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GCPO LCC Partnership Advisory Council

DRAFT Notes from Web Meeting January 15, 2015 1:30 - 3:30 am CST

PAC Participants

Catherine Rideout, Coordinator for EGCPJV
Jane Fitzgerald, Coordinator for Central Hardwoods Joint Venture
Keith McKnight, Coordinator for Lower Mississippi Valley Joint Venture
Jeff Gleason, GOM Migratory Bird Coordinator
Peter Blank, EGCPJV Science Coordinator
Mary Davis, SARP Southern Instream Flow Coordinator

Staff

Greg Wathen, Coordinator
Gregg Elliott, Communications
Yvonne Allen, Aquatic Habitat Analyst
Kristine Evans, Geomatics Coordinator
Todd Jones-Farrand, Science Coordinator

Follow-up

Staff will discuss projects further at staff meeting; Todd will vet projects through the ASMT and determine next steps for ranking/selecting a recommended set of projects to be presented at the Steering Committee meeting in March.

Discussion

Greg reviewed the proposed project spreadsheet (attached), which was developed from a September conference call among the GCPO LCC staff and Partnership Advisory Council (PAC) plus subsequent input of the participants via Meetingsphere.

We may not be ready with final recommendations yet, we have another couple months before they must be finalized. Task today is to review the projects for correctness and completeness, discuss them, and determine whether some projects should be taken off the table. At the end of the meeting, discuss how we would rank these and come up with final recommendations. Greg plans to turn the process over to Todd, and the goal is to take a recommended slate of projects to the Steering Committee for the March meeting.

This will give Todd the opportunity to become familiar with these projects, perhaps vet through the ASMT, and consider them in light of the ISA.

Catherine: What is the pot of funding available this year. Does this process replace an RFP process?

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Greg: We may wind up using an RFP to do some of these projects. We want to get ahead of the game to have a good idea how we might spend funds when they become allocated, because often allocations come late in the year. Relative to funding, there is no exact figure, but anticipating \$800 to \$900K, roughly half will go toward staff support, with about half available for projects. Those numbers could change. I'm hoping \$300 or \$400K for projects.

Catherine: Just wondered if we were reviewing specific projects or if you are looking for themes.

Greg: I put a column in the spreadsheet, "mechanism for implementing" - could be in-house staff work, a directed contract, or an RFP if we don't know good people to do a project. We also want to look at opportunities for collaboration with other partnerships such as JVs or SARP and whether there are match funds available.

Jane: What is the total requested? How much over our target are we - how much do we need to whittle the list down?

Greg: Don't know yet, because a lot of projects do not have numbers. The ones that do already add up to about 1/2 million. Let's focus on the ideas that are worth pursuing.

Jane: Relative to SARP for \$185,000 over 2 years....do you need to have the money for both years in hand or would you move forward without knowing if the funds will be available next year?

Greg: We could do either one - funding has been pretty stable, but with the new Congress in place things are a bit more uncertain. I propose going through these projects one by one, and pertinent people speak up. We'll fill in the blanks as we can. Everyone should feel free to make comments/edits directly on the google spreadsheet.

Conservation Design Topic

Expand Ozark Highlands CCS to other GCPO subgeographies

Greg: We will do this, the SC has already approved it. Cynthia Edwards is moving into a new cost-share position between the GCP and GCPO, which will entail working on the expanded conservation design process. I am not certain about additional costs. Todd proposed a draft budget for modeling support, etc.

Todd: As originally laid out, we would not need funds for modeling support for FY15, but FY16. We may need some funds for GIS support. We should be able to resolve that fairly soon.

Catherine: Following up the Jones Center open pine meeting, how does this work fit in with what Toby is working on and the SECAS objectives? Are there linkages between the three?

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Greg: Yes.

Todd: The links are not explicit, we need to lay that out over the course of this process. I have already been discussing this with Toby and Dennis and how this will relate to aligning our work with neighboring LCCs.

Mary: It also applies to the SE Aquatic Connectivity Assessment.

