

**Lake Maumelle Watershed Management Plan
Policy Advisory Council
Meeting Summary
October 19, 2006**

Attendees

See Attachment A.

Introduction

Trevor Clements of Tetra Tech took roll call and welcomed members to the twelfth meeting of the Policy Advisory Council (PAC). Trevor indicated that the PAC was on the “home stretch” of the road to completing Plan Development, but this milestone is really just the beginning for watershed management. The next emphasis will be on developing the Implementation Strategy for the Plan and on initiating early action items. This upcoming stage will represent a new way of doing business – operating under an ongoing, adaptive watershed management approach. To get there, our focus for these next two months will be on finishing the Plan.

Following this PAC meeting, Tetra Tech will turn the Preliminary Draft Plan into a Draft Plan that will be released for public review and comment. The target release date for the Draft Plan is October 27. Tetra Tech will then compile comments received on the Draft Plan through November 27. There will be numerous opportunities for the public to provide oral comments at public meetings scheduled for a two week period between November 6 and November 16 (PAC members will receive detailed information on meeting dates, times and locations). Additionally, written comments will be received by Tetra Tech through November 27.

Trevor stated that Tetra Tech will review all of the comments received and make its final recommendations on the Plan to the CAW Board of Commissioners at its December 14 meeting.

Trevor then reviewed the meeting agenda. Tetra Tech would first provide a brief overview of the Management Plan to make sure everyone has a basic understanding of the main plan provisions. The majority of the meeting was reserved for PAC members to provide their input on the Preliminary Draft and to discuss key issues together to potentially influence Tetra Tech’s recommendations in the Plan.

Overview of the Preliminary Draft Plan

Trevor explained the basis for the term “Preliminary” for the first draft. The version sent out for early review has not been edited and formatted yet by Tetra Tech’s production staff. Additionally, it has some known errors still to be corrected for things such as the Acknowledgments section and some figure references. The purpose of the Preliminary draft was to have Tetra Tech’s recommendations down in writing for advance review by the PAC. Tetra Tech would like input at tonight’s meeting from the PAC before making its revisions for the public release Draft Plan due out next week.

Trevor then reviewed the plan. Given that Tetra Tech’s technical analyses showed that the biggest threat to protecting the water supply comes from new development and increased population in the watershed, the Plan focuses on managing impacts from future development. Three management areas are proposed, each reflecting relative differences in risk to the water supply based on the indicator of time of travel to the water supply intake: Critical Area A makes up the eastern-most part of the lake and watershed that is closest to the intake and reflects the shortest amount of travel time for contaminants to reach the intake; Critical Area B contains the remainder of the lake and extends westward to drainages including Williams Junction (these areas have similar travel times across land and in route within the tributary streams

leading to Lake Maumelle); and the Upper Watershed Area which reflects the area having the longest travel time across the land and within the tributaries (total travel time to the intake ranging from 30 – 37 days).

To manage impacts from future development in the three management areas, the Plan calls for local jurisdictions to adopt two sets of ordinances: 1) sedimentation and erosion ordinances, and 2) watershed protection ordinances. Enhanced local sedimentation ordinances are needed to prevent excessive sediment and turbidity from draining off the land during the clearing and construction phases of development. The land is particularly vulnerable during these times such that the types of best management practices used are very important, as are the authorities and abilities to inspect and enforce the application of the sedimentation and erosion control practices. On the other hand, the watershed protection ordinance provisions are aimed at managing long-term post-construction impacts. They address design factors such as minimum lot size, minimum undisturbed area, maximum imperviousness or maximum allowable loads of selected pollutants that must be achieved in annual runoff.

In the short-term, Tetra Tech is recommending that watershed protection ordinance provisions include Large Lot and Cluster development options reflecting land slope conditions. For the Upper Watershed Area and Critical Area B, lot sizes need to average a minimum of five acres on low slopes and ten acres on high slopes. Design restrictions such as driveway composition type, minimum undisturbed area, and maximum impervious area depend on both the slope and development type (Large Lot or Cluster). Tables summarizing each were reviewed for both the Upper Watershed Area and Critical Area B. Restrictions in Critical Area B are more restrictive than those for the Upper Watershed Area, reflecting the difference in relative risk posed to the water supply.

