

## Appalachian LCC Steering Committee Meeting Notes for 3/6/14 Call

### Roll Call

States & Tribal	Feds	NGOs & Regional Partnerships	Others
Paul Johansen (WV) Chaired the Mtg	Rick Durbrow (EPA-4)	Rodney Bartgis (TNC-CAILI)	Andrew Milliken (NALCC)
Gordon Batcheller (NY)	Bill Jenkins & Tai Ming Chang (EPA-3)	Ginny Keritler (National Audubon)	Jean Brennan (AppLCC)
Gwen Brewer (MD)	Ellen Mecray (NOAA)	Bill Reeves (for SARP)	Matt Cimitile (AppLCC)
Kendrick Weeks (NC)	Perry Wheelock & Pat Campbell (NPS-NCR)	Doug Bessler (for EBTJV)	
Catherine Haffner (PA-GC)	Ray Albright (NPS-SE)	Jim Herkert (for CHJV)	
Mike Harris (GA)	Ken Elowe (FWS-R5)	Pat Ruble (for Scot Williamson) (WMI)	
Mike LaVoie (EBC)	Marily Lawal (for Mike Piccirilli) (FWS-R4)		
	Tom Shope (OSM)		
	Rachel Muir (for Dave Russ) (USGS)		
	Clyde Thompson (FS 8&9)		
	Evan Crews (TVA)		



Outline
1. Organizing Framework for the AppLCC <i>Review: Systematically Building our Institution &amp; Report-Outs from Working Groups</i>
2. Update on Funded Research <i>Video Updates from the Principal Investigators</i>
3. Advancing the Partnership <i>Sharing Data, Resources, Networking</i>
4. Facilitating the Planning & Integration <i>Conservation Priorities and Integrating Cultural-Human Dimensions (Socio-Economics)</i>

### 1. Staff reporting to SC on "2013 Year-in-Review" & Report-Outs from Working Groups

## Organizing Framework for the AppLCC - *Building our Institution*



- *Mike Harris / Evan Crews, Georgia Department of Natural Resources/ Tennessee Valley Authority – **Data Policy Work Group***



Mike Harris – There were four areas to look into on Data Policy. They were (1) general guidance (in RFPs), (2) data requests (how we would handle data request that would come into the LCC), (3) guidance regarding use of sensitive data (e.g., ‘fuzzy’ vs. limited etc.), and (4) data access fees.

Data WG: We recommend adopting guidance coming out of the LCC Network and other National Forums in regards to data management practices (coming out of the LCC Council and other National Forums later/currently in development) and including them for any upcoming RFPs.

- This guidance will cover things such as **best practices** in archiving and sharing and handling data request etc. -- we are expecting a lot of the products that we serve up will be maps and products to come from the datasets, so having detailed and defined guidance will be critical.
- In regard to **sensitive data**, our thinking is this will be a project specific issue and something we will deal with on an individual basis. We know we do not want to come up with guidance that leads to illegal collection or negative impacts to resources.
- Final thing is the **issue of access**. This issue will depend on what the project is and what we are trying to accomplish. May need to get exact locations of plants and animals through the LCC, but in the course of that, it is not reasonable that we would expect to own datasets forever. We would have access to it, but the data would belong to the original user.

**These were our recommendations as a group and Paul and Jean have developed them into a document for the LCC to consider.**

Evan Crews – There is quite a bit of limitations in terms of the use of sensitive data:

- It's not in the interest of LCC to maintain a separate dataset. It is a huge task in of itself. So what Mike is saying, I am in full agreement.
- The document Paul prepared is something we can bring before the LCC for consideration and turn it over to you on how we should proceed.
- Ginny Kreitler – One issue to consider is how to keep track of who is making use of our data. We should see if that is a feasible thing to achieve.

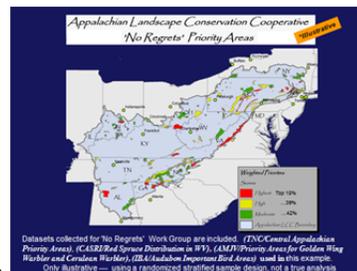
Paul Johansen – Like to take a moment to thank Mike for bringing this together. Are there any additional comments regarding this work? Jean what would you recommend for the next step.

