterfowl hunting; management actions that affect water availability for shorebirds). (2 votes)
  - a. Objectives 2,3,4,&5 are all similar and could be combined for marshbirds.

6. Expand understanding of plant community characteristics potentially detrimental to waterbirds, particularly Black Tern and Black-crowned Night-Heron. Define tradeoffs between habitat quality and ecological goods and services (e.g., Reed canary grass and hybrid cattail provide ecological services even though they may reduce habitat quality). *(5 votes)*
  - a. Should this be split into separate objectives (e.g., habitat effects and ecological goods/services)?
7. Fill information gaps related to biology and demographic characteristics for secretive marsh birds and marsh terns. Identify factors limiting population growth. *(3 votes)*

**Next Steps for Waterbird Committee (Group)** – Committee members were all interested in taking a more active approach identifying projects to move forward, directing funding to important projects, co-developing proposals, and participating in sub-working groups (COTE working group, marshbird working group, CDN's). To make these kinds of advancements, there was consensus that our team should meet more regularly and continue to brainstorm around the specific topics identified above.

**Action items / identified tasks and due dates** *(reviewed at close of meeting)*

**Action Item:** Rachael will provide the committee meeting notes and presentations by Feb 18. **Done**

**Action Item: Committee (team)** needs to resolve how to communicate our priorities to the public on the JV website (will decide during next scheduled meeting in March). Questions regarding Research- and Monitoring-need spreadsheets:

- High, Moderate, Lower (H, M, L) importance rankings for project ideas?
- Only identify the projects our team considers a priority in the short-term and leave ranks off everything else (i.e. these are our areas of focus with others having less emphasis)?
- Keep ranks for internal use only (i.e. these are our focus areas and we will work together to find opportunities for funding to advance our work together)?

**Action Item: Rachael** will send a doodle to schedule our next meeting by Feb 18. **Done** Topics of primary focus during this call will include:

- Define our top priorities.
  - Rewrite/combine objectives where appropriate.
  - Decide which objectives we want to move forward.
  - Refine the top priorities into some type of a work plan.
- Determine which proposal ideas have already been developed and might be appropriate for meeting identified objectives for the upcoming NOFO.
- Identify projects/objectives that we might want to work on for the 2023 NOFO.
- Schedule a summer meeting (July/Aug)

### **Landbird Committee Meeting (Chairs = Kelly VanBeek and Chris Tonra)**

Meeting dates / times: January 26<sup>th</sup> and 27<sup>th</sup>, 12 – 4 PM ET / 11 – 3 PM CT

The 2-day Zoom meeting was recorded and will be available at the below link for 120 days (end of April) and it can be downloaded / saved.

Day 1: [https://osu.zoom.us/rec/share/txthxRg7cmbvw5eh1oqbefOniat2CFMmJ3zfCx-Rn2jxWze9ICNLtadvKI85BzJu.Sf7JTW20\\_4iUaONX](https://osu.zoom.us/rec/share/txthxRg7cmbvw5eh1oqbefOniat2CFMmJ3zfCx-Rn2jxWze9ICNLtadvKI85BzJu.Sf7JTW20_4iUaONX)

Day 2: [https://osu.zoom.us/rec/share/HcfpDKZlAblgagrfeWMiS4Kx--ryL4Vz5KBmMgxoNcBhxE\\_wP0sNZ0Hzmcx6\\_ctC.ycPx7zgsuVPd4eSQ](https://osu.zoom.us/rec/share/HcfpDKZlAblgagrfeWMiS4Kx--ryL4Vz5KBmMgxoNcBhxE_wP0sNZ0Hzmcx6_ctC.ycPx7zgsuVPd4eSQ)

**Committee attendance:** Chris Tonra, Kelly VanBeek, David Ewert, Mohammed Al-Saffar, Allisyn-Marie Gillet, Shawn Graff, Jim Herkert, Sarah Kendrick, Mark Nelson, Greg Soulliere, Wayne Thogmartin, and Mike Ward. Missing committee member: None, all members present (Katie and Erin have left the committee since our last meeting). **Guests:** Neal Niemuth (FWS HAPET-Bismarck), Kevin Barnes (FWS HAPET – Massachusetts), Doug Gorby and Anna Sidie-Slettedahl (JV Coordination), and Andy Forbes (Region 3 Migratory Bird Program)

### **Research/management updates/presentations**

**Motus update (Sarah and Chris)** – Sarah reviewed MOTUS status in the UM/GL region and North America, with emphasis on Missouri. Many, many partners involved in nano-tag transmitter placement and network tracking. Currently 1,293 worldwide, mostly in NA, and receivers all operating on the same frequency, 31,000 animals tagged. Recently, CSWG funding was used to add receivers and purchase tags, and now have very good tower coverage in the Midwest to track migration. There is now a Midwest Migration Network 2021-2026 strategic plan for expanding capacity in the region.