Follows on SARP habitat connectivity plan that identifies connectivity as an issue, since the GCPO has some of most diverse aquatic biota in the country - it's important here. TNC started this process: it includes information about dams, linked to NHD (National Hydrography Dataset) data - e.g. how much of the watershed is free-flowing, size, and fish data that enables the user to look at how various fish populations could be impacted (resident and anadromous). TNC developed a DST that is user-friendly, allows one to query dam or region and prioritize based on ecological risk from removing or putting a dam in place. It's a very popular product in the SALCC. We are proposing to develop the basic dataset on dams linked to NHD and update the fish data from state agencies. In a follow-on contract with TNC, a DST could be developed. Methods are worked out, and we have in-house GIS capability. It's built on partner outreach to help with mapping. Having the database is useful for additional work such as flow alteration, climate change impacts, water supply issues, etc. The proposal is for 2 databases. Would take about 2 years; the focus is on bringing in local experts.

Greg: Is the DST available for both SALCC and GCP?

Mary: Only SALCC, TX also wants to do it, unsure of GCP support.

Yvonne: Current NHD data is woefully inadequate and unreliable to address conservation design issues. USGS national anthropogenic barrier DB (NABD) got pushback for distributing the data. In this arena, we may be taking a step back in terms of data availability - so this product is even more valuable.

Mary: Turns out the USGS DB is for larger dams, but there are many smaller dams that also fragment watersheds.

Kristine: Any risk, given NABD - any risk to the National Inventory of Dams (NID) getting pulled?

Yvonne: Don't think so...NABD is an aggregation of the NID. But this would have data added on top of it, not sure.

Mary: Not sure why pulling back on NID. NID is helpful for identifying mission, owner, storage capacity, but our method does not depend on that. NHDplus provides similar data.

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USFS FIA Data

Kristine: This had to do with the lack of ability to assess understory herbaceous cover. Forest Inventory Assessment (has forest plots every 6000 acres across the country, public and private lands across the entire US) has a lot of carbon attribute fields related to understory. This was about developing linking algorithms to use carbon field to get understory cover. Now it's a larger issue, to understand how FIA data relates to the metric we want to measure. Not sure it's an FY15 question.

Greg: Do we know what we want?

Kristine: Maybe need to reframe the question, perhaps it's back burner for now.

Todd: Concur, possibly design process will help with clarity.

Jane: This is another GCPO staff project - are you thinking that you'll sit down to rank these amongst yourselves, then tell us what is available? That might help with winnowing the proposed ideas.

Greg: We will be talking next week; column C does not say who will do the work, but who made the recommendation. There is only one in-house project.

Glades Assessment

Jane: Glades are shallow bedrock communities from TX to Wisconsin with a high concentration in the Interior Highlands and Ouachitas. CHJV led an effort to do a glade assessment for the USFS. There are estimates, but they have never been mapped. There are 6 different glade types, and some are globally significant according to NatureServe as endemic systems, with suites of endemic species associated. Typically animals are also found in surrounding dry woodlands. They have never been mapped, but Paul Nelson figured out how to map them. With funding from the Arkansas Natural Heritage Commission and AGFC, we mapped some. Some areas Paul has not finished. AR would like to have the mapping completed for AR, that's what this request is. Asking for \$15K from the LCC. In a way this leads to a vulnerability assessment, once glades are mapped you can see a number of factors that affect ownership and management. Some types are very unique to the IH.

Greg: We supported this project in the last couple years. My question is does this get it done, or are there more needed after this?

Jane: Odds are very good this will complete it...most glade-rich areas are in the White River hills, and that is finished.

Kristine: has anyone developed a signature for glades?

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Todd: When glades are degraded they are overrun by cedars, so you can't distinguish them using remote sensing - it's the shallow bedrock and plant community that defines the glade.

Jane: We tried hiring a couple people. Paul has not been confident, it takes 3 to 4 types of imagery plus information on soils and geology. He has done a lot of ground-truthing of his work as well. AR did not know they had chert glades until he started mapping...near Eureka Springs he found the second patch of chert glades known in the world! There is a lot of conservation value in this for the long-run.

LiDAR data

Kristine: I think there is potential to join with the USGS 3DEP program (Lidar for the Nation) and target LiDAR.

Yvonne: USGS knows where it's been collected/formatted. Increasingly, it's not just LiDAR but also point cloud data becoming available. It would be nice to have a protocol in place to see whether that data can provide the mid-story canopy information we need, and how to do it. This is using currently available data to extract the metrics you need. Not a priority now.

