

Missouri  
Department of  
Natural Resources

DRAFT BUFFALO DITCH TMDL  
PUBLIC COMMENTS

Public Notice  
October 2, 2009 – December 28, 2009

**Buffalo Ditch**  
**WBID # 3118**

Dunklin County, Mo.

Missouri Department of Natural Resources  
Water Protection Program  
PO Box 176  
Jefferson City, MO 65102-0176  
800-361-4827 / 573-751-1300



Missouri Department of Natural Resources  
Water Protection Program,  
Water Quality Monitoring & Assessment Section

Dear DNR Representative(s)

On behalf of the Kennett Board of Public Works, I would like to thank you for this opportunity to respond to your letter and express our concerns and/or comments on the proposed Draft of the Buffalo Ditch, TMDL.

We as owners/operators of the Kennett WWTP understand the importance and concerns for the environment and all the aquatic life in the Buffalo Ditch. We to want make sure that our WWTP discharges effluent waters applicable to the Missouri Water Quality standards. However; we are concerned about the proposed Buffalo Ditch TMDL limits and the impacts that it will have on us as a municipality and a community.

As you know, the Buffalo Ditch was placed on the states 303(d) list of impaired waters in 1994 for Biochemical Oxygen Demand (BOD), with the Kennett Wastewater Treatment Plant listed as the sole source of the impairment. Concerned for the environment and eager to stay in compliance, the Kennett Board of Public Works approved the purchase of a 3 cell aerated lagoon. In 1996, Kennett began operations of a new lagoon engineered for a lifespan of approximately 30 years based on approved DNR Permit limits. Since that time Kennett WWTP has met all permit requirements and yet we remained on the impaired waters list with Low DO as the primary impairment for an additional 15 years. Water quality studies and data collected on Buffalo Ditch in 2003, 2004 and again in 2008, revealed that there was early morning low dissolved oxygen levels both upstream and downstream of the WWTP. However; that same data reveals that two drainage ditches, one to the east and one to the west of the Buffalo Ditch showed similar decreases of DO during the same early morning hours as well as increased DO during midday to late evening hours. These two drainage ditches are in no way under the influence of the Kennett WWTP and have no direct contact with the Buffalo Ditch and furthermore, neither have been added to the state's 303(d) list for impaired waters.

With that in mind I have several questions and comments for you:

Question #1

What is DNR/EPA's overall goal for the Kennett WWTP? Is it to maintain above a 5mg/L DO throughout the Buffalo Ditch at all times? Or is it to meet all permit limits? Or Both.

Question #2

How can the Kennett WWTP be listed as the sole source of impairment of the Buffalo Ditch for DO when natural occurring ditches in the same surrounding area of the Buffalo Ditch have very similar patterns of decreased and increased DO during the same early morning to late evening hours?

### Question #3

If the state knew that the Kennett WWTP had built a new lagoon system in 1996 and previously been on the 303(d) list for impaired waters since 1994 for BOD, then why did the MODNR take until 2003 to return to the lagoon and Buffalo Ditch for additional sampling? It was our understanding that more frequent testing on the Buffalo Ditch should have been performed at least every two years or prior to the 303 (d) list renewal.

#### (Comment #1)

It was our belief that the designed operations of the new lagoon and the pollutant levels for BOD outfall effluent being below the permit requirements, were yielding positive result levels of BOD and that the impairment for DO had been eliminated with the construction of the new lagoon. It seems that we as a municipality was more eager to correct the low DO by building a new lagoon than DNR was to monitor the Buffalo Ditch and the effects on the aquatic life. If we built the new lagoon based on low BOD, then why has the DNR allowed the Buffalo Ditch to remain below acceptable DO levels for 15 years. The lack of testing of the Buffalo Ditch prior to each new 303(d) list being published over the last 15 years since the new lagoon was constructed has now put the citizens of Kennett and this municipality with a increased financial hardship due to our economic downturns and increased prices of supplies and equipment needed to meet state regulatory limit requirements.

### Question #4

Will applying new upgrades and best treatment technology to the now 13 year old lagoon eliminate the low levels of DO? If so, then why didn't the building of the new lagoon take care of this problem 1996?