In the long-term for Critical Area B and the Upper Watershed Area, the Plan calls for establishing a Performance Standards option allowing for the use of engineering BMPs to meet pollutant runoff allocations, conditioned on successful conduct of pilot projects and establishment of administrative and enforcement capacity.

For Critical Area A, the Plan provides two options for the CAW Board of Commissioners to consider. Option 1 involves no development. No development poses the least risk to the water supply from land in this area. In other words, when conservation land is replaced with developed property, sources of contamination associated with human inhabitation increase and pose a greater risk. Choosing a policy of no development eliminates that risk. It also could be used to meet a major portion of the 1500 acres needed to offset the watershed plan exemptions proposed for existing landowners in the watershed. The area meets the criteria for high priority acquisition. Under this option, CAW could reasonably continue its existing policy for land in Critical Area A.

However, Tetra Tech cautions CAW from considering Critical Area A in isolation from the rest of the watershed. Therefore, Option 2 is offered for consideration by the Board. It involves allowances for a very limited amount of highly restricted development under five proposed conditions:

- 1) Overall risk to the lake must be reduced. Since there is no guarantee that all jurisdictions will adopt the recommended ordinances, greater certainty for reducing the overall risk from future development could result from an agreement by major landowners to follow the proposed plan requirements in the remainder of the watershed. [Note that the holdings of Deltic Timber, Weyerhaeuser, and Rick Ferguson companies total more than 30,000 acres in the remainder of the watershed.]
- 2) Major landowners must work with CAW to obtain other watershed land to offset the exemptions. Fifteen hundred (1,500) acres of high priority conservation land are required to meet the needed offset.

- 3) Major landowners must conduct pilot studies for BMPs. Prior to approving the use of BMPs to meet performance standards, it must be demonstrated that the BMPs can achieve the requirements and can be sustained in these soil types and slopes through major storm events.
- 4) If the pilot studies are not successful, CAW should not be penalized for the increased price of land after the studies are performed (expected to take 4 years). CAW and the ratepayers have nothing to gain by agreeing to delays for studies if it would cost them more even though the studies failed to demonstrate applicability.
- 5) Administrative, regulatory and enforcement capacity must be in place. A performance standards approach requires design manuals to establish specifications for meeting the standards, trained staff to perform design review and approvals and to conduct inspections for the more complex configurations, and enforcement capacity. Such capacity requires time to build, and could be worked on simultaneously with performance of the pilot projects.

Under Option 2, there is a short-term Large Lot option for Critical Area A. It would require a minimum lot size of 20 acres with 92 percent undisturbed area and a maximum of 2.2 percent imperviousness. Roads and driveways would need to be paved, and wastewater would be handled by non-discharging systems. If all landowners in Critical Area A pursued the short-term Large Lot option, Tetra Tech estimates that it would result in a build-out condition of 68 houses. Tetra Tech believes this to be a manageable risk, and if the Board selects Option 2 to allow development in Critical Area A, then development under this Conservation approach should be allowed to proceed (i.e., pilot projects are not needed for development at this scale and design).

Under the Performance Standards approach for Option 2, Tetra Tech estimates that it would create approximately 230 to 240 additional houses at build-out if all landowners followed this approach. Again, this approach is contingent upon the CAW Board selecting Option 2 and the five conditions being met.

In making the decision on Option 1 or Option 2, Tetra Tech cautions the CAW Board not to make the decision considering Critical Area A in isolation. Rather, Tetra Tech recommends that the Board consider Critical Area A in the context of the whole watershed (i.e., considering which option provides the most overall risk reduction to the water supply, and best meets the adopted goals and objectives in their entirety).