Kristine: Would be cool to know where we have LiDAR gaps and work with the 3DEP.

Yvonne: There is a call for LiDAR acquisitions this summer; if there are partnerships the priority gets bumped up.

Watershed-based planning to Restore Coastal Ecosystems

Catherine: We propose work that overlaps with Reconnecting Gulf Coast Rivers with Forests (Jeff Powell is involved tangentially). About 2 years ago Rob convened a meeting in panhandle of FL. This would help us identify where to work and what to do, it will be integrated with other terrestrial planning tools, such as the Open Pine DST, to optimize impacts on terrestrial and aquatic, and ultimately incorporate a monitoring component. The JV does have an interest in connecting aquatic and terrestrial systems (eg. water quality). It might make more sense for Rob to engage in that effort than try to pursue funding, when there are already efforts out of the Ecological Services office.

Greg: Bill Pearson is pulling together a meeting in Atlanta, and he is very interested in the Gulf Coast program.

Catherine: Bottom line is we are more interested in learning more about the ES project and if we have a role to play in it.

Mary: SARP has an idea of what it takes to do these comprehensive assessments. While we absolutely support this, for something like this data, they are not yet in place to make an assessment that would be useful to management. For example, without the

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dams database, there is too much guess work on what the impact of dams is. Also, we do not have water use information - a major hole - where it's extracted, surface or ground, and put back in and the seasonal patterns. Both dams and water use are essential. Right now we are putting the DBs together. We also need better information on hydrology - EPA and USGS propose looking at actual gage data for the GC and how much flow has been altered and the ecological significance. They were going to look at dams and climate change, but not water use. Excellent idea, it's only as good as the supporting data going into it, which is not quite there yet. Recommendation: work on models, but give DBs a year or two.

Yvonne: I agree, also lack habitat configuration: depth and structure, also base pieces that are needed.

Greg: This is pertinent to the first topic of expanding the CCS to the rest of the LCC.

Integration of At-risk and Range Restricted Species Models and Strategic Conservation Information into the GCPO LCC Conservation Blueprint

Greg: This is about integrating at risk and range-restricted species models for the Conservation Blueprint of the SALCC and SECAS. This project is not in the SALCC database, but they are funding it. Mike Harris from Georgia DNR forwarded this to me.

Mary: It might be worth considering for specific habitat models given to me, a lot are really restricted in range, so it is pointing toward habitat modeling. This looks kind of interesting.

Jane: All species? - plant/animal/terrestrial/aquatic?

Greg: Need to look at the proposal, I think it includes everything, think it's primarily the SWAP list.

Todd: From Heritage datasets, not sure about plants.

MONITORING

Bat Data Analyses

Long-term MAPS site at Bon Secour NWR

Jeff: This is about data that has been collected for a long time (MAPS = Monitoring Avian Productivity & Survivorship). Frank Moore from southern MS is ready to retire. NAS funding has covered the last few years. This ask is a short-term opportunity to build something more long-term in terms of support through USFS, Refuge I&M. It's very unique because they have a long-term dataset, huge sample of birds, with a lot of data per bird in both spring & fall. Anyone interested, contact Mark Woodrey directly or Frank Moore.

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Greg: How does this fit into the LCC's overall mission?

Jeff: Long-term dataset could be analyzed in the context of climate change impacts. It's a key site in the GOM Avian Monitoring Network. There is a lot of value in continuing this monitoring. A lot of value for limited dollars. Not looking at the GCPO LCC as a long term funding solution, but a stopgap.

FWS Long-term Inventory Data Sets

Jeff: This links well with I&M - there is a lot of information in refuges and ES offices, a lot of data. Typically there is not the capacity to analyze data. In some cases, a huge dataset over 20-30 years, and they have never been analyzed. Not sure of the cost, there is a value to both the LCC and the Service. Bird data is very relevant to my current position (e.g. 15 years banding of juvenile Brown Pelicans, 1500 per year).

Janet: Thanks for considering this, this is potentially a unique role the LCC could fill that other agencies are poor at....to fill the gap of analysis. FWS has datasets and other agencies almost certainly have datasets that are valuable. For example, an ideal match is the bat habitat/occurrence on refuges data: this year or next. There is an analysis gap - everyone struggles with this.

