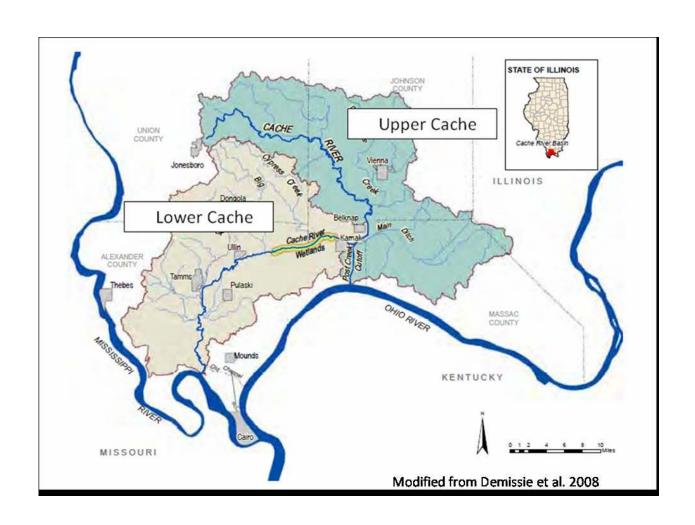
# Project Administrator Cache River Watershed Ecosystem Restoration, Union, Johnson, Alexander and Pulaski counties in Illinois Final Project Report T-11-P-1





# State Wildlife Grant Program

### State of Illinois

**QPR** 

Date: June 30, 2012

**Project Title:** Project Administrator - Cache River Watershed Scale Restoration Project, Union, Johnson, Alexander and Pulaski Counties, Illinois.

**Project Number:** T-11-P-1

Legal Name of Entity doing the Project: Shawnee RC&D

Reporting Period: June 1, 2011 – June 30, 2012

PI/Lead Worker:

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Narrative (Annual accomplishments towards achieving the Grant Segment Objectives in black, while historical information on this amendment is listed in grey.)

# Approach:

Between June 2010 and July 2012 the Project Coordinator (Shawnee RC&D) will:

1. Coordinate activities associated with the Upper Cache River/Main Ditch Study, data collection, needs assessment, and grant writing/administration.

**SUPPORTED EFFORT TO QUANTIFY INSTABLITY IN THE SYSTEM:** The coordinator worked with the Illinois State Water Survey and partners to raise awareness about potential concerns of instability in Big Creek, a tributary stream to the Cache River, and a potential headcut advancing westward through the Karnak Levee. The ISWS is developing a white paper on the concerns about Big Creek and a methodology for regular monitoring of the headcut.

# SUPPORTED COLLECTION OF HISTORICAL INFORMATION RELATED

**TO KARNAK LEVEE:** The coordinator gathered historical files relating to the levee into a briefing packet. The packet provides historical detail on the levee, its construction and its maintenance, as well as pulling together other source files that examined the levee. For example, historical Illinois State Water Survey file speak to ecological benefits of the levee being in-tact.

**POST 2010 SURVEY:** Coordinated survey needs post-2011 flood, including supporting collection of data to examine impacts and nature of the flood. Continued coordination with Illinois State Water Survey to examine the flood, including the impacts of the breech in the levee. Assisted with photo documentation.

**FLOOD 2011 ASSESSMENT:** Supported partners in the management of the flood, which included providing information to community leaders to enable them to fight the flood.

**RE-ORGANIZED PROJECT WORK (2010-June 2011).** The coordinator worked with partners to re-imagine management of this project, as it has grown in complexity and scale. The new approach calls for a committee to focus more deeply on the requirements of this grant and the restoration project, thereby freeing remaining partners to focus on other components of the grant. This allows committee members to continue to develop the knowledge and expertise needed to successfully guide, support and manage this process. This transition required the coordinator to prepare various materials for partners.

2. Coordinate the completion of hydrologic modeling/flood analysis necessary for advancing the Cache River Basin Study, which will investigate the tail water impacts of Main Ditch. The report will include a written report and detailed maps illustrating water levels and affected lands (private and public).