Chris updated us on status of towers around Lake Erie and described the related collaboration by key partners. Due to lack of maintenance during the pandemic, several towers have been lost. JV is funding project to fill some gaps in tower coverage, with focus on lake crossings and informing open-lake wind energy development. OSU research beginning on five songbird species for this project. Committee comments: Wind energy companies are hesitant to share bird mortality data and probably would not agree to receiver placement on turbines. The *Ice Breaker* wind energy project is just six offshore towers on Lake Erie, but likely the “tip of the iceberg” for new wind towers if this experimental project works. In addition to new Motus towers, we need additional efforts for tagging birds. We also need to address flight altitude to fully assess potential bird losses. Perhaps we should check with FWS Ecological Services staff to determine what they use for wind energy assessment and what they need. Chris and Greg have communicated the OSU project to the FWS ES Office in Michigan and supervisor Scott Hicks has been supportive of the project.

**Golden-winged Warbler Update (Wayne)** – “Climate change to impact species distribution and hybridization ...” FWS is considering listing GWWA due to significant BPOP decline especially in the Appalachian Mountains and southern MI and WI. Conversely, BPOPs growing in northern MN and southern Canada, as GWWA populations appears to be redistributing in response to the warming climate. Research trying to explain this distribution shift and interaction with Blue-winged Warbler (BWWA). Four modeling approaches and multiple statistical approaches used for this effort, total of 576 models. Best fitting models suggest GWWA range restriction occurs with current emission and higher emission pathways. Most models suggest decline in GWWA whereas response by BWWA variable. Species have different climate niches. Appears temperature plays a crucial role in breeding range for both species. Future distributions will change, and future range of GWWA will likely be completely out of U.S. (moving toward Hudson Bay) and BWWA to the upper NE states, with less breeding range

overlap for these species. Higher temperatures may influence nesting behavior and success, related to egg survival, adult thermoregulation, or change in predatory community.

**Predicting grassland conversion across the lower 48 states** (*Neal Niemuth and Kevin Barnes*) – Neal covered assessing landscapes for grassland conservation using NLCD and change in breeding bird communities using BBS data across the Great Plains region. Ag conversion appears to be primary cause of grassland loss. Olinb and Robinson (2019) provided a thorough conversion assessment, but their models resulted in hard county edges and problematic breaks. Neal and Kevin were seeking a different process, one that land managers could grasp. They found highest loss rates occurring in landscapes of mixed grass and cropland, whereas areas of mostly grass landscapes stayed that way (e.g., Nebraska Sandhills). Areas with less grass (already converted) continue to lose grass to conversion at a high rate. Using separate models for states with varied coverage, developed risk of conversion maps to help more effectively target conservation, particularly grassland easements. Redirecting easement focus away from low risk areas to high-risk areas should result in greater program efficiency in the Great Plains region.

Kevin expanded the grassland loss analysis to all the lower 48 states, using two separate models, and predicting into the future, then he reviewed predicted loss in our JV region. Model was not as good as Great Plains region, but still useful. Landowner decisions regarding land use and conversion more complicated in our area vs Great Plains. Neal described the spatial variation in grassland-bird population abundance and distribution. Compared 1966-2011 and 2012-19 BBS data to evaluate local extirpations between the two periods. Reviewed nine landscape / land-cover variables and their relationship to probability of persistence (based on linear models). Generally, analysis suggests best to work in areas considered mid-range in current importance (mixed landscapes), where grassland can be easily restored and populations can expand into restored areas. Mohammed mentioned the value of using this modeling approach for similar grassland DTS in our JV region.

