

DAMON R. TALLEY, P.S.C.

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DAMON R. TALLEY

ATTORNEY AT LAW

January 9, 2008

RECEIVED

JAN 09 2008

**PUBLIC SERVICE
COMMISSION**

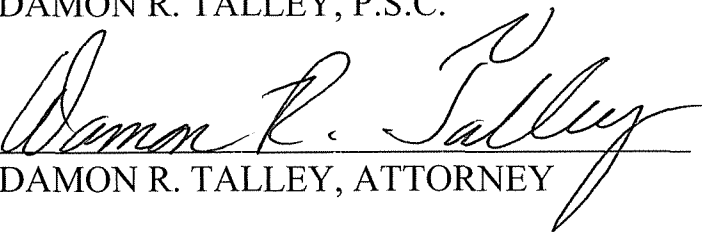
Office of the Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

RE: Case No. 2007-00134
Kentucky-American Water Company

Dear Executive Director:

Enclosed for filing are the original and eight (8) copies of the Responses of Bluegrass Water Supply Commission to the PSC's Post-Hearing Requests for Information. This filing is being made pursuant to the PSC Order dated December 21, 2007.

Yours truly,
DAMON R. TALLEY, P.S.C.


DAMON R. TALLEY, ATTORNEY

DRT/ms

Enclosures

cc: All Parties of Record

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

RECEIVED

THE APPLICATION OF KENTUCKY-)
AMERICAN WATER COMPANY FOR A)
CERTIFICATE OF CONVENIENCE AND)
NECESSITY AUTHORIZING THE)
CONSTRUCTION OF KENTUCKY RIVER)
STATION II, ASSOCIATED FACILITIES)
AND TRANSMISSION MAIN)

JAN 09 2008

**PUBLIC SERVICE
COMMISSION**

) CASE No. 2007-00134

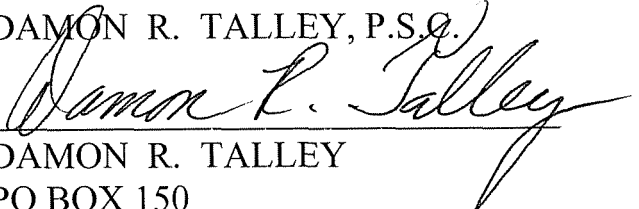
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**RESPONSES OF BLUEGRASS WATER SUPPLY COMMISSION
TO COMMISSION'S
POST-HEARING REQUESTS FOR INFORMATION**

*** ** *** ** *** ** *** ** *** ** *** ** ***

Comes the Bluegrass Water Supply Commission (the "BWSC"), for
its Responses to the Public Service Commission's Post-Hearing Requests for
Information, and states as shown on the following pages.

DAMON R. TALLEY, P.S.C.


DAMON R. TALLEY
PO BOX 150

HODGENVILLE, KY 42748
ATTORNEY FOR BWSC

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY-AMERICAN)
WATER COMPANY FOR A CERTIFICATE OF)
CONVENIENCE AND NECESSITY AUTHORIZING) CASE NO. 2007-00134
THE CONSTRUCTION OF KENTUCKY RIVER)
STATION II, ASSOCIATED FACILITIES AND)
TRANSMISSION MAIN)

**CERTIFICATION OF RESPONSES TO COMMISSION'S
POST-HEARING REQUESTS FOR INFORMATION**

This is to certify that I have supervised the preparation of the Bluegrass Water Supply Commission's Responses to the Public Service Commission's Post-Hearing Requests for Information. The responses are true and accurate to the best of my knowledge, information and belief formed after reasonable inquiry.