CONSULTATION ABOUT MAIN DITCH: Through consultation with IDNR, it was determined that an analysis of tail water impacts of Main Ditch was not needed. However, it remained important to investigate the impacts of Main Ditch. This became apparent during 2011 flood of the Ohio, Mississippi and Cache rivers, where Main Ditch water flowed through the breach in the levee. Through these meetings and various briefings, the group succeeded in convincing FEMA, as it conducted its mapping of Pulaski County, to survey Main Ditch and incorporate it into the model. Therefore, through the FEMA process, Main Ditch has been successfully mapped and incorporated into the model. The FEMA discovery meeting is planned for September 2012. The model should be completed in 2013.

PHASE III THE ILLINOIS STATE WATER SURVEY STUDY: Coordinated scope of work and analysis needs for Phase III contract with the Illinois State Water Survey; white paper delivered August 2012. This phase of work further examined the restoration alternatives in light of suggested changes and research conducted in the watershed.

**DETAIL PROVIDED ON COMPONENTS OF THE RESTORATION ALTERNATIVE – KARNAK LEVEE:** The coordinator scheduled a series of meetings to review the proposed design for the level, as outlined by the U.S. Army Corps of Engineers, its original design, as well as explore other alternative options for construction. In response to these series of meetings, partners developed a levee design matrix that allows for each design to be analyzed separately.

**DETAIL PROVIDED ON COMPONENTS OF THE RESTORATION ALTERNATIVE – PATHWAY FOR CONNECTIVITY:** The coordinator scheduled a series of meetings to review survey data and discuss engineering concerns raised in regards to the location of a pathway for restoring a more natural hydrology between the upper and lower segments of the river. Challenges associated with potential pathways were collected for future efforts. At this point, Phase III from the Illinois State Water Survey and data from SIUC's demonstration project should allow for the final selection of a pathway.

**DETAIL PROVIDED ON COMPONENTS OF THE RESTORATION ALTERNATIVE – WEST SWAMP STRUCTURE:** The planning and design document calls for a west swamp structure, currently the Diehl Structure, to be eventually located on land owned by the U.S. Fish & Wildlife Service. This concept was originally prepared by the U.S. Army Corps of Engineers. This structure was studied as part of the Phase I work with ISWS. However, additional study was needed to develop a land acquisition strategy to implement this measure. The coordinator worked with the partners to review the challenges and study potential impacts. Nature Conservancy conducted initial assessments and will produce the final report.

# DETAIL PROVIDED ON COMPONENTS OF THE RESTORATION

**ALTERNATIVE – DREDGING:** The coordinator scheduled a series of meetings to review information and opportunities for dredging the Cache River. Because of the departure of an IDNR staff person historically responsible for this work, historical files were copied, converted into pdfs and shared with the larger work group. Through previous work, IDNR sought and received permits to dredge the river. Further, IDNR has developed plans for a new containment basin. All information collected was used to develop a briefing memo.

**LED INVESTIGATION OF CONENCTION PATHWAY:** Through a series of meetings, the partners have begun delving into the engineering implications associated with the pathways to restore river connectivity. Additional work products are planned, including a new survey of land in private conservation ownership.

**RE-ORGANIZED PROJECT WORK (2010-June 2011).** The coordinator worked with partners to re-imagine management of this project, as it has grown in complexity and scale. The new approach calls for a committee to focus more deeply on the requirements of this grant and the restoration project, thereby freeing remaining partners to focus on other components of the grant. This allows committee members to continue to develop the knowledge and expertise needed to successfully guide, support and manage this process. This transition required the coordinator to prepare various materials for partners.

Through the above projects, a series of products and memos were developed that constitute this body of work. They include:

- *The Restoring the Cache: Low Water Flow and Connectivity* document, i.e. the plan the partners would like to send into final planning and design.
- Karnak Levee design matrix
- Dredging memo
- Series of reports from Illinois State Water Survey (Phase I-III)
- Historical files from the U.S. Army Corps of Engineers
- Survey data related to the pathway

All data collected as part of the study was provided to the partnership in the form of detailed digital files. Further, detailed notes, with links to various support documents, was provided, as was a closeout in-person briefing and memo.