Trevor then reviewed the Plan's recommended exemptions for existing property owners. Those with homes or businesses as of the effective date of the ordinance will be eligible for the Additions exemption, which will allow homeowners to complete additions and businesses to add up to 10,000 square feet of additional impervious area without being held to requirements in the Plan. A second exemption would allow landowners with proof of ownership of property on or before December 2000 to be allowed to create up to five subdivisions of 3-acre lots that would not be subject to the Plan requirements. These exemptions would have some impact on additional pollutant loading in the watershed, so the Plan calls for acquisition of 1500 acres of conservation land from the pool of developable land to offset the exemptions impacts.

The Plan has many other recommendations as well. Some important provisions to highlight include:

- Working with state authorities to prohibit direct surface discharges of wastewater. All wastewater would be handled through non-discharging alternatives.
- A Responsible Management Entity (RME) would be established to own, operate, and maintain all new non-discharging systems.
- CAW would hire a Watershed Administrator to enforce the watershed protection and sedimentation & erosion control ordinances.

- For undisturbed space conserved under the Plan, an enhanced fire management plan and a forest stewardship plan would be developed.
- A strategic plan would be established to address minimizing risk of and response to transportation spills.
- High priority unpaved roads would be identified for paving based on cost-benefit criteria.
- A Watershed Stewardship Council would be established for long-term coordination of the Plan, facilitating implementation and tracking progress, and recommending adaptations of the Plan as needed over time to achieve the adopted goals and objectives. CAW would hire a Watershed Stewardship Coordinator to staff the Council and coordinate related activities.

Under this Plan, CAW recognizes its responsibility for supporting implementation by funding key provisions including:

- The Watershed Administrator and Watershed Coordinator positions.
- Land purchase to offset the landowner exemptions.
- Long-term water quality monitoring.
- Special provisions and projects within the watershed to develop support among local governments and communities (e.g., providing supplemental water, collecting household hazardous waste, paving critical unpaved roads, and so on).

Trevor then summarized with the big picture. Under this Plan at build-out:

- About 65 percent of the land would be in conservation, 5 percent would be in impervious surface, and 30 percent would be covered with grass and meadow.
- An estimated 6,590 houses would be located in the watershed, assuming that the majority of developments average 5 acres on low slopes and 10 acres on high slopes.
- Water quality targets would be achieved.

This Plan meets the adopted goals and objectives. It accommodates growth while providing flexibility by offering both traditional large lot development options (i.e., reflecting what has been demanded to date) and newer cluster design options. Proposed exemptions help to minimize burdens and address legacy issues for existing landowners. All of this is provided while maintaining a high quality drinking water supply.

Additionally, Tetra Tech believes that the Plan provides for an equitable sharing of costs and benefits. CAW and the ratepayers are taking on the financial burden for administration and enforcement, mitigation of exemption impacts, supplemental water supply, and additional services in the watershed. While landowners have some additional indirect costs posed by increased restrictions on development, the Plan contains provisions to offset many of these thereby reducing the burden on existing landowners (i.e., exemptions for legacy landowners with CAW picking up the tab for mitigation, increased water availability, and services such as household hazardous waste collection and BMP cost-sharing).

Update from the PAC Implementation Subcommittee

PAC members agreed to hear first from the Implementation Subcommittee before discussing specific issues on the Preliminary Plan. John Bentley provided a synopsis, crediting Ray Vogelpohl for his support in pulling information together. Of the 10 or 11 members on the Subcommittee, John indicated that there was unanimous support for further exploring the establishment of a Regional Watershed Management Authority – or body – that would provide unity and consistency in managing and enforcing

the Lake Maumelle Watershed Management Plan. State enabling legislation would be required for such an authority with regulatory, administrative, and enforcement powers.

Excellent discussion occurred at this time and later in the meeting. For the purposes of synthesizing documentation, the main points on the recommendation for a Regional Watershed Authority are summarized together here.