Date: _____

1-9-08

Thomas P. Calkins

Thomas P. Calkins, Chair
Bluegrass Water Supply Commission

CERTIFICATE OF SERVICE

This is to certify that a true copy of the attached document has been served by first class U.S. Mail, postage prepaid, this 9th day of January, 2008, to the following:

Hon. A. W. Turner, Jr., Gen. Counsel
Kentucky-American Water Co.
2300 Richmond Road
Lexington, Kentucky 40502

Hon. Lindsey W. Ingram, III
Stoll Keenon Ogden PLLC
300 West Vine Street, Suite 2100
Lexington, Kentucky 40507-1801

Hon. David E. Spenard
Assistant Attorney General
1024 Capital Center Drive, Suite 200
Frankfort, KY 40601-8204

Hon. David J. Barberie
Lexington-Fayette Urban Co. Gov.
Department of Law
200 East Main Street
Lexington, KY 40507

Hon. David F. Boehm
Boehm, Kurtz & Lowry
36 East Seventh Street, Suite 2110
Cincinnati, Ohio 45202

Hon. John N. Hughes
124 West Todd St.
Frankfort, KY 40601

Hon. Thomas J. FitzGerald
Kentucky Resources Council, Inc.
PO Box 1070
Frankfort, KY 40602

Hon. Stephen Reeder
Kentucky River Authority
70 Wilkinson Blvd.
Frankfort, KY 40601

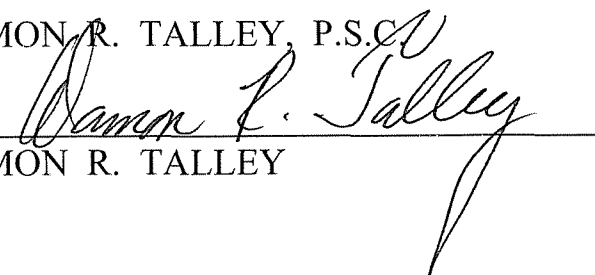
Hon. John E. Selent
Dinsmore & Shohl LLP
1400 PNC Plaza
500 West Jefferson Street
Louisville, KY 40202

Hon. Barbara K. Dickens
Louisville Water Company
550 South Third Street
Louisville, KY 40202

DAMON R. TALLEY, P.S.C.

BY:

DAMON R. TALLEY

A handwritten signature in cursive script, reading "Damon R. Talley", is written over a horizontal line. The signature is fluid and extends slightly below the line.

1. Identify each alternative to the construction of the facility proposed in Kentucky-American's application that BWSC has considered within the past 5 years. For each such alternative, provide:

- a. A brief description of the alternative.
- b. The names and positions of the persons who identified or proposed the alternative.
- c. The time period in which BWSC considered the alternative.
- d. The name and position of the person(s) who evaluated the alternative on BWSC's behalf.
- e. The name and position of any non-BWSC personnel who evaluated the alternative.
- f. The best estimation of the cost of the alternative over a 30-year period as a present day value.
- g. The best estimation of the rate impact of the alternative.
- h. The best estimation of the time period for completing construction of the alternative.
- i. A narrative of the findings and conclusions of the person(s) identified in subparagraphs (d) and (e) above as having evaluated the alternative which includes the basis for not pursuing the alternative.

RESPONSE:

Overview. BWSC and its predecessor organization, the Bluegrass Water Supply Consortium (the "Consortium"), have identified and evaluated over 40 water supply alternatives since

1999. A comprehensive analysis of 40 of these water supply alternatives for central Kentucky is contained in the *Water System Regionalization Feasibility Study* (the “Regional Study”) prepared by O’Brien and Gere Engineers, Inc. for the Bluegrass Area Development District in association with the Consortium. The Regional Study has been discussed throughout this proceeding and has been identified by various names including: the “O’Brien and Gere Report”; the “O’Brien and Gere Study”; the “Regional Feasibility Study”; and, perhaps, by other names. The report shall be referred to as the “Regional Study” throughout the remainder of this Response. The Regional Study was filed with the Commission on June 28, 2004 in Case No. 2001-00117. The Commission has incorporated by reference all records from Case No. 2001-00117 into the record of this case.

The different water supply alternatives evaluated by BWSC and the Consortium can be summarized as follows:

- (1) The 40 alternatives identified and evaluated in the Regional Study;
- (2) Additional Louisville Water Company proposals;
- (3) Versailles Interim Supply Option; and
- (4) Frankfort Supplemental Supply Option.

These alternatives will now be discussed in more detail.