**3.** Coordinate activities associated with the ecological research needed to support the findings of the Cache River Basin Studies (Phase I and II).

# COMPLETED EFFORT WITH CACHE RIVER WETLANDS JOINT VENTURE PARTNERSHIP TO DETERMINE TARGETS, ATTRIBUTES AND

**INDICATORS:** This process allowed land managers and scientists to come together to talk about the Cache, while also developing a framework for assessing ecological integrity. It resulted in increased communication and new ideas about how to approach conservation work, as well as generating research ideas. In addition to providing a tool to assess conservation action, the

conservation targets document also provides a roadmap for future conservation efforts. It identifies research gaps for the watershed and is intended to be used as a living document. This final product builds off the previous effort (internal to the partnership) of determining key attributes for conservation targets. The final conservation document, which identifies conservation targets, attributes and indicator ranges, forms the foundation for future monitoring efforts, as it establishes a baseline from which to measure progress towards ecological integrity.

# RECRUITED RESEARCH INTEREST AND COLLABORATED WITH

**SCIENTISTS:** The Coordinator continued efforts to recruit additional research interest to the Cache River Watershed through various outreach meeting and discussions with partners about ways to achieve this objective, while also supporting research interest recruited prior to this reporting year.

Some of the efforts prior to this reporting period included: Scientists with Southern Illinois University Carbondale have sought and received grant approval for research that would more closely examine low water flow's ecological impacts. The coordinator continues to support this process by assisting the researchers in determining experiment details, from permits required to the exploration of structures needed. Additionally, the partnership is working with a group of six doctoral students with SIUCs new watershed science training program. Of this group, three students have completed or are completing internships with partners, and an additional student was placed by the partners with a professional researcher at another agency who is examining the Cache River. Also, two of these students have chosen dissertation topics that are specific to the Cache River, while a third chose a topic that will include the Cache. Further, the SIUC program coordinators have expressed interest in working with the partnership in upcoming years. Lastly, please note work mentioned below in regards to forest health and fish communities. Smaller research assistance provided to other scientists. In all instances, the coordinator has assisted with the flow of information, so that research findings can support land management and guide the development of the restoration plan.

For this reporting period: Additional supported was provided to SIUC's efforts to examine low water flow. In specific, preliminary findings about water chemistry and macroinvertebrate communities was produced. Researchers were able to document hypoxic conditions in the lower Cache River and the disparity in the ecological health between the upper and lower Cache River segments. Further, previous efforts to examine this information through ecological models were completed, thereby demonstrating the benefits of the restoration of water flow by an external source.

**SUPPORTED LAUNCH OF MICROBIAL RESEARCH:** The coordinator financially supported start-up costs related to microbial research through a University of Alabama scientists interested in building off research being conducted by Southern Illinois University. In specific, the grant funded the collection of samples, which are being used as a pilot for a larger project. The scientist intends to use the GeoChip as a type of microarray to determine microbial functional community structure.

### SUPPORTED SIUC RESEARCHER IN LAUNCHING DEMONSTRATION

**PROJECT:** The coordinator supported Southern Illinois University researchers in their efforts to conduct a demonstration project to document potential benefits of increasing flow to water quality and stream communities in the lower Cache. Researchers received supported in their efforts to obtain a special use permit from the Illinois Nature Preserves Commission to conduct a demonstration project in the lower Cache River. They also received support in planning and implementation of that project. The demonstration project is tentatively scheduled for late summer 2012.

SUPPORTED COLLBORATION BETWEEN SCIENTISTS: The coordinator arranged a meeting between partners and scientists conducting research on the Cache River to discuss the pending demonstration project and the launch of new waterfowl research, while also determining synergies between the various research projects. The meeting raised awareness of their respective research and, in the time since, conversations between researchers about collaboration has advanced.

SUPPORTED ILLINOIS NATURAL HISTORY SURVEY: The coordinator attended a meeting/participated in discussions related to the creation of the Cache River Center for Research, Education and Outreach (The Cache CREO), a new Illinois Natural History Survey facility in Southern Illinois. The facility hosts scientists conducting research in the Cache River watershed and other areas in southern Illinois, and also hosting workshops and public education/outreach events.