Pete Blank: I concur - offices have so much data, and volunteers also collect data, which I hope more and more can get used. Bon Secour banding: which JV is that in? (answer: GCJV)

Greg: TWRA has boxes and boxes of data. We are good at collecting, terrible at analyzing. What would it take for us to do this? Is this a grad student project, more comprehensive? Post-doc?

[Gregg: How about the LCC commit to funding a long-term annual competition/"call for data" - \$ level dependent on appropriations. Define priority analysis focus each year, seek to leverage match funds and obtain important datasets and perform analyses. Very cost-effective and leverages value of tax dollars 3 times: analysis, match \$ (if any), and saving the data (previous taxpayer investment).]

Jeff: Depends on scale of data. Could be overwhelming.

Greg: Ed Laurent is working on a SE data analysis. How would we prioritize what we want? Bat data appeals because it's recent and relevant.

Jeff: There are a significant number of datasets out there just from refuges. It's value to the partnership you have to think about.

Jane: Much data collected before standardized protocols, etc. Can you take old data and use them in a way that is useful to compare to data collected more recently. Hard

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to do that. Have to be careful. Would want to prioritize cause and effect, the types of questions you can answer.

Janet: Gobs of datasets, LCC would have to be strategic about what is applicable to the partnership. Seek out the datasets.

Jeff: Especially if there is linkage to the species endpoints - that could be the first cut. Within the partnership which agencies have data available? Good rough first cut. People are retiring and throwing out entire filing cabinets of data on species!

Mary: It would be more productive if a list of species were sent out...

Bat Data Analyses

Greg: Can we flesh out cost estimates? Let's talk next week.

Wading Bird/Waterbird Colonies Inventory

Greg: The idea of using UAVs or drones for monitoring is intriguing.

Keith: This has emerged as a priority for LMVJV - we say we are worried about waterbirds, but don't know much. Need to assess trend status and also echoing the former discussion, there is a need for some data mining that we should assess. This is a cost-effective monitoring protocol for tracking status over time. Is this worth discussing with LCC or only applicable to the lower Miss?

Catherine: This is something that EGCPJV has not started to address. We would support it.

Jeff: Last comprehensive Gulfwide monitoring of wading/water birds occurred early to mid 80s. Probably dramatic change since that time. This is also a topic of interest for GOM Avian Monitoring Network.

Greg: Also Ed Laurent's radar?

Jeff: Ed is also involved with the SDM working group (Avian Monitoring Network) as well.

Mary: Should we see if big Gulf pots of money might fund this?

Jeff: Good question. Next round RESTORE funding there might be more money. This time, it's \$2.5 million, ceiling 400K, floor 200K.

Mary: Does anyone know cost of drones relative to data you get and cost of analysis/processing?

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Jeff: Good question, not sure, have not read the literature. Pretty sure, yes you can identify to species.

Mary: Sounds promising - small amount of funding to test/pilot.

Yvonne: UAVs - they are tightening up on regulations for federal application.

Evaluation of Open Pine DSTs

Catherine: The history outline our objectives in the context of initial planning the JV did. We developed the DST that prioritizes where on the landscape to focus conservation based on ecological variables, ability to burn, and public lands. We want to streamline the tool and develop a graphical user interface (GUI); started with Craig Conzelmann; it required some peer review. Monitoring will test key assumptions in the tool, also evaluate whether bird response is maximized.

At the open pine meeting: discussed there is value to follow up Barry Grand work and develop a model to specifically determine response of wildlife to various conservation actions. Also model temporal actions; there is need for additional matlab(?) modeling, plus we need to add more species outcomes for the model (now 2). It's fairly ambitious. Potential to explore with Barry. What we have is a tool, but it's not linked to population objectives, which would help us to have the ability to predict outcomes. This is probably the highest priority for us...

Species are beyond birds: modeled gopher tortoise, also northern bobwhite. Our DST includes pine snake and gopher tortoise.

Greg: Is this DST ready?

Catherine: I do know Barry has submitted some manuscripts, got major comments for revisions. Unclear on the status of USGS peer review required. Would not want to undertake something unless it is ready to go.

Greg: We have a contract for advanced apps work; we could develop the GUI but need to know the answer to that question. We are also doing a fair amount of work on open pine, including monitoring bird response (Taylor's project). Let's look at what we are doing currently.