Regional Study. The Regional Study commenced in August 2002 and was completed in February 2004. George B. Rest, Senior Vice President of O'Brien and Gere Engineers, Inc. ("O'Brien & Gere") headed the Consultant Team and was the primary author of the Regional Study. The Regional Study identified and evaluated 40 unique water supply alternatives for central Kentucky. These alternatives were grouped into five (5) categories:

1. Ohio River – seven options
2. Kentucky River – eight options
3. Existing reservoirs – seven options
4. New reservoirs – twelve options
5. Groundwater – six options

A complete listing of all 40 alternatives is presented in Appendix F of the Regional Study. A narrative description of each alternative is found in Appendix G of the Regional Study. The list of 40 water supply alternatives was separated into near-term and long-term groups based on the alternative's potential to be implemented within 3 to 5 years. A total of 16 near-term alternatives were carried forward for further evaluation. Eight (8) of these alternatives were deemed "preferred" and were selected for further evaluation. The eight (8) preferred alternatives were:

1. Purchase treated water from Cincinnati Water Works via Boone Florence Regional Water Commission;
2. Purchase treated water from Cincinnati Water Works via Bracken County;
3. Purchase treated water from Louisville Water Company;
4. Purchase treated water from Carrollton Utilities/Carroll County Water District No. 1;
5. Purchase treated water from Greater Fleming County Regional Water Commission;
6. Ohio River water withdrawal and new water treatment plant at Maysville/Dover;
7. Ohio River withdrawal and new water treatment plant at Warsaw; and
8. Kentucky River withdrawal and new water treatment plant at Kentucky River Pool No. 3, with supplemental raw water from the Ohio River.

Section 3 of the Regional Study (pages 17-25) explains the selection process used to identify the eight (8) preferred alternatives. Section 3 also explains the five (5) evaluation criteria used to evaluate the alternatives and the weight given to each criteria.

The estimated project costs and the present worth costs for each of the eight (8) preferred alternatives are shown in Table 3 on page 23 of the Regional Study. Bar graphs depicting the unit present worth and the annual cost for each of these preferred alternatives are contained in Appendix K of

the Regional Study. For convenience, Table 3 (page 23) and the two (2) bar graphs from Appendix K are provided as part of this Response under **Tab 4**.

Next, the Consortium members and the Consultant Team conducted a pairwise comparison process, which ranked each alternative against the other alternatives for each evaluation criteria. This process is described in detail on page 23 of the Regional Study. The top two (2) alternatives were:

1. Kentucky River Pool 3 Water Treatment Plant, with a supplemental raw water line to the Ohio River; and
2. Treated water purchased from Louisville Water Company (the “LWC”).

Page 24 of the Regional Study contains a bar graph depicting the score of each of the eight (8) alternatives. The bar graph is produced as part of this Response under **Tab 5**.

The Consultant Team recommended the Kentucky River Pool No. 3 alternative based on its highest overall score. The scoring for Pool No. 3 was driven by first place rankings in implementability, flexibility, and water quality, and second-place ranking in cost. On October 13, 2003 at Workshop No. 6, the Consortium members voted unanimously to accept the recommendation of the Consultant Team and selected the Kentucky River Pool 3 alternative as the best alternative for solving the water supply deficit in central Kentucky.

Additional LWC Proposals. LWC has submitted a total of four (4) proposals to BWSC and the Consortium. The four (4) LWC proposals are dated as follows:

| | |
|-----------------|-------------------|
| Proposal No. 1: | July 9, 2003 |
| Proposal No. 2: | August 8, 2003 |
| Proposal No. 3: | December 15, 2005 |
| Proposal No. 4: | October 25, 2006 |

The first two (2) proposals were submitted to the Consortium during the course of the Regional Study and were evaluated, along with approximately 40 other distinct proposals or alternatives, by O'Brien & Gere and the Consortium members.

Item 3 of this Response describes all four (4) LWC proposals and lists the Tab number of this Response where each proposal may be found.