The timing and approach for how this might reasonably move forward was discussed. Upon reflection, the PAC stressed the importance of having all local governments in the watershed:

- Be part of the exploration and discussion of a Regional Watershed Authority.
- Help determine the need for and feasibility of such an authority.
- Help design the authority structure, if created.
- Be governing members of the authority.

Several PAC members stressed that this exploration will take time, and that it is critical to take the time needed – all governments working together – to establish the required support for a watershed management authority. Following this discussion, the PAC voted unanimously (16 in favor, with 1 member abstaining) for support of a resolution to make this recommendation in the Plan. A request was made that the diagram illustrating Plan Oversight Structure be revised to incorporate the Authority concept and inclusion of local governments. Tetra Tech agreed to make this revision for the Draft Plan.

PAC Discussion on the Preliminary Draft Plan

Kimberly summarized the list of issues sent to Tetra Tech prior to the meeting, and asked the PAC members to prioritize which to discuss first. She also acknowledged that members had received an extensive list of concerns raised by fellow PAC-member Chuck Nestrud in an email. Some of the issues included alleged misquoting or other inappropriate action by Tetra Tech. Kimberly assured the group that the Tetra Tech team has gone back and checked our records and verified that we have the correct citations and were supported in our recommendations in the plan. She indicated that Tetra Tech would not be taking up everyone's time during this meeting with a point-by-point rebuttal, but stated that Tetra Tech will be providing written responses to the CAW Board and that PAC members will receive a copy of those responses. Kimberly said that Chuck and others providing comments can be assured that the Tetra Tech team did read all of their comments and will be addressing them in the appropriate format.

Non-Discharging Wastewater Systems

The PAC first wanted to discuss the issue of non-discharging wastewater systems. One concern raised by some members was whether pumping wastewater out of the watershed would be allowed. Trevor clarified Tetra Tech's concern regarding larger sewer systems. While Tetra Tech believes that it is okay to have local collection systems for individual subdivisions under a Cluster design, it does not recommend stringing subdivisions together to create larger volumes of wasteflow in larger pipelines that cover longer distances. Tetra Tech acknowledges that there may be some locations where the same smaller volume of wastewater that would have been handled with a non-discharging system is pumped a short distance and discharged outside of the watershed.

Chuck Nestrud asked about establishing criteria for making these decisions, such as line size. Trevor responded that criteria could be established but that they should focus on volume, avoiding stream crossings, length of pipeline, and number of pump stations in addition to line size. Chuck indicated that he could agree with having that kind of criteria that the RME would use to make a decision.

Kate Althoff indicated that it would be helpful to define large. Trevor indicated that Tetra Tech would consider 300 homes to be on the upper end of what would be acceptable.

Trevor then clarified that the intent of the Plan was to keep sources small and diffuse, so if problems do occur, they should be smaller in magnitude and be limited to more localized impacts. The idea is to minimize the exposure to large impacts.

Several PAC members then stressed the importance of emphasizing the no-discharge provision. Glen Hooks suggested adding language to the Plan stressing that the no-discharge provision is the foundation for the recommendations for managing new development. Jay Cheshire recommended making the definitions of discharging and non-discharging systems very clear.

Trevor and Kimberly indicated that Tetra Tech would refine the Plan to address these suggestions.

The PAC then voted unanimously (16 in favor with 1 abstaining) in favor of the no-discharge provision.

Subdivision Exemption Eligibility

Concern had been raised regarding how eligibility for the legacy subdivision exemption will be determined. Kimberly indicated that Tetra Tech had considered this further since the last meeting and had decided that any proof showing land ownership as of December 2000 would be sufficient. Members generally concurred that this would meet the spirit of the exemption.