#### (Comment #2)

Since the lagoon had a thirty year life span and now current limits will not meet department permit limit criteria, we are going to be hard pressed to explain to our community why their dollars spent in 1996 for a new lagoon yielded no positive results as earlier believed. It will furthermore destroy any chance of getting a sale tax increase through a public election. Our community will not vote to spend money on projects that will not pay off in a positive way and produce desired results. In reality this will have a very negative impact on our already economically distressed community, financially.

#### (Comments #3)

In order to meet the WLA required limits as defined by the TMDL, significant upgrade to our WWTP must be engineered and implemented. Initial data suggest that even with the upgrades and newest technology, we won't be able meet the limits 70 % of the time, and may not, in any case, correct the low DO problem within the Buffalo Ditch. Therefore we are reluctant to move ahead with any major changes to the current lagoon until a more realistic and cost effective solution can be proposed.

#### (Comments #4)

While reviewing our TMDL Draft for Buffalo Ditch it came to our attention that the lack of data upstream and contradictory information within the draft left us with many concerns as to the validity of the data being reported. For Example: Ammonia, which at high concentrations can kill aquatic life was added to the 2004/2006 303(d) list as an impairment. Despite low levels measured during our quarterly in house monitoring per our permit, ammonia was still added to the 303(d) list. Only later did we receive notice through the 2008 303(d) list that it was being de-listed as a impairment because the ammonia criteria was reassessed. For four years we were on the impaired waters list for ammonia only to be told that the data was incorrect.

REQUEST:

We the Kennett Board of Public Works would like to see testing of TKN, NH<sub>3</sub>N, NO<sub>3</sub>N, TN, TP, VSS, Chl. A , and CBOD performed at location points upstream of the WWTP along the Buffalo Ditch, Ditch #36 and Ragland Slough. We understand that these locations are not directly influenced by municipal wastewater constituents, however; we would like to see how they compare to the locations downstream of the WWTP since similar patterns of decrease and increase of DO occurred during all three testing periods by both the natural ditches and our downstream WWTP sampling sites during the same window of time.

Most importantly we would like to ask that you grant a time extension, until additional data can be collected, analyzed and reviewed for the locations upstream of the WWTP along the Buffalo Ditch and the two drainage ditches mentioned above and in the original draft, before finalizing any TMDL for the Buffalo Ditch.

These are our concerns and comments at this time. Again thank you for allowing the Kennett Board of Public Works the opportunity to respond to the Draft TMDL letter. If you have any questions or comments, Please do call us if you wish to discuss these matters further.

Sincerely yours,

David Wilkins  
CLGW Director of Operations  
303 S. Anthony  
Kennett, Mo. 63857  
Phone 573-888-5366  
Email: [dwilkins@clgw.net](mailto:dwilkins@clgw.net)

Barry Jarred  
Water Plant Superintendent  
Kennett Water Plant  
406 East Fourth Street  
Kennett, Mo. 63857  
Phone 573-888-2023  
Email: [barry@clgw.net](mailto:barry@clgw.net)



Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director

## DEPARTMENT OF NATURAL RESOURCES

[www.dnr.mo.gov](http://www.dnr.mo.gov)

December 11, 2009

Mr. David Wilkins, Director of Operations  
Mr. Barry Jarred, Water Plant Superintendent  
City Light, Gas and Water  
303 South Anthony Street  
Kennett, MO 63857

RE: Response to Comments on the Buffalo Ditch Total Maximum Daily Load

Dear Sirs:

The Missouri Department of Natural Resources (Department) appreciates the comments provided on behalf of the Kennett Board of Public Works on the draft Buffalo Ditch Total Maximum Daily Load (TMDL). This letter responds to comments received from City Light, Gas and Water following the public notice period for this TMDL. Please find herein the Department's response to each comment.

*Question #1: What is DNR/EPA's overall goal for the Kennett WWTP? Is it to maintain above a 5 mg/L DO throughout the Buffalo Ditch at all times? Or is it to meet all permit limits? Or Both.*

The purpose of the Buffalo Ditch TMDL is to determine the pollutant loading of total nitrogen, total phosphorus, total suspended solids and biochemical oxygen demand that will result in attainment of the minimum dissolved oxygen criterion of 5 mg/L and support the protection of the aquatic life designated use.