Kristine: Big theme from the meeting: Randy Wilson, Ricky White giving broad acknowledgement that you cannot develop compositional endpoints such as what percent of the landscape needs to be within prescription. Perhaps there is a tie-in there.

Freshwater Mussel Surveys

Kristine: Provide spatial prioritization of river systems within the geography to determine where surveys need to go next.

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Mary: I'd support that too: For mussels, we have no resolution on what kind, where - there's a lot of data, could be combined.

Janet: Where we could do mussel surveys....several people said we have mussel surveys done, what was difficult - info tied up in key people like Jeff Powell. First step is to identify gaps - don't want to redo stretches.

Greg: Could this be done in-house?

Kristine: Yes, but using staff to inventory surveys is a time drain. Once we know, we could prioritize.

Mary: As part of expert involvement for species/habitat models - could get key mussel experts, ask who and what's been done. They could help with initial work. A lot of what we want to do is validate species-habitat models, and it requires data - we need meta data etc. If the connectivity project does not make it, I'd like to have this as a stand-alone because these data are critical.

Greg: What is the LCC role?

Mary: Serving as a focus, bringing people together, discussing, prioritizing, deciding what needs to be done etc.

Greg: Funding need?

Mary: 1/4 time for a year or two.

Hydrology surface and subsurface waters - impacts on BLHW

Keith: Growing recognition that there are significant issues with forest processes/ ecology being driven by altered hydrology. A simple example: we manage forest expecting a particular outcome based on historical knowledge, but results are not the same because altered hydrology drives what is happening and masks what managers are doing. Kenny Ribbeck in LA is pushing hard to start with gathering all the info we have and going from there. LSU is interested. Focus is not just the MAV, this is occurring in WGCP and probably other places. What we've always done may not matter if the hydrology is the controlling factor.

Greg: Richard Day NWRC/USGS has an interest in the Trinity River watershed and BLHW, also integrating cultural resource values, especially the use of hickory by Native Americans for stick ball. Kind of a unique group of potential partners.

Mary: Makes sense: hickory has heavy seeds, needs seeds to float to new areas, if hydrology is altered enough they cannot disperse.

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Keith: Don't know the cost, but am hoping to know this spring. We have a meeting in April to have an initial discussion on this. Depending on timing, the \$ may be this year or next. It's a large-scale question with implications beyond just birds.

Mary: Bring Tom Doyle into that conversation. He has BLHW regeneration models, and ran scenarios for different types hydrological regimes.

Catherine: What would happen to that project with a larger footprint? It could apply to EGCP.

Greg: It resonated with the group, not quite ready for formal project proposal.

Keith: It's a long term project. It's taking shape.

MAV - Role of Natural Habitats for Migratory Shorebirds

Keith: Since first shorebird planning effort for LMVJV and GCJV there has been this question, particularly on the river. Debate is based on lack of knowledge. Develop sampling protocol of natural habitats/shorebird use.

Jeff: Shorebirds of conservation concern just came out. Buff breasted sandpiper is a key species.

Greg: For most of these, there is no formal written proposal, which would be helpful. Does not have to be long...

DFCs for oak woodlands

Todd: Just added it; it's similar to the shortleaf initiative or LCC with NatureServe - take a look at oak woodlands, from an aerial extent it's our biggest natural community restoration effort.

Mary: In the Ozark CCS, a lot is based on habitat classification; we do not have accepted river classifications to be used in parallel. I'm available to work on behalf of SARP; better to describe broadly defined habitats. This may be a SECAS issue, but river classification is pretty important.

Factors Influencing Autumn and Winter Distribution of Dabbling Ducks in the Atlantic and Mississippi Flyways of North America: Investigating spatial relationships to predict timing and intensity of Mallard migration.

Greg: This is an issue relevant to JVs. Philopatry of waterfowl and influence on migratory behavior patterns, not a priority but relevant to JVs. Cost with masters student would be double what is shown, but get a better product.

Followup

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Greg: We will be discussing these projects at our meeting, and will get back with you. Todd will touch base with the ASMT and vet some of these ideas. I appreciate the discussion.

Jane: I'm impressed with how far the thinking has come relative to the aquatic side. That was needed and it's good to see.

Thanks all round.