LWC Proposal No. 3 was requested by BWSC because the members of BWSC and KAWC had signed non-binding letters of intent to purchase a total of 31 million gallons per day ("MGD") rather than the full 45 MGD as contemplated in the Regional Report. BWSC also requested LWC to submit a proposal for providing lesser quantities of water. No formal action was taken by BWSC on LWC Proposal No. 3.

LWC Proposal No. 4 was requested by BWSC in 2006 when BWSC was evaluating whether to negotiate with KAWC to become a joint owner of the regional Pool 3 water treatment plant proposed by KAWC. This

proposal was tailored by LWC to supply just the needs of BWSC members. It did not provide any capacity for KAWC. BWSC evaluated LWC Proposal No. 4 and determined that becoming a joint owner of the Pool 3 facilities to be constructed by KAWC would result in significantly cheaper water rates for BWSC members than accepting LWC Proposal No. 4 or any of the previous LWC proposals. In addition, joint ownership of the Pool 3 facilities offered other advantages for BWSC and its members. BWSC then voted unanimously at its January 22, 2007 Meeting to continue negotiating with KAWC toward joint ownership of a 25 MGD regional water treatment plant on Pool 3 of the Kentucky River. Those negotiations were ultimately successful as evidenced by the November 20, 2007 Agreement between KAWC and BWSC.

George B. Rest of O'Brien & Gere evaluated LWC Proposals No. 1 and No. 2 during the Regional Study. Bryan K. Lovan of O'Brien & Gere evaluated LWC Proposals No. 3 and 4 for BWSC. Bryan K. Lovan of O'Brien & Gere serves as the Program Manager for BWSC.

Some of the documents produced as part of BWSC's Response to Item 3 contain evaluations and recommendations of O'Brien & Gere and provide additional insight concerning the LWC proposals. These documents are:

- Tab 13** Letter from O'Brien & Gere to BWSC dated October 12, 2005 confirming that the Pool 3 Option recommended in the Regional Study is both the highest rated and lowest cost when evaluated "apples to apples" to the LWC proposals and other alternatives;
- Tab 14** Letter from BWSC to LWC dated November 14, 2005 requesting a revised proposal;
- Tab 16** O'Brien & Gere's Preliminary Review and Analysis of LWC's December 15, 2005 Proposal;
- Tab 18** Program Manager's Report from O'Brien and Gere to BWSC dated January 22, 2007;
- Tab 19** Letter from O'Brien & Gere to BWSC dated June 4, 2007 reviewing all 4 LWC proposals; and
- Tab 20** Program Manager's report from O'Brien & Gere dated July 23, 2007.

Versailles Interim Supply Option. In late 2005 and 2006, BWSC investigated the possibility of obtaining an interim source of supply from the City of Versailles in the range of 2 to 3 million gallons of water per day ("MGD"). The City of Winchester had previously notified BWSC that Winchester will need an additional 1.6 MGD before the regional Pool 3 water treatment plant, water transmission line and other facilities will be constructed.

Versailles had recently completed the construction of a new water treatment plant with a rated capacity of 10 MGD. Its current usage was 4 to

5 MGD. Thus, Versailles had, and continues to have, some unused capacity at its water treatment plant. Since KAWC's service area abuts Versailles' service area, it is plausible that Versailles could sell a limited amount of water to KAWC which, in turn, could convey water to Winchester to address its near term deficit.

Versailles expressed a willingness to open discussions concerning this matter. Versailles, in cooperation with BWSC, engaged the services of GRW Engineers, Inc. ("GRW") to investigate the feasibility of Versailles selling water to KAWC. GRW completed its study and submitted a report dated April 14, 2006. The report is produced as part of this Response under **Tab 6**.

The GRW Report concluded that Versailles could only sell 2 to 3 MGD and only on a short-term basis. It would also require an up-front capital investment ranging from \$185,000 to \$400,000 to construct a booster pump station and other facilities.

Bryan K. Lovan of O'Brien & Gere reviewed the GRW Report for BWSC. His evaluations, findings and recommendations are summarized on page 2 of the Program Manager's Report dated January 22, 2007 and found in this Response under **Tab 18**. No formal proposal was made by Versailles to BWSC following the GRW Report.