*Question #2: How can the Kennett WWTP be listed as the sole source of impairment of the Buffalo Ditch for DO when natural occurring ditches in the same surrounding area of the Buffalo Ditch have very similar patterns of decreased and increased DO during the same early morning to late evening hours?*

The 2004/2006 303(d) List of impaired waters identifies the Kennett Wastewater Treatment Plant as the source of the low dissolved oxygen impairment in Buffalo Ditch. One of the main elements of the TMDL development process is to identify all existing sources of pollutants that may be causing or contributing to the impairment. These include both point and nonpoint sources of pollutants. Among point sources, only two permitted facilities discharge to the impaired segment during critical low-flow periods and the Kennett Wastewater Treatment Plant accounts for 85 percent of the permitted

discharge. While nonpoint sources of oxygen-demanding pollutants do exist at higher flows, the Kennett Wastewater Treatment Plant is the predominant source of pollutant loading to Buffalo Ditch during critical low flow periods. Another step in the TMDL development process is ensuring that pollutant loads are allocated to both point source and nonpoint source at the appropriate flow conditions. In addition to allocations for the Kennett Wastewater Treatment Plant, this TMDL also sets wasteload allocations for other permitted point sources in the watershed, as well as load allocations for nonpoint sources.

*Question #3: If the state knew that the Kennett WWTP had built a new lagoon system in 1996 and previously been on the 303(d) list for impaired waters since 1994 for BOD, then why did the MODNR take until 2003 to return to the lagoon and Buffalo Ditch for additional sampling? It was our understanding that more frequent testing on the Buffalo Ditch should have been performed at least every two years or prior to the 303(d) list renewal.*

The Department typically waits at least three years from the end of a permit compliance schedule or facility upgrade before assessing the impact of facility improvements on instream water quality. Resources became available in 2003 to monitor Buffalo Ditch and assess whether the water body was attaining water quality standards. Because data indicated dissolved oxygen concentrations were below the 5 mg/L minimum criterion, Buffalo Ditch was assessed as impaired and retained on the 2004/2006 303(d) List.

*(Comment #1): It was our belief that the designed operations of the new lagoon and the pollutant levels for BOD outfall effluent being below the permit requirements, were yielding positive result levels of BOD and that the impairment for DO had been eliminated with the construction of the new lagoon. It seems that we as a municipality was more eager to correct the low DO by building a new lagoon than DNR was to monitor the Buffalo Ditch and the effects on the aquatic life. If we built the new lagoon based on low BOD, then why has the DNR allowed the Buffalo Ditch to remain below acceptable DO levels for 15 years. The lack of testing of the Buffalo Ditch prior to each new 303(d) list being published over the last 15 years since the new lagoon was constructed has now put the citizens of Kennett and this municipality with a increased financial hardship due to our economic downturns and increased prices of supplies and equipment needed to meet state regulatory limit requirements.*

Department records indicate that in the early 1990's the Kennett wastewater lagoon was regularly failing to meet permit effluent limits for biochemical oxygen demand (BOD). It was noted on inspection reports at the time that the facility had exceeded its design life and that the city of Kennett was in the process of upgrading the facility in order to bring it into compliance with current permit limits. Technology-based effluent limitations for BOD were 65 mg/L weekly average and 45 mg/L monthly average. These limits were not modified as a result of the upgrade and have remained the same up to the present time.

Mr. Wilkins and Mr. Jarred  
Page Three

Records show that the lagoons were upgraded from an unaerated two-cell lagoon system, to an aerated three-cell lagoon system. Following upgrades completed in 1996, the facility was able to successfully meet permit limits for BOD. However, subsequent water quality monitoring in 2003 indicated that Buffalo Ditch was not meeting the minimum criterion for dissolved oxygen and, as a result, Buffalo Ditch was retained on the 303(d) List. This TMDL was developed to comply with Sections 303(d) and 302(a) of the Clean Water Act which dictates that when technology-based effluent limitations result in impaired water quality and non-attainment of designated uses, water quality-based effluent limitations shall be established.

*Question #4: Will applying new upgrades and best treatment technology to the now 13 year old lagoon eliminate the low levels of DO? If so, then why didn't the building of the new lagoon take care of this problem in 1996?*

The load and wasteload allocations developed for this Buffalo Ditch TMDL are expected to bring the impaired segment into compliance with the applicable water quality standards.