**Identifying grassland retention vs restoration opportunities** (*Mohammed*) – A draft framework for grassland-bird habitat retention, enhancement, and restoration for the JV region was described with committee feedback requested. The conceptual model started with the historic distribution of grasslands (pre-European settlement). Next, used distribution of current (actual and potential, “herbaceous and pasture/hay” 2001-2019) to depict core breeding habitats (BBS and eBird data for JV focal species). Finally, determined areas of grassland recently lost and restorable areas. Comments: We need to be careful about only including pre-settlement grasslands, as some current grassland areas that were forested at one time account for only grassland remaining. If we use only pre-settlement grasslands in places like IL, we will end up with only areas of current high quality cropland which will be the most difficult to revert back to grass. Prioritization may include breeding waterfowl and game birds (pheasant, prairie chicken, norther bobwhite) considering the funding resources available for these species. The tool may prioritize pheasant and hunting areas because many conservation supporters (hunters) do not care about songbirds. We may need to use Eastern Meadowlark or other indicator species that are more detectable than pheasants and quail but use same areas. The group discussed how land ownership was treated vs. distance to conservation lands. We should think about retaining (reactive) vs restoration (proactive) framing, integrating focal species, and consider the quality (\$ value) of the land for agriculture vs. CRP vs. potential energy development, relating to monetary data. May separately box spatial characteristics (size, proximity) and a-spatial (soils types, bird densities, etc.) in future DSTs. Should also consider threats (timing of haying) and link to thematic characteristics. Ultimately, we need to share final products with the JV Grassland CDN group.



### **Communicating out the 2020 JV Landbird Strategy (Kelly, Greg, Doug)**

*Final version of document sent to:*

- JV Management Board and Region 3 FWS Program leaders (e-copy + hard copy)
- Northern Forest Working Group, promoting use by partners in BCR 12 – Katie
- Urban Bird Conservation Program partners – Katie
- Missouri DOC field and urban biologists – Sarah
- Ohio BCI update team – Chris
- Mississippi Flyway Nongame Technical Section representatives - Alli
- BCR 12 foresters affiliated with ABC and Ruffed Grouse Society staff - Shawn and Dave
- National Audubon Society staff – Erin
- General Mills sustainable-ag staff - Doug
- Unified Science Team (UST) and NAWMP Science Support Team (NSST) - Greg
- All reviewers (30) of draft landbird strategy – Greg
- PIF steering committee – Andy; PIF News Release – Kelly / Tom
- USDA Forest Service research biologists in northern portion of region - Mark

*Presentation Examples (JV Landbird Committee):*

*February 2021 Presentation.* JV Landbird Habitat Conservation Strategy – 2020 Revision. ***JV Waterbird Committee Meeting*** – Virtual. (Greg)

*March 2021 Presentation.* JV Landbird Habitat Conservation Strategy – 2020 Revision. ***An overview presentation shared with the JV Landbird Committee to communicate information in the newly released strategy.*** ([https://doimssp.sharepoint.com/:p:/r/sites/ext-fws-umgljv-landbirds/\\_layouts/15/Doc.aspx?sourcedoc=%7BDF1C86E1-7368-4426-B106-CEF6FEB8DA06%7D&file=JVLandbirdStrategyOutreachV4\\_2-12-2021\\_full\\_presentation.pptx&action=edit&mobileredirect=true](https://doimssp.sharepoint.com/:p:/r/sites/ext-fws-umgljv-landbirds/_layouts/15/Doc.aspx?sourcedoc=%7BDF1C86E1-7368-4426-B106-CEF6FEB8DA06%7D&file=JVLandbirdStrategyOutreachV4_2-12-2021_full_presentation.pptx&action=edit&mobileredirect=true))

*June 2021 Presentation.* JV Landbird Habitat Conservation Strategy – 2020 Revision. ***Upper Mississippi / Great Lakes Joint Venture Management Board, webinar.*** (Greg and Kelly)

*June 2021 Presentation.* JV Landbird Habitat Conservation Strategy – 2020 Revision. ***Region 3 FWS staff and associated partners, webinar.*** (Greg and Kelly)

*Other efforts and outcomes resulting from the 2020 JV Landbird Strategy:*

- JV Management Board discussing, investigating, and moving forward with Grassland, Northern Forest, and Urban Bird Conservation Delivery Networks (CDNs).
- The recently formed Northern Forest Bird Network is using information from the JV landbird strategy
- Mohammed has been assisting Ohio partners revising the OH BCI Plan with higher resolution state-scale maps and DSTs, and other requests are coming in for help
- Currently rebuilding our JV Technical Committee, adding greater diversity and new skill sets including social science
- Rainwater Basin JV modeled portions of their new landbird plan after our JV strategy

We discussed the potential for additional webinars, but decided we have already had very good coverage communicating to the scientific community. Bringing the plan to local land managers, including private lands specialists, ready to implement should be the focus for future communications ... scaling down and being focused with partners ready to work. There may be value in cross walking our

JV plan with state NRCS plans, perhaps with help from a term employee(s). Although collaboration with NRCS has been challenging in some states, opportunities exist with this resource rich agency. Perhaps using the Great Lakes Restoration Initiative (GLRI) funding to add capacity (hire people) to conduct implementation and outreach for the landbird strategy (and other JV plans) with 2-year term positions should be evaluated, remembering GLRI focus is GL basin and must align with GLRI plan priorities. We should also consider developing an actual JV communications plan (via expert contract) to determine who and how to find those most ready to use our habitat conservation information. Effective communications is obviously a critical way to keep strategy information top of mind, and there are good examples from other JVs.