- Jean Brennan – We had envisions today's call as an opportunity to present the information and had not envisioned this any sort of voting or consultation.
- Paul J. – **ACTION ITEM** Let's give folks an opportunity to review this data document. This could serve as the opportunity to close out this working group. I like to thank them for their efforts and making this document available. We will come to a decision pertaining to data at our next meeting.



**Appalachian LCC Datasets**

- Species Distribution**
  - Eastern Slope Trout, MARIS Fish Collection Database
  - AMV - Priority Areas, National Audubon(BL) - Important Bird Areas...etc.
  - Ecological / Classifications
    - NatureServe Ecological System
    - Normalized Difference Vegetation Index
    - National Wetlands Inventory
    - EPA Ecoregions
- Regional (TNC - Central Appalachian TNC's Priority Areas)**
  - Northeast Terrestrial Resiliency Data, Essential Forests, Northeast Freshwater Resiliency Data, Portfolio of Important Habitats
- Foundational / Published Data Sets**
  - (2006) NCC's Human Footprint, Hydrologic Units, Imperious Surface, National Hydrological Dataset, Housing Density, Socioeconomic Index, National Elevation Dataset, Protected Areas
- Thematic Datasets**
  - Land Fire, Biomass, Energy, Red Spruce Picea rubens Distribution
- Environmental Protection Databases**
  - Impaired Watersheds, Superfund Priority Sites, Nat'l Pollutant Discharge Elimination System Sites, Toxic Release Inventory Sites



➤ Rodney Bartgis, TNC – **"No Regrets" Work Group**

**Report Out: 'No Regrets' WG**

Members:

- Rodney Bartgis
- Ginny Kreitler
- Ken Elowe + BJ Richardson
- Rick Durbrow
- Tai Ming Chang

Rodney Bartgis – Most of the work so far has been Paul Leonard trying to pull together the various data layers that can then be looked at and analyzed.

“No Regrets” Work Group: recommended we look at that full analysis of the data and look at those places where we see the different analysis repeatedly point to the same geography. That gives us a starting point and would indicate that conservation investments at those geographies make sense to us as experts in the Appalachian region. We have not done the analysis yet, that would be the next step.

- Jean B. – Are there other datasets that the rest of the Steering Committee suggest we try to inquire/investigate? What sort of questions of that full analysis should we go forward with and try to answer? I would like to try and put a little bit more meat on this before the May meeting.
- Rodney B. – To the rest of the team: does anyone have any concerns regarding what I just laid out and would like to follow up with Jean or me in an email.
- Ken Elowe – Part of the “No Regrets” products may include patterns on the landscape, such as riparian buffers. May also be used as simple tools that we (NALCC) would like to incorporate.
- Paul J. – When would you envision a final product that comes out of this work? Is this more of a longer-term project?
- Jean – My hope would be to have general high-level queries and questions. (We might be able to fast track some of that analyses). Paul has proposed taking this to a much finer scale of analysis (compliment his graduate research). I see two tiers – (1) getting a quick deliverable for next SC face-to-face meeting -- is something we can push for but (2) part of that next meeting will be to identify some finer types of analysis you can do under that umbrella.
- Ginny K. – **GUIDANCE** I would like to see us make some progress before the next steering committee meeting. As we go forward after that meeting we can inform our approach about how partners in the LCC might intend to use this when we have it done.
- Andrew Milliken (NALCC) – **GUIDANCE** While undergoing this, we should see how we can connect our two LCCs in this area and identify priority areas across the landscape? There is also a Nationally-funded LCC project (FY13) to look at the eastern LCC approaches, that may provide suggestions on how we can work together.

➤ *Rachel Muir, USGS* – **NR Indicators and Surrogate Species Guidance**

Jean B. – This Work Group was greatly supported by Bridgett (former Science Coordinator), and then Rachel Muir stepped up to coordinate the effort. Mike Slattery with Chesapeake Bay also provided considerable support.