Critical Area A Provisions

PAC members requested clarification of the two options offered in the Plan, and of Tetra Tech's recommendations. Trevor clarified that Option 1 was developed to address two issues: 1) risk to the water supply and 2) mitigation of exemptions. With regard to risk, when you compare risk of runoff from forest and meadowland to developed property, the developed property brings in more sources of contamination to increase the risk. No development decreases that risk and, when the recommended criteria for land acquisition are considered, land in Critical Area A fits the criteria well. The question is, how substantial is that increase and is it manageable? And, what is the best approach for protection of the water supply? That is why Option 2 was developed.

Under Option 2, any development would still require conservation of a minimum of 70 to 92 percent of the land and include other management measures, all to help manage that risk. If CAW could also reach agreement with major landowners to implement the provisions of the Plan on their land in the remainder of the watershed (because there are no guarantees that ordinances will be passed), then the long-term risk to the water supply posed by contaminants such as sediment, total phosphorus, TOC, and bacteria would be decreased over Option 1. Trevor stated that PAC members should understand that if the no-development option is selected for Critical Area A and the major landowners don't enter into agreements for Critical Area B and the Upper Watershed Area, development under existing regulations could be substantially worse than what Option 2 can provide. Therefore, Tetra Tech doesn't think the decision on Critical Area A should be made without considering these factors. Tetra Tech recommends that the PAC and CAW consider which ultimately best meets the overall goals and objectives.

Wally Loveless said that all but two members voted for Option 2 at the last meeting, which would seem to corroborate that line of thought.

Kathleen Oleson raised concern that she didn't think there was authority to make certain that the conditions are met. Kimberly responded that the courts would be used to enforce the contract.

The concern over the language in Condition #4 was raised. After discussion, Tetra Tech agreed to modify the condition to remove reference to a specific date for reaching an agreement on land price in favor of simply reflecting that agreement on price should occur before conducting the pilot studies.

Sedimentation and Erosion Control Implementation Provisions

Several PAC members raised concern for adequate oversight and enforcement of sedimentation and erosion control during the land disturbance and construction phases of new development. A suggestion

was made to require certification of subcontractors before construction can begin. This issue will be further considered during preparation of the Implementation Strategy for the Plan.

Clarification of Plan Oversight Structure

Several members asked for further discussion on the composition of proposed oversight bodies. Wally Loveless asked what CAW's role would be. Kimberly responded that they would be a member of the Watershed Stewardship Council, and that they could be a member of the Planning Commission or Regional Authority if appointed by the local governments. She clarified that the Watershed Administrator would notify the Board of development applications and decisions, but that the CAW Board would not be the oversight body.

Discussion turned to the composition of the Watershed Review Board. Based on PAC discussion, Tetra Tech agreed to recommend that the Watershed Review Board include technical expert and landowner representation.

Time ran out for the meeting, so discussion of development agreements was postponed to the November PAC meeting.

Next Steps

Tetra Tech stated that the Draft Plan would be available by the end of next week. A final schedule for public meetings will be sent to each PAC member. A summary of this meeting, a meeting agenda, and any supporting materials will be sent out prior to the next meeting scheduled for November 15. Trevor reminded members that the meeting time was switched to Wednesday from 1:30 to 4:00 p.m. so that Tetra Tech could meet with the Perry County Quorum Court on Thursday evening, November 16 at 7 p.m.

The meeting was adjourned.