**Building JV Habitat Implementation Networks (landbird discussion) – Andy, Doug, Committee**

A JV Management Board Working Group has been progressing in establishment of bird habitat delivery networks modeled after other successful JVs (LMVJV, GCJV) who presented at one of the 2021 JV Board meetings. The four CDNs in various stages of development by the JV Board include:

- Urban Bird Conservation Initiative / Bird Cities
- Northern Forest Birds (potentially with Pine Plains module and GWA module)
- Grasslands
- Coastal Wetlands

Doug provided a presentation he developed for the waterbird and landbird committee meetings describing the CDNs. Some landbird committee members may be interested in participating on the new JV CDNs and or providing focused research to inform CDN activities. Andy mentioned the landbird strategy was influential in developing these CDNs, and there are several sub-teams of the JV Board being formed, with opportunities for science team members to engage. The Board would like to see concerted effort in implementing the landbird plan, addressing the “implementation gaps.” Doug reviewed how CDNs have worked in other JV regions, a typical approach to governance, leveraged funding and partner resources, and CDN goals. Expected outcomes and next steps were then covered, beginning with establishing dialog and identify key leaders.

Shawn reviewed take-away information from presentations by other JVs, so this model can work well, with success influenced by relationships between JV staff and network influencers. Success will depend on local leadership, with support for our JV staff and Science Team. This type of effort, coupled with targeted monitoring, will help our JV better complete the SHC Wheel. The GWWA workgroup model is a good example of collaboration used by many across the country. Mark identified the need to accomplish examples of translating the plan to local conservation actions, providing a model for local managers to follow. If / when landbird-focused CDNs require technical needs, JV Management Board members should feel free to contact Kelly and Chris or any key Science Team members for assistance.

*Urban Bird CDN* – Mags Rheude (R3 Migratory bird Program) works with the six cities in the region who have signed up for the Urban Bird Treaty. The cities have already started projects but need help with coordination. Mags reviewed some characteristics of the program, such as strong interest in citizen science. Regarding help from the JV, guidance on useful data collection would be helpful to determine value of some practices (e.g., efficacy of chimney swift towers). Helping groups know what is going on across bird cities and what they can do for birds would be valuable. Anna Sidie-Slittedahl has offered to assist with this CDN. Sarah reviewed Missouri’s situation, as there are many initiatives aligning with this effort (St. Louis is a Bird City) and the Missouri collaboration may provide a model for others in need of connection and direction. Shawn emphasized the need to build the network to share ideas and information about conservation activities. Chris mentioned the value of working with students on college campuses, as several have showed interest in lights-out or similar programs. In addition, museums are often active in monitoring collisions and may be interested in more. In some areas, there

may be enough coordination where the JV is not needed, as we do not want to duplicate effort. We want to make sure to be efficient and thoughtful about what the JV can contribute. Following guidance from the JV landbird strategy seems very appropriate (see urban bird summary needed actions on Page 69).

*Northern Forest Bird CDN* – There is a well-developed effort for forest bird management and information sharing across BCR 12, especially the state and federal conservation agencies and large private land managers. Because the Northern Forest CDN is already functioning, Doug has offered current leaders JV assistance.

*Grassland CDN* – Kelly led off with this discussion and reminded the committee grassland conservation is a complex issue to unravel in this JV region. The CDN could be defined by geography or it could be in a forum with information sharing and provision of expertise (e.g., working with NRCS) to improve partner conservation effectiveness. Many decisions ahead after more stakeholder discussion.

*Coastal Wetlands CDN* – Greg reviewed work of the Great Lakes Coastal Assembly, who operate similar to the JV Science Team, but focusing on all aspects of coastal wetland ecology, monitoring, conservation design, and information sharing. They have a wealth of technical information but little conservation deliver going on through this group. Greg has been a member since the start and Doug has been in contact with assembly coordinators and with the ACJV for opportunities related to the GLRI. Rachael Pierce will serve as the liaison between JV CDN and FWS MB Program.