# SUPPORTED WATER LEVEL STUDY AND RESEARCH ON BUTTONLAND

**SWAMP:** Due to expected future challenges of water level management in Buttonland Swamp, a National Natural Landmark, the coordinator initiated and supported research on the impacts of various water levels on the swamp. Through the course of this work, the historic government land office information was tied to the landscape to show the historic extent of the swamp. Additionally, a topographic model was developed, which demonstrated the effect of different management scenarios on the swamp. The model was then refined with additional survey data of the swamp from Little River Research and Design.

Additionally, the coordinator supported a researcher from Southern Illinois University in seeking a grant to conduct additional research into the historical extent of the swamp. That researcher recently was able to complete deep soil borings as part of that investigation, which is expected to conclude in 2013.

Taken together, this information will guide land managers and stakeholders as they work together to ensure the continuity of this natural resource.

# SUPPORTED FORESTRY STUDY OF BUTTONLAND SWAMP: The coordinator contracted with a Southern Illinois University researcher that specialized in dendroecology of cypress trees to investigate Buttonland Swamp. The researcher is studying whether hydrologic changes may have contributed to apparent declines in productivity, lack of bald cypress regeneration and a recent apparent dieback of mature bald cypress in the area. The final report is due July 2012.

**SUPPORTED LITERATURE REVIEW FOR BUTTONLAND SWAMP:** The coordinator contracted with an ecologist to update the partnership's literature in regards to cypress trees and ecological underpinning of the swamp, such as fluctuating water levels, impoundments and sedimentation. Final report completed June 2012.

# SUPPORTED PARTNERSHIP IN EXAMINATION OF WATER LEVEL

MANAGEMENT: As an initial step toward a deeper understanding of water level management, and how stakeholders might use adaptive management on the river, the coordinator has started a process where the partners review current science, historical conditions and think more deeply about river and swamp water levels. The process was launched with the examination of water level management of Buttonland Swamp, a National Natural Landmark; Section 8 Woods, a dedicated nature preserve; and the connected river. The coordinator continued to support this process in this reporting period through the introduction of the formal consensus decision-making process and the facilitation of meetings and proposals. The work extended to formal presentations on formal consensus and collecting data to support the proposal process. It also included a tour to regional coordinator for the National Park Service's National Natural Landmark program.

# SUPPORTED EXTERNAL REVIEW OF DOCUMENT DETAILING APPROACH TO WATER LEVEL MANAGEMENT IN BUTTONLAND

**SWAMP:** The coordinator worked with external reviewers to provide comments to IDNR's *Justification for a Structural Crest Elevation*. Reviews were collected and a series of discussions was held with specific partners. A final, updated document remains elusive.

**SUPPORTED COLLECTION OF WATER LEVEL DATA:** The coordinator provided key support from 2010-2012 of the collection of water level data for the lower Cache River. A final reporting of data collected was provided to IDNR at the conclusion of this grant.

INITIATED AND SUPPORTED FISH ASSESSMENTS: An important benefit of the project is the expected boost in the river's fishery. In order to better plan for this work, the group conducted an initial assessment of fish communities to determine that a gap in knowledge exists. With the assistance of the coordinator, the group initiated an assessment of fish communities. Through Illinois Department of Natural Resources Streams and Rivers Program, in collaboration with Illinois Natural History Survey, an assessment of fish species is underway; the project launched in 2011 and is continuing through 2012. In collaboration with a doctoral student at Southern Illinois University, an analysis of historical fish communities was completed. This analysis provided important information about the existence and integrity of fish guilds historically present on the Cache River.

# SUPPORTED ADDITIONAL RESEARCH RELATED TO FISH

**COMMUNITIES:** The coordinator undertook various efforts to support additional fish research on the Cache River, which the partners determined as needed. This work including collecting information for a SIUC researcher interested in investigating headwater contributions to downstream foodwebs, potential work from INHS on fish genetics and the developing USFWS fish habitat partnerships.

