

Lake Conway Watershed Study Meeting
U.S. Army Reserve Training Facility
November 7, 2013

Members Attending:

Eric Cummings, University of
Arkansas
James McCarty, University of
Arkansas
Dr. Marty Matlock, University of
Arkansas
Judy Watts, Metroplan
Richard Magee, Metroplan
Bill Beall, LCCAC
Smitty Burgess, LCCAC
Peggy Vernon, LCCA C
Barbara Himbough, LCCAC
Matt Schroeder, AGFC

Matt Horton, AGFC
Jack Johnson, LCCAC
Tom Eans, LCHOA
Larry Hill, LCHOA
Hayden Baldwin, LCHOA
KC Larson, UCA
Sally Entrekin, UCA
Reba Cargile, LCHOA
Raven Lawson, ADEQ
Grover House
Mary Alice House
Scott Grummer, City of Conway
Jim Houston

Meeting began at 6 pm

Mr. Magee began the meeting with an introduction of the meeting and addressed the question if this meeting and group was the same as the Advocacy Group that was formed 3 - 5 years ago. Mr. Magee said that is up to the group to decide and that Metroplan can provide the staff and support but the group will decide the process and how detailed the group.

Introductions by group

Presentation by Mr. Eric Cummings on a review of the 9 Element Plan.

Project Goals of Lake Conway Watershed Study - for EPA 319 develop:

- 9 Element Plan
- Urban LID Plan for Conway
- Decrease Lake Conway sedimentation and pollutant loading Lake

Watershed

The Point Remove Creek is not part of the watershed area. There have not been a lot of water quality issues. This group is focusing on the Conway area and the 12 digit HUC: Palarm Creek Watershed area that is made up of Stone Dame Creek, Gold Creek, and Lake Creek.

EPA 9 Element watershed plan has six steps but focusing on 3 steps

1. building partnerships

2. characterize watershed
3. set goals and identify solutions

Step 4 will move forward with the implementation.

Step 2, update of what UA has been working on: the existing data for what watershed as a whole, water elevations, nitrates and ammonias. Stone Dam Creek has nitrates and ammonia, has TMDLS. Also has 319 programs, priority watershed program and soil, water, assessment tool. If there is anything that has been missed, let the team know.

Mr. Cummings demonstrates impaired creeks on map, White Oak Creek, Stone Dam Creek etc. The main object of the 319 Program is to get streams delisted off of the 303 list. There will be a proactive, preventative plan to make sure the water quality does not go down and to increase the water quality.

Dr. Matlock explains that the plan will make the Lake Conway Watershed eligible for more funding. Building a citizens group is designed to protect the watershed as it changes.

The data gaps are: unknown source of sediment issue, lack of routine monitoring sites in portions of watershed, lack of flow data to determine loads, and loads dominated by Arkansas River is out of control of HUC 8 and HUC 12 populations.

Step 3 to set goals and identify solutions. Also determine load reductions needed.

Steps needed to obtain full 9-element plan

- Monitoring of TMDL effectiveness
- projects in TMDL segments to address continued non-attainment of standards
- cost estimates and timelines for remedial measures to eliminate impairments
- Full 9 Element Plan completion
 - 2016 - 2017
 - \$50 - \$100k (does not necessarily include the cost of monitoring)

Question about why LID is named that way. Soil and water conservation in an urban system. Another question was asked about how to change what was done by engineers/officials. Dr. Matlock explains that policy needs to be changed. Scott Grummer mentions public meeting on December 2nd 6-8 pm at Conway Chamber of Commerce where Markham Street redevelopment will be the topic. Mr. Magee stresses that no dollars can be spend on Lake Conway unless it is on a plan. Dr. Matlock suggests visiting the ADEQ parking lot to see

they hybrid LID parking lot.

Mr. McCarty presents information about watershed modeling. Two reasons to watershed model, to understand best practices to manage TMDLS (total maximum daily load) and for city planning prioritizing.

One example was Storm Water Management Model (SWMM)

- rainfall runoff simulation developed by EPA
- can place rainfall event in the model and develop subcatchments
- can place LID technology to see model rainfall runoff
- results: infiltration, runoff, surface storage, ponding, and where flooding appears

The SWMM results can show before and after of potential systems in place. This is a standard EPA model. Most engineers are using something like that.

A basic SWMM model for Lake Conway Watershed shows with Little Creek, Gold Creek, and Stone Dam. The percent of impervious surfaces from 1.5% - 30.9%. Mr. McCarty showed group that a two year storm event would produce 2.63 in in Little Rock, 2.08 in in Stone Dam, and 2.96 in Gold Creek due to impervious systems.

Mr. McCarty also demonstrated a SWMM model of a smaller area, a dirt lot paved compared to paved with LID to forecast differences.

Another model is System for Urban Stormwater Treatment and Analysis Integration Model or SUSTAIN. It does the following:

- model flow and pollution control measures to protect source waters and meet water quality goals
- there are 5 - 6 tools within model like slope, drainage area, road buffer, etc.
- produces a map of where LID elements can be put in place

SUSTAIN runs simulations of flow and pollutant transport for a wide range of structural BMPs. This model is a cutting edge model and probably not used by local civil engineers.

These are two models that the team will be using to determine many factors relate to the Lake Conway Watershed. A question about the timeline was asked. Dr. Matlock said there are two tracks, taking care of known problems and preventing future problems.

A question was asked about Lake Maumelle master plan and learning from their project.

Mr. Magee asks the group how they want to govern and pursue this project. Dr. Matlock summarizes some other watershed groups. One watershed group has expanded beyond watershed management into an educational group of the Illinois River in Northwest Arkansas. The Beaver Watershed group is a small group that protects the sediment and quality of the watershed. Most are structured as 501c3 but there have to be bylaws, officers, etc. The recommended pattern is to mirror the Beaver Watershed group. Mr. Magee also recommends an informal group before incorporating.

A statement about the name. The committee for the protection of the lake was started in 2001 to protect the sedimentation of the lake. The Lake Conway Citizens Advisory Group started from this. This group should not have to pay their own money to fund this group, but it could obtain money from other groups. ADEQ mentioned that the money for Lake Conway Watershed is there but it cannot be distributed until the 9 Element Plan is created. ADEQ can also step in and develop the watershed group.

The consensus is that a group is formalized and will look at the ADEQ materials.

LCHOA mentions that there has been issues with flooding, quality of the water, and enforcement issues. They are a 501c3 and take dues of \$5. LCHOA has never heard back from representatives they contacted.

Question asked about water management plan and issues with the Lake Conway watershed. What are future short-term solutions? Could the dam be fixed? Explained that political senator Jane English no longer participated that the group disbanded.

Prioritize projects. LCHOA bylaws can be used as a template for the bylaws to be created with this group. LCHOA says that they have flooding now. Dr. Matlock replies that identify sources and intervene i.e. retention.

What are the common goals? The group needs to identify common goals. Trust means understand (not agreement). Communication is the problem. Distrust motivates people. Shared values do exist with the group; the solutions are what we differ in.

Potential meeting - 2nd week of December. Doodle poll to be sent out.