**Working group of working groups - R2R/PIF update** (Chris) – Road to Recovery (R2R) leaders have identified many overlapping threats and the need to address these issues collectively. The PIF Eastern Working Group brought together representatives from many groups, (<https://partnersinflight.org/eastern-working-group-meeting-2021-urban-birds/>), with Randy Detmers leading the meeting and completing a 2-page summary report with five threat categories to carry forward (see <https://docs.google.com/document/d/1HhIWip2advcn4lctrO6RLqVQECjXKcY/edit?usp=sharing&oid=112737632631575358693&rtpof=true&sd=true>). Three meeting categories became the central focus of discussion: Management of eastern temperate forest, Management of agricultural lands, and Loss of stopover sites. A follow-up meeting is being held today regarding next steps in science delivery and best practices for focal species. There is also a lot of overlap with Eastern Working Group PIF team and our JV landbird strategy priorities (Shawn involved in both groups and can serve a liaison). Sarah has been very active in R2R webinars and working groups, focusing in on what approaches have worked and the need for fewer groups with broader focus and that are working together. R2R is a constantly evolving effort.

**Strategy step-down efforts / Ohio BCI update** (Mohammed) – Several sets of high-resolution maps were developed for Ohio following objectives in the JV strategies. For landbirds, the Ohio BCI higher resolution maps included viewing opportunities, plus grassland, forest, and developed land layers. Mark mentioned there are two layers of public lands (conservation estate) spatial layers that might improve DSTs (PAD-US and PAD-cbi) which are similar but slightly different in protection status of land categories. Mohammed provided detailed maps of predicted development growth out to year 2100 and where grassland/openland and forest areas currently exists. This layer can may help in targeting conservation-area expansion (before development of areas at risk) and or avoidance depending on stakeholder priorities and resources (consider opportunity cost). Ideally, conservation decision would be able to integrate priority bird habitat areas (i.e., stopover habitat) and potential recreational values relevant to local human populations seeking greenspace close to home. Maps with projected development in shorter time intervals (10-20 years) may also be helpful to land managers.

### **Research / Monitoring Needs / Science Team Recruitment / Action Items – All**

Only Dave Ewert provided ideas and ongoing projects following the homework assignment. A primary “hot button” issue discussed was around the impact of new solar energy farms, especially related to influence of placement and size on facilities to local bird populations. Siting, appearance (clumped vs. swathed), and bird use could be a primary focus. Because the JV research and monitoring priority lists were updated recently for landbirds (2020 strategy revision), we decided not to significant time on this effort. However, Kelly offered to incorporate input from committee members to update lists in the next couple of weeks.

Regarding new landbird committee members, there was discussion about progress with the JV Technical Committee (e.g., new social scientist) and potential skill and geographic distribution for the Landbird Committee moving forward. Mike mentioned that Corinna Van Riper (a social scientist at U of I) might be willing to assist the JV. Chris reminded the committee that there are many sub-disciplines within the social science field, such as political science, decision science, and motivational / behavior alteration science. They are not all the same. Perhaps someone savvy in the policy-setting realm would be most helpful to the JV Management Board. Kelly asked committee members to submit to her ideas regarding needed skills of a future landbird committee, and if possible, names of individuals with those skills that we may seek to recruit in the future. Andy suggested that for now perhaps the committee could retain a bird science focus, and be prepared to evolve at the JV CDNs develop. Working with the CDNs, providing early habitat conservation guidance plus monitoring assistance leading to increased effectiveness (via adaptive management), remains a very important need for the JV.

#### ***Action items and due dates (reviewed at close of meeting)***

**Action Item:** If / when landbird-focused CDNs require technical needs, JV Management Board members should contact Kelly and Chris (Landbird Committee co-chairs) or any key Science Team members for assistance. **Kelly** will relay this offer to the JV Board (via Doug) by 1 March so he can present it at the March JV Board meeting. **Done**

**Action item:** By 4 February, **Landbird Committee members** will provide suggested adjustments to the lists of priority Research and Monitory needs (see Kelly’s 19 January email, with spreadsheets) and **Kelly** will provide updated lists to **Greg** for the JV website by 11 February. **Done**

**Action item:** By 4 February, **Landbird Committee members** will submit characteristics and, if possible, names and affiliations of potential committee recruits to help address evolving science needs and to assure adequate geographic coverage for the JV region. During this process, committee members should consider, what are the most pressing science questions we need help to answer? What do farmers / large landowners think about birds and how do bird conservationist “appeal to their hearts and souls?” and, how do we get bird watchers to better (financially) support conservation? **Done**