Frankfort Supplemental Supply Option. In 2006, BWSC explored the possibility of purchasing water from the Frankfort Electric and Water Plant Board (“Frankfort”) in the event BWSC could not successfully negotiate a favorable joint ownership agreement with KAWC. Frankfort, in cooperation with BWSC, engaged GRW Engineers, Inc. (“GRW”) to evaluate Frankfort’s existing water treatment plant and distribution system and to determine the feasibility of supplying 5 or 9 MGD to meet the needs of BWSC members.

GRW presented its findings to BWSC at a meeting on September 19, 2006. A copy of GRW’s PowerPoint presentation is provided as part of this Response under **Tab 7**.

The GRW study reveals that the Frankfort water treatment plant has a rated capacity of 18 MGD. Frankfort’s historical peak demand is 16 MGD. Hence, it has no excess capacity. Frankfort must make substantial improvements to both its water treatment plant and its distribution system before it can sell any water to BWSC. GRW estimates that BWSC’s share of those costs will range from \$17 to \$32 million.

Bryan K. Lovan of O’Brien & Gere reviewed the findings of GRW for BWSC. His evaluations, findings and recommendations are summarized on page 2 of the Program Manager’s Report dated January 22, 2007 and

found in this Response under **Tab 18**. Mr. Lovan estimated that the unit price from Frankfort to BWSC would exceed \$3.00 per 1,000 gallons. No formal proposal was made by Frankfort to BWSC following the GRW Report.

Summary. At its January 22, 2007 meeting, BWSC voted unanimously to negotiate with KAWC toward joint ownership of a 25 MGD regional water treatment plant on Pool 3 of the Kentucky River. Those negotiations were ultimately successful as evidenced by the November 20, 2007 Agreement between KAWC and BWSC. Consequently, BWSC is not pursuing any of the LWC proposals, the Versailles Interim Supply Option, or the Frankfort Supplemental Supply Option. Rather, BWSC is cooperating with KAWC to expedite the approval and construction of the 25 MGD regional water treatment plant on Pool 3 of the Kentucky River and the other associated facilities described in KAWC's Application pending before the Commission.

WITNESS: Thomas P. Calkins, Chair, BWSC
Bryan K. Lovan, O'Brien & Gere
George B. Rest, O'Brien & Gere

2. Provide in narrative form, together with any relevant documents, a summary of all contacts with Kentucky-American regarding the future supply of water to BWSC and Kentucky-American's customers that involved joint ownership or a public-private partnership of a new water treatment facility on the Kentucky River including the construction of mains sufficient to transmit such water to Kentucky-American's system or the construction of a transmission main from LWC facilities to Kentucky-American and BWSC members.

RESPONSE:

Background. Representatives of Kentucky-American, representatives of other central Kentucky water providers and representatives of Lexington-Fayette Urban County Government (the "LFUCG") have been working together since the severe drought of 1999 to achieve a regional solution to the serious water supply problem that plagues central Kentucky. Initially, this group was called the Bluegrass Water Supply Consortium (the "Consortium"). In 2004, following the completion of the Regional Study, the BWSC was created as a regional water commission pursuant to the provisions of KRS Chapter 74.

The primary purpose of BWSC is to develop and implement a regional solution to the water supply deficit in central Kentucky. Nine (9) members of the Consortium, including LFUCG, became charter or founding members of the BWSC. Its membership has since grown to 10 with the addition of the City of Berea in 2007.

Kentucky-American was an active participant of the Consortium. Indeed, a representative of Kentucky-American, Linda Bridwell, served as a member of the Consortium's Technical Group which provided oversight of the consultants working on the Regional Study. Kentucky law, however, prohibits a private utility such as Kentucky-American from becoming a voting member of a regional water commission. Nevertheless, Kentucky-American supported the creation of the BWSC. Representatives of Kentucky-American have been actively involved in the affairs of the BWSC by attending committee meetings, planning sessions and monthly board meetings since the creation of the BWSC in 2004.

Consequently, Kentucky-American and members of the BWSC have been “yoked together” since 1999 in an epic struggle to identify and implement a regional solution to the water supply problem in central Kentucky.