*(Comment #2): Since the lagoon had a thirty year life span and now current limits will not meet Department permit limit criteria, we are going to be hard pressed to explain to our community why their dollars spent in 1996 for a new lagoon yielded no positive results as earlier believed. It will furthermore destroy any chance of getting a sale tax increase through a public election. Our community will not vote to spend money on projects that will not pay off in a positive way and produce desired results. In reality this will have a very negative impact on our already economically distressed community, financially.*

As noted above, the facility upgrade was required to meet the effluent limits in effect and not achieved prior to 1996. New effluent limits based on wasteload allocations found in this TMDL will allow the facility to be in compliance with applicable water quality standards.

The Department understands that resources are limited and that small communities are sometimes hard pressed to meet the demands of water and wastewater system improvements. I invite you to contact the Department's Financial Assistance Center to discuss grant and low-interest loan options that may be available to the city. To reach the Financial Assistance Center, you can call 573/751-1192 and ask for either Doug Garrett or Traci Newberry, or email Mr. Garrett at [doug.garrett@dnr.mo.gov](mailto:doug.garrett@dnr.mo.gov). You can also find them on the web at <http://www.dnr.mo.gov/env/wpp/srf/index.html>.

Mr. Wilkins and Mr. Jarred  
Page Four

*(Comments #3): In order to meet the WLA required limits as defined by the TMDL, significant upgrade to our WWTP must be engineered and implemented. Initial data suggest that even with the upgrades and newest technology, we won't be able meet the limits 70 % of the time, and may not, in any case, correct the low DO problem within the Buffalo Ditch. Therefore we are reluctant to move ahead with any major changes to the current lagoon until a more realistic and cost effective solution can be proposed.*

While the Department is not familiar with the treatment technology data to which the city refers, we do acknowledge that meeting newer and more stringent effluent limits may pose challenges for the city. However, the city could look upon system upgrades that will be required to meet forthcoming effluent limitations for bacteria and ammonia as an opportunity to evaluate the condition and operation of the wastewater collection and treatment system as a whole. System operation and maintenance improvements such as inflow and infiltration reduction, wet weather flow operations and sludge handling can improve a facility's performance and enhance water quality.

Having said that, it should be noted that while cost-effective maintenance may help improve water quality and prolong the life of the lagoon facility in the near term, additional upgrades and improvements will likely be necessary to implement new effluent limitations for ammonia, bacteria and those limits based on wasteload allocations found in the Buffalo Ditch TMDL.

*(Comments #4): While reviewing our TMDL Draft for Buffalo Ditch it came to our attention that the lack of data upstream and contradictory information within the draft left us with many concerns as to the validity of the data being reported. For Example: Ammonia, which at high concentrations can kill aquatic life was added to the 2004/2006 303(d) list as an impairment. Despite low levels measured during our quarterly in house monitoring per our permit, ammonia was still added to the 303(d) list. Only later did we receive notice through the 2008 303(d) list that it was being de-listed as a impairment because the ammonia criteria was reassessed. For four years we were on the impaired waters list for ammonia only to be told that the data was incorrect.*

The Department acknowledges that Buffalo Ditch was listed as impaired for ammonia on the 2004/2006 303(d) List. Subsequent to this listing, revised assessment procedures were implemented and the assessment for the 2008 303(d) List indicated no ammonia impairment. In this case, no new data was collected, rather, the method of assessment to determine impairment changed. In regard to the lack of upstream data, water quality data upstream of the Kennett Wastewater Treatment Plant have been collected by the Department or its contractors and can be found in Tables 5 and 6, and Appendix A of the TMDL.

Mr. Wilkins and Mr. Jarred  
Page Five

*REQUEST: We the Kennett Board of Public Works would like to see testing of TKN, NH<sub>3</sub>N, NO<sub>3</sub>N, TN, TP, VSS, Chl. A , and CBOD performed at location points upstream of the WWTP along the Buffalo Ditch, Ditch #36 and Ragland Slough. We understand that these locations are not directly influenced by municipal wastewater constituents, however; we would like to see how they compare to the locations downstream of the WWTP since similar patterns of decrease and increase of DO occurred during all three testing periods by both the natural ditches and our downstream WWTP sampling sites during the same window of time.*

The final TMDL is being revised to include amended implementation language acknowledging that low dissolved oxygen is an issue in Buffalo Ditch both upstream and downstream of the wastewater treatment plant. The new language also acknowledges issues regarding low dissolved oxygen as a natural background condition in streams and ditches in this ecological region. The Department may develop revised dissolved oxygen criteria for Buffalo Ditch and similar streams during the next Triennial Review of the Water Quality Standards if resources are available. Additional monitoring and analysis will determine whether the dissolved oxygen criterion of 5 mg/L is appropriate, or if a new site-specific dissolved oxygen criterion is required.