Rachel Muir – BACKGROUD/PROCESS: We looked at ecological services/environmental services - answering questions about the trends, what they are, and if there have been any impacts on conservation measures and activities. We developed a series of criteria for identifying these indicators. Any indicator had to be science based. Take existing monitoring efforts and try to make them more useable throughout the region. Not going to create a new monitoring network. Finally we want to make sure indicators that we select align with partners need.

For example, mussel assemblages and species combinations tell us something about the overall quality of the habitats. Relationship between a species and this environment is a complex web. There are a few species based on previous studies that suggest they are a good indicator of overall environmental quality. Brook Trout is an example. We have strong population data and trends level throughout LCC. They are very sensitive to temperature. 23 degree Centigrade for Brook Trout is the law. That describes the kinds of measures we have developed.

The key product from this work is a table with a list or guidance (for selecting) indicators for terrestrial, aquatic, and human dimensions. Need to link this list with the work being done by Lesley Sneddon (NatureServe, Climate Change Vulnerability Assessment project) in regards to surrogate species she has developed. Need to develop more robust information on the table and conduct one more round with subgroup to review measures.

Ellen McCray – A crosswalk between those two and the National Climate Assessment (due out in May) would be an excellent idea.



2. Update on Funded Research (Pre-Recorded) PI presentations (~8-12 min) on the status of the various RFPs/Contracts funded by the AppLCC

**Vulnerability / Impact**  
Support for Understanding Land Use and Climate Change in the Appalachian Landscape:  
Young (NatureServe)  
[July 2014]

**Support for Understanding Land Use and Climate Change in the Appalachian Landscape**  
Research will compile climate change vulnerability assessments and other relevant information on vulnerable species and habitats, discern the various methodologies and criteria used in these assessments, and use a team of expert peer reviewers to recommend the most efficient, effective, and appropriate methods for adoption by the Appalachian LCC for conservation and adaptation planning. The recommended method will then be deployed, resulting in vulnerability assessments for a suite of key species/habitats selected in consultation with partners of the Appalachian LCC. A database will be created of the vulnerability assessments of selected species and habitats. The database will be easily accessible on the web.

Lesley Sneddon, NatureServe – CCVA

<http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/climate-change-vulnerability-assessments-project-update>

**Management Response / DST**  
Development of a Hydrologic Foundation and Flow-ecology Relationships for Monitoring Riverine Resources in the Marcellus Shale Region:  
Walter (Cornell)  
[July 2014]

**Development of a Hydrologic Foundation and Flow-ecology Relationships for Monitoring Riverine Resources in the Marcellus Shale Region**  
The study will provide a report assessing availability of hydrologic and ecological flow models suitable for the region, a quantitative assessment of available ecological data to inform the ecological flow models, the application of the models to anticipate how altered flow regimes will affect critical conditions, and a report that forecasts changes in hydrology and associated predicted biological responses in relation to different water resource development scenarios for critical watersheds.

Todd Walter, Cornell University – Aquatic Flows

<http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/aquatic-ecological-flows-project-update>

**Foundational**  
Data Needs Assessment to Support Conservation Planning for the Appl.CC:  
(data architecture)  
Baldwin (Clemson)  
[March 2014]

**FY 12 Funding**  
Data Needs Assessment  
This research will produce an analysis of both data and processes to achieve stable, open source data products and identify critical new data needs, within a short time frame. Extended time frame includes manipulating and producing new versions of critical datasets customized for the Appalachian LCC. A specific conservation planning process will also be developed and execute portions of that process that are possible with available data. Lastly, as these become available, this research will integrate observations achieved through science needs projects funded by the Appalachian LCC and currently underway.

**Data Needs for the Appalachian LCC**  
Derek Bowers  
Web-Browser and Twitter Data  
Clemson University

Rob Baldwin, Clemson University – Data Needs Assessment

<http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/data-needs-assessment-research-project-update>

**Management Response / DST**  
Web-Based Tool for Riparian Restoration Prioritization to Promote Climate Change Resilience in Eastern U.S. Streams:  
Nislow (UMass)  
Coombs (UMass)  
[Dec 2013]

**Riparian Restoration to Promote Climate Change Resilience in Eastern U.S. Streams**  
This research will develop and implement a user-friendly web-based tool to identify priority areas for riparian restoration in the context of predicted climate change at the appropriate scale needed by practitioners. First, a "shovel-ready" prioritization tool for managers facing immediate on-the-ground decisions will be developed. The research will then link directly to ongoing and future stream flow, temperature, and biological response modeling projects and decision support tools. In addition, a short article in a peer-reviewed journal detailing this project will be published.