Summary of Contacts. The following list of documents and meetings, in addition to the various workshops and meetings of the Consortium and BWSC attended by representatives of KAWC, constitutes a summary of the contacts between Kentucky-American and BWSC concerning the matters set forth in this Information Request:

- a. **February 8, 2006.** Letter from BWSC to Linda Bridwell (see attached copy) to commence a dialogue concerning the proposed Public-Private Partnership;
- b. **March 6, 2006.** Meeting between representatives of Kentucky-American and BWSC to discuss upcoming Informal Conference in PSC Case No. 2001-00117 and to discuss proposed Public-Private Partnership;
- c. **April 21, 2006.** Letter from Linda Bridwell to Thomas P. Calkins, BWSC Chair (see attached copy) concerning Kentucky-American’s need for additional time in which to present potential partnership proposals;

- d. **May 12, 2006.** Letter from Nick O. Rowe to Thomas P. Calkins, BWSC Chair (see attached copy) outlining proposed partnership;
- e. **June 2, 2006.** Letter from BWSC to Nick O. Rowe (see attached copy) responding to Mr. Rowe's letter of May 12, 2006 and requesting a meeting between representatives of Kentucky-American and BWSC;
- f. **September 19, 2006.** Meeting between representatives of Kentucky-American and BWSC to preview presentation that Linda Bridwell planned to make at BWSC meeting on September 25, 2006;
- g. **September 25, 2006.** Presentation by Linda Bridwell at BWSC meeting held at Cynthiana. The Presentation outlined the framework for a proposed Public-Private Partnership between BWSC and Kentucky-American and suggested different scenarios for joint ownership of the proposed facilities. A complete copy of Ms. Bridwell's PowerPoint Presentation is contained in Kentucky-American's Response to the Attorney General's First Request for Information, Item 23. For convenience, it is also provided as a part of this Response under **Tab 8**.
- h. **October 31, 2006.** Letter from BWSC to Nick O. Rowe responding to Kentucky-American's September 25, 2006 Partnership Proposal, requesting a meeting and including a list of Discussion Topics. A copy of the letter and Discussion Topics is attached.
- i. **December 12, 2006.** Meeting between representatives of Kentucky-American and BWSC to discuss terms of proposed Public-Private Partnership Agreement and potential for joint ownership of certain facilities. (A list of the Discussion

Topics is attached to the October 31, 2006 letter from BWSC to Mr. Rowe);

- j. **February 27, 2007.** Agreement for Payment of Engineering Expenses dated February 27, 2007 between Kentucky-American and BWSC whereby BWSC will pay for the incremental cost of the additional engineering design work necessary to increase the capacity of the proposed water treatment plant on Pool 3 from 20 million to 25 million gallons per day. A copy of the Agreement was appended as Exhibit E to Kentucky-American's Application in this case. For convenience, the Agreement is also provided as a part of this Response under **Tab 9**; and
- k. **November 20, 2007.** Agreement between BWSC and Kentucky-American dated November 20, 2007 which provides different options for BWSC to acquire joint ownership of certain water treatment and other facilities which Kentucky-American proposes to construct upon Commission approval. A copy of the Agreement was admitted into evidence at the Formal Hearing in this case as Louisville Water Company Exhibit 6. For convenience, a copy is also provided as a part of this Response under **Tab 10**.

Discussions between Kentucky-American and BWSC Regarding Construction of Transmission Main to LWC Facilities.

The first two (2) proposals by the Louisville Water Company (LWC) to supply water to central Kentucky were dated July 9, 2003 and August 8, 2003 and were submitted to the Consortium

during the course of the Regional Study. Kentucky-American, as an active participant of the Consortium, and the other Consortium members participated in various discussions with O'Brien & Gere and other members of the Consultant Team. The LWC proposals were evaluated along with approximately 40 other distinct proposals or alternatives for supplying water to central Kentucky. As previously stated in Response to Item 1, the members of the Consortium unanimously voted to accept the recommendation of O'Brien & Gere and selected the construction of a large regional water treatment plant on Pool 3 of the Kentucky River as the preferred alternative for solving the water supply deficit in central Kentucky.