Language has been included in the TMDL to indicate that allocations of pollutant loading will be implemented only partially through permit action, acknowledging the potential importance of nonpoint source controls. The TMDL will recommend that implementation of new effluent limits not begin until after it is determined whether or not the current dissolved oxygen criterion is appropriate. The TMDL will also recommend that additional chemical and biological sampling be conducted by the city prior to implementation to assess Buffalo Ditch's attainment of designated beneficial uses. The forthcoming permit will be reissued with effluent limits for biochemical oxygen demand and total suspended solids carried over from the previous permit.

The Department acknowledges that, should revised criteria be developed, a revised Buffalo Ditch TMDL may be necessary. It also acknowledges, however, that the revised criteria may result in no impact for Buffalo Ditch and that new loading calculations may not differ or offer relief from what is currently contained in this TMDL.

*Most importantly we would like to ask that you grant a time extension, until additional data can be collected, analyzed and reviewed for the locations upstream of the WWTP along the Buffalo Ditch and the two drainage ditches mentioned above and in the original draft, before finalizing any TMDL for the Buffalo Ditch.*

Mr. Wilkins and Mr. Jarred  
Page Six

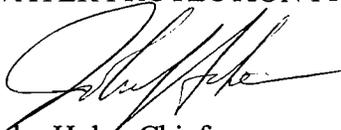
Buffalo Ditch is a TMDL Consent Decree<sup>1</sup> water that must have a TMDL submitted to the Environmental Protection Agency (EPA) by December 31, 2009. The Department believes a 30-day public notice period was sufficient time to review and provide informed comments on this TMDL. However, extensions may be granted provided the Department can accommodate the extension and still meet its obligations under the Consent Decree. In the case of Buffalo Ditch, the Department can reopen and extend the public comment period until December 28. This will give the Kennett Board of Public Works and its representatives sufficient time to submit additional comments and allow the Department time to respond and submit the TMDL to EPA in 2009.

Please know that while this TMDL must be submitted by December 31, 2009, the Department is committed to working with the Kennett Board of Public Works toward implementing this TMDL once it is approved by EPA.

Thank you again for your comments. If you should have questions or would like to discuss this TMDL further, please contact me at (573) 526-1446 or by mail at the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102.

Sincerely,

WATER PROTECTION PROGRAM



John Hoke, Chief  
TMDL Unit  
Water Quality Monitoring and Assessment Section

---

<sup>1</sup> Consent Decree refers to the 2001 Consent Decree entered in the case of American Canoe Association, et al. v. Carol M. Browner, et al., No. 98-1195-CV-W in consolidation with No. 98-4282-CV-W, February 27, 2001.



**Fw: Buffalo Ditch Comments**  
**John Hoke** to: Bill Whipps

02/11/2010 12:21 PM

History: This message has been replied to.

FYI. If you decide to come into the office tomorrow, let's schedule some time to discuss. Thanks

John Hoke  
Environmental Specialist IV, TMDL Unit Chief  
Water Quality Monitoring & Assessment Section  
Missouri Department of Natural Resources  
Phone: (573) 526-1446 Fax: (573) 522-9920  
---- Forwarded by John Hoke/WPCP/DEQ/MODNR on 02/11/2010 12:20 PM ----

From: Adkins.Tabatha@epamail.epa.gov  
To: john.hoke@dnr.mo.gov  
Date: 02/11/2010 12:16 PM  
Subject: Buffalo Ditch Comments

John,

Listed are EPA comments for Buffalo Ditch. Thanks.

TJ

3.2.2 Run off from Urban areas: Needs to be clarified that this is run-off from non-MS4 covered areas. This is very vague here and may confuse the reader. It may help if, in the point source section a little more detail on the Kennett MS4 is provided (area covered of the 6% urban land use w/in point source vs. area covered in nonpoint source (Senath urban area)).

Explain implicit MOS. Need to elaborate on what those conservative assumptions/targets were.