Jason Coombs, UMass – Riparian and Climate Change Prioritization Tool

<http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/riparian-restoration-to-promote-climate-change-resilience-in-eastern-u.s-streams>

Foundational	Stressor / Threat	Vulnerability / Impact	Management Response / DST
<b>Classification and Geo-Referencing Cave/Karst Resources across the Appalachian LCC:</b> Culver (Am U) [Sept 2015]	<b>Preliminary Assessment and Inventory of Threats across the Appalachian Landscape:</b> (TBI FY14)	<b>Preliminary Assessment and Inventory of Ecosystem Services across the Appalachian Landscape:</b> (TBI FY14)	
<b>Classification and Georeferencing Cave/Karst Resources across the Appalachian LCC</b> Research will assemble and identify key location and classification data while developing products that depict and map cave and karst habitats and biological resources across the Appalachian LCC. Based on a critical review of earlier and existing efforts, the project will collect and synthesize data to present cave and karst resource information. Researchers will then propose the most appropriate classification system for these habitats within Appalachia. Maps of the physical and biological resources will be made widely available in order to facilitate easy access and support coordinated conservation efforts throughout the Appalachians.			

David Culver, American University – Cave Biodiversity Classification System

<http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/cave-and-karst-mapping-and-classification-update>

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### 3. Advancing the Partnership - Sharing Data, Resources, Networking, and “Nested Sites” to support Building Capacity

- Paul Leonard, AppLCC – GIS & Planning Web Platform <http://applcc.org/the-cooperative/sc/sc-past-meetings-and-materials/steering-committee-call-3-6-14/gis-conservation-planning-portal-overview>



**Outline**

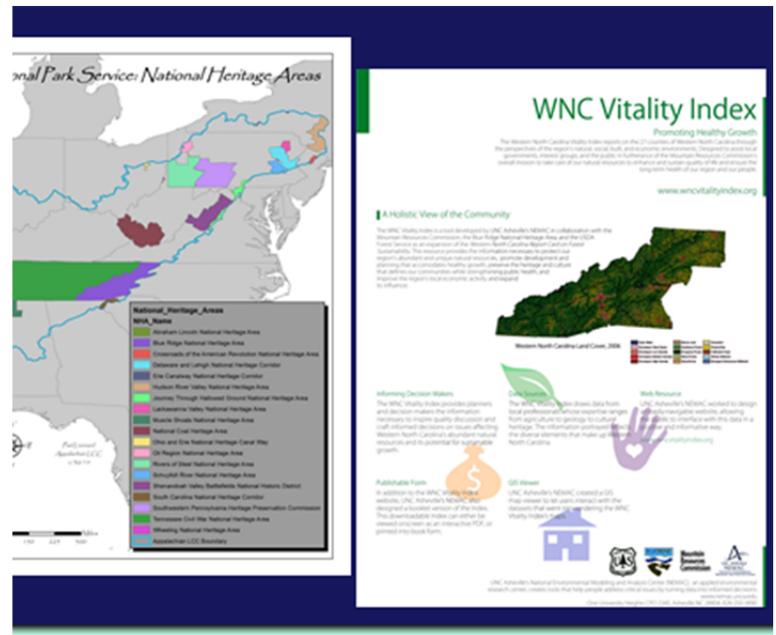
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### 4. Facilitating Planning & Integration

- Perry Wheelock and Rick Durbrow provide update on "Cultural-Heritage-Human Dimensions Workshop Planning Team" discussions and recommendations

Perry W: The work of this group is largely centered on planning at larger levels and need to get at more granular level regarding cultural resources and human dimensions in the context of landscape-level planning. This group so far has

looped in senior leaders at the national park service. We continue to work with neighboring LCCs such as the South Atlantic LCC and Pat Campbell is providing support from the National Park Service National Capital Region.