# COORDINATED REVIEW OF FORESTY ASSESSMENT AND

**DEVELOPMENT OF NEEDS:** The coordinator coordinated meetings with USFWS and IDNR to review current forest inventory work and discuss options for advancing understanding/knowledge of forests in the Cache. The group also examined work developing from the conservation targets process and opportunities for future conservation actions in the region.

# INITIATED COORDINATION WITH IDNR'S RIVERS AND STREAMS

**PROGAM:** The partnership now is collaborating closely with IDNR's Rivers and Streams Program, which has agreed to:

- Identify significant fishing access areas in the "lower cache river;"
- Interview fishermen for success during the weekends in specific periods of the fishing season;
- Survey fish habitat in the "lower cache river;"

- Enhance fish habitat via addition of "artifical habitat" or "woody debris;"
- Purchase, mark and, if possible, stock fingerling crappie and channel catfish;
- Assess changes or trends in sport fish metrics;

The partnership expects to provide additional detail on these projects once all analyses are complete.

**INITIATED COORDINATION WITH IDNR's STREAMS CAMPAIGN:** The coordinator arranged for an initial tour of campaign staff and transfer of information to the streams campaign as it identifies priorities and develops state strategies.

**INITIATED COORDINATION WITH IDNR's FORESTS CAMPAIGN:** The coordinator arranged for an initial meeting with campaign lead to explore concepts developing from conservation planning process in the watershed.

# RECRUITED RESEARCH INTEREST AND COLLABORATED WITH

SCIENTISTS: The Coordinator took initial steps to recruit additional research interest to the Cache River Watershed through various outreach meeting and discussions with partners about ways to achieve this objective. Various options were explored. As of the writing of this report, scientists with Southern Illinois University Carbondale have sought and received grant approval for research that would more closely examine low water flow's ecological impacts. The coordinator continues to support this process by assisting the researchers in determining experiment details, from permits required to the exploration of structures needed. Additionally, the partnership is working with a group of six doctoral students with SIUCs new watershed science training program. Of this group, three students have completed or are completing internships with partners, and an additional student was placed by the partners with a professional researcher at another agency who is examining the Cache River. Also, two of these students have chosen dissertation topics that are specific to the Cache River, while a third chose a topic that will include the Cache. Further, the SIUC program coordinators have expressed interest in working with the partnership in upcoming years. Lastly, please note work mentioned below in regards to forest health and fish communities. Smaller research assistance provided to other scientists. In all instances, the coordinator has assisted with the flow of information, so that research findings can support land management and guide the development of the restoration plan.

**COMMUNICATION WITH CURRENT RESEARCHERS:** The Coordinator continued steps to work with current researchers to discuss research possibilities raised by the restoration project. Assisted Illinois Natural History Survey in thinking through an opportunity to expand research in Southern Illinois. Worked

with Little River Research & Design to define a research project investigating water levels on the lower Cache River, as well as discussed future collaboration possibilities. And, supported various researchers at SIUC as they explored and generated research projects based on the Cache River.

INITATED STUDY ON BUTTONLAND SWAMP: Due to expected future challenges of water level management in Buttonland Swamp, a National Natural Landmark, the coordinator initiated and is overseeing a study with Little River Research and Design. The study is examining the impacts of various water levels on the swamp. This will guide land managers and stakeholders as they work together to ensure the continuity of this natural resource.

# SUPPORTED PARTNERSHIP IN EXAMINATION OF WATER LEVEL

MANAGEMENT: As an initial step toward a deeper understanding of water level management, and how stakeholders might use adaptive management on the river, the coordinator has started a process where the partners review current science, historical conditions and think more deeply about river and swamp water levels. The process was launched with the examination of water level management of Buttonland Swamp, a National Natural Landmark; Section 8 Woods, a dedicated nature preserve; and the connected river.

**DEVELOPED UPDATED WATER LEVEL MANAGEMENT PLAN:** With the expected increase in needs to monitor water levels, the coordinator assisted the group in developing a plan that would bolster the sites where data is collected and install new equipment. To date, new equipment has been purchased for the Illinois State Water Survey, and one new staff gage has been placed. More are planned. The partners expect all updates to be in place by end of year, which will allow for the increased site monitoring.