Revise TMDL to include the 2008 listing

2.4 & 2.1: 57 miles<sup>2</sup> watershed, 3.39 miles<sup>2</sup> urban land use total

3.1: No area given for Kennett MS4

8, p. 20: States entire Buffalo Ditch watershed is 47 miles<sup>2</sup> and MS4 is 5.2 miles<sup>2</sup>. Neither matches the figures given in section 2.4, 2.1 and 3.2.2.  $5.2/57 = 9.1\%$   $5.2/47 = 11.1\%$ .

- Appears to be a typo of 47 instead of 57.
- Need to explain why the MS4 area is larger than that cited for urban land use.

Tables 7,8,9: The first column gives ranges of percent exceedances. The values given in the following columns are specifically for 100, 80, 60, 40, and 20% - not the range. The first column needs to be changed to reflect that difference.

8, p. 23: This explanation, Table 10 and the Appendices states the Kennett WWTP has a design flow of 2.17 cfs. Table 3 states it has a design flow of 1.4 mgd. Using the Convert program, it shows 1.4 mgd =

2.60 cfs. Clarify.

Tabatha Adkins, TMDL Coordinator  
Water Quality Management Branch-WWPD,  
USEPA Region 7  
901 North 5th Street  
Kansas City, KS 66101  
913.551.7128  
adkins.tabatha@epa.gov



**Re: Buffalo Ditch Comments**   
**John Hoke** to: Adkins.Tabatha  
Cc: Bill Whipps

02/23/2010 10:50 AM

Thanks TJ. Below in bold text are the department's responses to EPA comments on the Buffalo Ditch TMDL. Most of the comments have been addressed through revisions of the TMDL document at the pages referenced. A final draft version of the Buffalo Ditch TMDL has been placed on the Department's FTP site in the "Outgoing/TMDL" folder.

If you have questions or need additional information, please let me know. As always, we appreciate EPA's assistance and review of this and other TMDLs. Thanks!

John Hoke  
Environmental Specialist IV, TMDL Unit Chief  
Water Quality Monitoring & Assessment Section  
Missouri Department of Natural Resources  
Phone: (573) 526-1446 Fax: (573) 522-9920

Adkins.Tabatha | John, Listed are EPA comments for Buffalo Ditch... | 02/11/2010 12:16:42 PM

From: Adkins.Tabatha@epamail.epa.gov  
To: john.hoke@dnr.mo.gov  
Date: 02/11/2010 12:16 PM  
Subject: Buffalo Ditch Comments

John,

Listed are EPA comments for Buffalo Ditch. Thanks.

TJ

3.2.2 Run off from Urban areas: Needs to be clarified that this is run-off from non-MS4 covered areas. This is very vague here and may confuse the reader. It may help if, in the point source section a little more detail on the Kennett MS4 is provided (area covered of the 6% urban land use w/in point source vs. area covered in nonpoint source (Senath urban area). **Page 10**

Explain implicit MOS. Need to elaborate on what those conservative assumptions/targets were. **Page 23**

Revise TMDL to include the 2008 listing **Pages 1, 3, and 27**

2.4 & 2.1: 57 miles<sup>2</sup> watershed, 3.39 miles<sup>2</sup> urban land use total  
**No change, numbers are correct.**

3.1: No area given for Kennett MS4 **Page 7**

8, p. 20: States entire Buffalo Ditch watershed is 47 miles<sup>2</sup> and MS4 is 5.2 miles<sup>2</sup>. Neither matches the figures given in section 2.4, 2.1 and 3.2.2. 5.2/57= 9.1% 5.2/47=11.1%.

- Appears to be a typo of 47 instead of 57.  
- Need to explain why the MS4 area is larger than that cited for urban land use. **Page 20**

Tables 7,8,9: The first column gives ranges of percent exceedances . The values given in the following columns are specifically for 100, 80, 60, 40, and 20% - not the range. The first column needs to be changed to reflect that difference. **Pages 21 - 22**

8, p. 23: This explanation, Table 10 and the Appendices states the Kennett WWTP has a design flow of 2.17 cfs. Table 3 states it has a design flow of 1.4 mgd. Using the Convert program, it shows 1.4 mgd = 2.60 cfs. Clarify. **No change, 2.17 cfs is correct. A result of 2.60 cfs is obtained when British (UK) gallons are used instead of US gallons.**

Tabatha Adkins, TMDL Coordinator  
Water Quality Management Branch-WWPD,  
USEPA Region 7  
901 North 5th Street  
Kansas City, KS 66101  
913.551.7128  
adkins.tabatha@epa.gov