Attachment A

	MEMBER NAME	DESIGNATION	REPRESENTING
P	Herb Dicker	PRIMARY	Ratepayers (Little Rock Neighborhoods)
P	Kathy Wells	ALTERNATE	Ratepayers (Little Rock Neighborhoods)
NP	Sue Corker	PRIMARY	Ratepayers (North Little Rock Neighborhoods)
NP	Jack Finnegan	ALTERNATE	Ratepayers (North Little Rock Neighborhoods)
P	Mike Simpson	PRIMARY	Ratepayers – Jacksonville Water Works (Master-metered Customers)
P	Robert Stout	ALTERNATE	Ratepayers – North Pulaski Water Works (Master-metered Customers)
P	Tony Kendall	PRIMARY	Central Arkansas Water Commission (Chair)
NP	Jane Dickey	ALTERNATE	Central Arkansas Water Commission (Member)
P	Roby Robertson, Ph.D.	ALTERNATE	Central Arkansas Water Commission (Vice Chair)
NP	Ruth Bell	PRIMARY	Community (League of Women Voters of Pulaski County)
P	Kathleen Oleson	ALTERNATE	Community (League of Women Voters of Pulaski County)
NP	Steve Owen	PRIMARY	Community (North Little Rock Chamber of Commerce)
NP	James Dietz	ALTERNATE	Community (North Little Rock Chamber of Commerce)
NP	Randy Wilbourn	PRIMARY	Community (Little Rock Regional Chamber of Commerce)
P	Jay Chesshir	ALTERNATE	Community (Little Rock Regional Chamber of Commerce)
P	Kate Althoff	PRIMARY	Community (Citizens Protecting Maumelle Watershed)
P	Barry Haas	ALTERNATE	Community (Citizens Protecting Maumelle Watershed)
P	Alderman Neil Bryant	PRIMARY	Elected Official (North Little Rock City Council)
NP	City Director Stacy Hurst	PRIMARY	Elected Official (City Director, City of Little Rock)
P	Justice Pat Dicker	PRIMARY	Elected Official (Pulaski County Quorum Court)
P	Justice Harrison Jones	PRIMARY	Elected Official (Perry County Quorum Court)
NP	Justice Charlie Clements	ALTERNATE	Elected Official (Perry County Quorum Court)
P	Glen Hooks	PRIMARY	Environmental (Sierra Club)
NP	Dale Ingram	ALTERNATE	Environmental (Sierra Club)
P	Kevin Pierson	PRIMARY	Environmental (Audubon Arkansas)
NP	Stephanie Hymel	ALTERNATE	Environmental (Audubon Arkansas)
P	Charles Nestrud	PRIMARY	Property Owners (Deltic Timber Corporation)
P	Larry Hedrick	PRIMARY	Property Owners (U.S. Forest Service)
NP	Jeff D. Allison	PRIMARY	Property Owners – Water Association within Watershed
P	John M. Bentley, III	PRIMARY	Property Owners – within Watershed – Western Watershed
P	Ray Vogelpohl	ALTERNATE	Property Owners – within Watershed – Western Watershed

	MEMBER NAME	DESIGNATION	REPRESENTING
P	Marge Brewster, Ph.D.	PRIMARY	Property Owners – within Watershed – Northern Watershed
P	Earl Hillard	ALTERNATE	Property Owners – within Watershed – Northern Watershed
P	Wally Loveless	PRIMARY	Realtors (Arkansas Realtors Association)
NP	Kenneth Gill	ALTERNATE	Realtors (Arkansas Realtors Association)
P	John Bryant	PRIMARY	Recreationists (Grand Maumelle Sailing Club)
NP	Nicole Claas	ALTERNATE	Recreationists (Grand Maumelle Sailing Club)
P	Randy Day	PRIMARY	Recreationists – Fisherman (President of Maumelle Bass Club)
	OTHERS IN ATTENDANCE	REPRESENTING	
P	Kimberly Brewer, A.I.C.P.	Tetra Tech, Inc.	
P	Lee Bodenhamer	Property Owner	
P	Shaní Canada	Central Arkansas Water	
P	Matthew Cate	<i>Arkansas Democrat-Gazette</i>	
P	Trevor Clements	Tetra Tech, Inc.	
P	Tim Daters, P.E.	White-Daters & Associates, Inc.	
P	Troy Ellison	Citizen	
P	Hester Estate	Property Owner	
P	Jim Harvey	Central Arkansas Water	
P	Scott King	A-V Arkansas, Inc.	
P	Bruno Kirsch, Jr., P.E.	Technical Advisory Council/Central Arkansas Water	
P	Brandi McGreevey	Central Arkansas Water	
P	Norvell Plowman	Attorney for Lee Bodenhamer, Property Owner within Lake Maumelle Watershed	