SUPPORTED USFWS'S HYDRO-GEOMOPRPHIC ANALYSIS: Through a consultant, USFWS has launched a hydro-geomorphic analysis, which spans federally-owned lands, as well as a section of the river that abuts state owned lands. This analysis is expected to provide additional information to the partners as it works to implement water level management.

# LAUNCHED COORDINATED EFFORT TO EXAMINE NEEDS OF FISH

**SPECIES.** As project details were becoming more concrete, it was determined that input now was need from fish experts as the partnership moved towards restoring low water flows through the use of manipulated structures. A coalition of agencies, including IDNR (multiple internal levels), USWS (multiple internal levels) and Illinois EPA, gathered to discuss the possible impacts and benefits of restoring low water flow on aquatic resources, including invasive species, threatened and endangered species, sport fisheries, etc. The 2009 Cache River

acquatic resources study was discussed, as was the ability to coordinate some activities through the Ohio Fish Basin Habitat Partnership. Discussions with this group of agencies continues to date and has been expanded to include a doctoral student and additional agency individuals. Strategies are being developed that could address the research gap that exists in this area of fish communities.

INITIATED AND SUPPORTED FISH ASSESSMENT: An important benefit of the project is the expected boost in the river's fishery. In order to better plan for this work, the group conducted an initial assessment of fish communities to determine that a gap in knowledge exists. With the assistance of the coordinator, the group initiated an assessment of fish communities. Through Illinois Department of Natural Resources Streams and Rivers Program, in collaboration with Illinois Natural History Survey, an assessment of fish species is underway. In collaboration with a doctoral student at Southern Illinois University, an analysis of historical fish communities is underway, as is a current assessment of non-sports fish.

**CONNECTIVITY AND FISH COMMUNITIES:** In conjunction with the assessment project, the partnership has started to determine how to build connectivity for fish species into the proposed design and what interim measures could be put in place to support fish communities. To date, the group has reviewed research, various projects and is in the process of investigation fish passage options for the river.

**ORGANIZING CACHE RIVER SYMPOSIUMS:** Historically, The Nature Conservancy convened a regular meeting of scientists and agency personnel with professional involvement and/or interests in the restoration and management efforts taking place in the Cache watershed. A group of 11 agencies actually signed a Memorandum of Agreement formalizing a Cache River Consortium in 1994 and the group initially met twice a year. However, the group LAST MET IN 2001. It's the intent of the JVP to resurrect the Cache River Consortium with the intention of meeting bi-annually. To kick-off that effort, a three-daylong Cache River Conference was held August 10-12, 2006 at John A. Logan Community College (Carterville, Ill.), in partnership with the National Great Rivers & Research Center. It drew researchers from across the nation and was attended by local community members, as well as elected officials. The second symposium was held September 10, 2008 on the campus of Shawnee Community College in Ullin, Ill. The 2008 meeting consisted of a series of short science presentations and agency updates. The objectives of this meeting are to update the science community on current restoration and management in the watershed and to facilitate discussions that may lead to more cooperative efforts aimed at accomplishing mutual goals. The third symposium was held October 12, 2010 in Vienna, Ill. (Gambit Country Club). The 2010 meeting featured a keynote by Beth Middleton, of the U.S. Geological Survey, and brought together

researchers interested in policy and science. It was coordinated in conjunction with SIUC's new (as of 2010) IGERT program on Watershed Science and Policy, which is supported by the National Science Foundation. The next symposium is tentatively scheduled for fall 2012.

4. Coordinate all activities associated with implementing the Cache River Basin Study, including but not limited to additional survey work, structure design, continue grant writing and administration.

SUPPORTED DREDGING PROPOSAL: The coordinator and IDNR worked with the community of Karnak to submit a proposal through IDNR's Mud to Parks program, which could provide support for a community activity and river dredging. Although the grant received initial support, it was eventually denied because the land identified was not fully in village ownership. IDNR continues to support this process by working with the community to rollout a portion of the land needed for this project. Although this opportunity was missed, a concept plan has been developed and which the community supports. Additionally, the location of this land, which is the abandoned railway, provides the village with an opportunity to shore up flood protection. IDNR worked with the community to make those modifications to the existing railway.