Pat Campbell: With the Vitality Index, people are bringing in the Socioeconomic component into the decision process. So we are not just looking at the landscape, but looking at the economics and social fabric of the community. This is part of the planning process that we use, having multiple steps and where we are currently and where we want to go to improve our resources.

These tools, as well as similar ones pertaining to cultural resources/heritage, human dimensions, are coming across my desk almost daily and the Steering Committee should be aware of such work and need to be updated on these tools. **With that in mind, the Human Dimensions Work Group would like to propose to review integrating cultural resources within this LCC and tools to do so with the Steering Committee at the May Meeting; much like the Communication folk did at the last face to face meeting.**

Jean B. – **ACTION ITEM** If that is supported by the Steering Committee, between now and that May meeting we would be working with this group to develop a framework and discern who are the major decision makers. It will require pretty dedicated time to do that but I think we have moved forward substantially since this group formed.

Perry W. - Paul we propose working more closely with Jean on these issues.

Paul J. - Sounds like a great opportunity and I will discuss further with David but I think we should carve some time out in May on these issues.

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- SC Communication Work Group: Clyde Thompson (US Forest Service) and Matt Cimitile (AppLCC)

Clyde T. - The goal of this group was to begin to create an on-going process that promotes engagement and dialogue across the Appalachian LCC region with various partners/stakeholders. The initial focus was on development of a cooperative set of messages on the identity of the LCC for the members to utilize with their key constituents (Finalized on the June Steering Committee Call). Since then the group (which has a changing cast of communication characters depending on the work and goals of the moment) has come together to help develop messaging and strategy on specific projects (Appalachian Energy Impact Analysis) and to better discern how the LCC has similar (common priorities) and distinguishing characteristics (complimentary roles) with other initiatives such as Climate Science Centers, resulting in cooperative and inclusive process where parties can participate in dialogue regarding landscape conservation.

Matt C. – Specifically the LCC has brought together communication coordinators/specialists from The Nature Conservancy and USFWS to develop messaging, communication strategy, and timeline around the Appalachian Energy Impact Analysis Project. This has led to cooperative work that has outlined key messaging on energy and land use in the region, outlined the major audiences to target with these messages, and developed a timeline for how each partner organization can coordinate their outreach to audiences so we are all in sync. It is a good model moving forward when doing outreach for future projects and deliverables.

Moving forward, one action item that came out of that April meeting was developing specific issue messages (energy, urbanization). The communication work regarding the Appalachian Energy Impact Analysis has really developed those messages on energy and land use, which will be released during the public rollout of the project. We foresee as each funded project is nearing completion, a communication group brought together by the LCC would develop messaging and communication products (fact sheets) related to why this project was funded, what issue it deals with, solutions of the issues, etc. Since our funded projects are dealing with topics such as climate change, stream classification, riparian restoration, cave and karst habitats, etc, this is how we foresee we can tackle messaging and communication on a range of issues impacting the AppLCC region.

Another next step for the Communication Work Group (and was first discussed at the AMJV Management Board meeting) is setting up an AMJV/AppLCC Communication Workshop. In essence, this workshop would bring together Communication Coordinators/Specialists from Partner Organizations. The goals of the Workshop would include: greater awareness of AMJV/AppLCC activities with Partners, Identify ways to disseminate information to partner organizations, identify communicate needs and increase capacity, develop and maintain communication network. Currently the idea is for me to host this workshop later in the year, say August-October in Roanoke.

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**Programmatic Focus: Discussion**

- Discussion on Advancing Work to Identify
  - Conservation Priority Resources
  - Conservation Targets
  - Surrogate Species & NR Indicators
- Dedicated Staff Time (Science Coordinator)  
Preliminary Data/GIS Products to Facilitate Discussions
  - SOW / Coop Agreement
- Discussion on Advancing Work on Integrating Cultural-Heritage-Human Dimensions Information into LCC Planning Framework
- Discussion on Communications Networking & Enhancing Partner Capacity

5. Initial discussions to set the stage for a decision on how the SC wishes to consider our next phase of development (i.e., identifying priority resources, conservation targets and reflection on NR Indicators including surrogate species).

Jean B. - Hoping that Science Coordinator will be filled and hired as a 3-year term position.

Paul J. - I would like to thank all the presenters.