PREFERRED RESTORATION ALTERNATIVE DEVELOPED: Coordinator participated in multiple meetings with leadership within IDNR, including its Office of Water Resources, to discuss opportunities for moving project into a formal design and planning process. As an initial step, the coordinator held individual meetings with partners to develop a restoration alternative that all parties could support. The alternative laid out the location of structures, the pathway for restoring connectivity and the amount of water desired. The partnership recently (June 2011) completed this process and has started work on addendums, which will delve more deeply into various aspects of the project.

**PROJECT PHASES UNDER DEVELOPMENT:** With leadership from the coordinator, the partners are in the process of examining the formal plan and design to determine ways that the project could be ordered to properly allow for additional research, in some cases, and engineering. The group currently is reviewing a proposal where Phase I would provide limited connectivity and flow, with limited fish passage, while Phase II would build additional connectivity, provide more flow and improve fish passage.

**BRIEFING DOCUMENT ON LAND IMPACTS:** Oversaw research that examined potential land impacts with restoration activities and compared the differences between current and proposed conditions. Provided partners with a briefing document that captured these findings.

INITIATED RESEARCH INTO POTENTIAL LAND IMPACTS ASSOCIATED WITH ONE RESTORATION MEASURE: With an eye towards launching a NEPA process for one of the identified conservation measures, launched a deeper review of potential land impacts associated with this measure.

# BRIEFING DOCUMENT ON PERMITS, WORKFLOW AND LEGAL ISSUES:

Provided partners with a briefing document that captured knowledge gained about legal issues, specifically in regards to the Karnak Levee, permits and the work undertaken in these areas by the partnership.

# 5. Oversee the Cache Restoration communication plan

# DEVELOPED AN ASSESSMENT/RECOMMENDATION OF COMMUNICATIONS: The coordinator provided detailed commentary and

recommendations on how to support communication activities in the Cache River.

**DEVELOPED, PLANNED and PARTIALLY EXECUTED A MARKETING PLAN FOR THE JOINT VENTURE PARTNERSHIP.** The marketing plan seeks to provide partners with the necessary tools needed as it enters a more public phase of its work, namely the development of a water management plan for the Cache River. It also supports the strategy to build the partnership's friends group and strengthen its relationship with other organizations, especially other conservation groups in the region. Currently completed components of the plan include media releases (on-going), talking points developed on sensitive subjects, descriptions sheets for the project, draft brochure (recently acquired funding to produce) and, of course, completion of marketing work with Southern Illinois University (listed above), which included the development of a traveling exhibit.

As part of the broader media relations plan, the Coordinator organized an editorial board meeting with the regional newspaper and other stakeholders, which resulted in a three-part investigative series titled, "Cache at the Crossroads." Additionally, coordinator became a spokesperson for the partnership in this series and in later interviews, and the coordinator assisted in drafting key pieces for broader distribution to the public.

Additionally, the partnership developed new logos for differentiation purposes between its work and the Friends group. Initial efforts underway for the development of a Web site, including selection of hosting agency, gathering of photos and development of copy.

The partnership also undertook an effort to update its accomplishments report. An initial draft has been created, but the final document is waiting on detailed

information from the partners on its investment in the Cache. The initial draft of this marketing piece is complete.

The partnership updated and reprinted its brochure.

Select Wikipedia entries on the river, the project and partners were created and updated.

With support from the coordinator, the partnership completed its work to update its project map, which currently focuses only on lands in public ownership. The new map provides a tool for partners to use in their signage and materials, as well as allowing for improved illustration of the river, its connect habitats and the impacts of restoration activities. The final map was delivered Spring 2012.

The coordinator, in collaboration with an IDNR staff member, authored a story for *Outdoor Illinois* on efforts to fish research to guide restoration on the Cache River. The final story was then developed into a handout for partnership use.