Since the completion of the Regional Study, BWSC and Kentucky-American have not had any discussions concerning jointly constructing a water transmission line to Louisville or to connect with any LWC facilities that might be constructed by LWC in Shelby County. It should be noted, however, that representatives of Kentucky-American and BWSC have been

present at various public meetings and forums at which LWC has made presentations (e.g. Lexington, Frankfort and Georgetown). In addition, representatives of Kentucky-American have also been present at numerous BWSC meetings at which additional proposals from LWC have been discussed and rejected. These more recent proposals by LWC will be discussed in response to Item 3 of this Information Request.

WITNESS: Thomas P. Calkins, Chair, BWSC

Bluegrass Water Supply Commission



Water, Our Future

699 PERIMETER DR. • LEXINGTON, KENTUCKY 40517-4120

PHONE: (859) 269-8021 • FAX: (859) 269-7917

CYNTHIANA • FRANKFORT • GEORGETOWN • LANCASTER • LEXINGTON-FAYETTE • MT. STERLING • NICHOLASVILLE • PARIS • WINCHESTER

February 8, 2006

Ms. Linda Bridwell
Kentucky American Water Company
2300 Richmond Road
Lexington, KY 40502

**Re: Bluegrass Water Supply Commission
Public-Private Partnership**

Dear Ms. Bridwell,

On behalf of the Bluegrass Water Supply Commission, I invite you and representatives of Kentucky American/American Water to meet and develop a Public-Private Partnership to implement the Bluegrass Regional Water Supply Plan. As you know, time is of the essence in meeting the critical water shortage facing your customers, and those of every member of BWSC, especially in light of the recent announcements by Sekisui S-LEC America, LLC and the World Equestrian Games.

The primary focus of BWSC is to complete this project on a schedule that will permit all concerned utilities to not only meet the baseline projected demands of the future but also the unanticipated demand related to the above mentioned announcements. Clearly it is time for aggressive action! In the belief that we can and must work together, BWSC requests an open discussion on the framework for the Public-Private Partnership Agreement, including:

- approaches to accelerate the schedule
- design and construction options, including design-build by Kentucky American
- operations options, including contract operations by Kentucky American
- procurement requirements and options
- ownership and lease options
- financing and cash flow considerations
- committed capacity
- wholesale contract
- other challenges to successful partnership

Please provide some suitable dates as soon as possible. If your company's representatives will be in town for the meeting with Kentucky Public Service Commission on March 14th, may we suggest meeting prior, perhaps on March 13th, or even sooner?

Very Truly Yours,
Bluegrass Water Supply Commission

Thomas P. Calkins
Chairman

cc: Don Hassall, BWSC

April 21, 2006

Mr. Thomas P. Calkins
Chairman
Bluegrass Water Supply Commission
699 Perimeter Drive
Lexington, KY 40517 - 4120

Dear Mr. Calkins,

Kentucky American Water committed to have you a response by your meeting on April 24, 2006 on potential partnership proposals. We are currently exploring a wide range of options with our financial, legal and senior management team and realize now that we are unable to get you a response by April 24. We continue to be encouraged by the potential opportunities of this partnership, and anticipate a conceptual response shortly after the 24th.

I apologize for any inconvenience this may cause, and look forward to continue working with you.

Sincerely,



Linda Bridwell, PE
Project Delivery and Developer Services Manager
Kentucky American Water

Nick O. Rowe
President
859 268 6333

May 12, 2006

Mr. Thomas P. Calkins
Chairman
Bluegrass Water Supply Commission
699 Perimeter Drive
Lexington, KY 40517 – 4120

RE: Bluegrass Water Supply Commission Phase I Project

Dear Mr. Calkins, *1 OM*

Kentucky American Water has been working on a number of different issues since our meeting on March 6, 2006. As we indicated, we have attempted to frame a partnership arrangement between the Bluegrass Water Supply Commission and Kentucky American Water on a conceptual basis. Clearly there will need to be a number of details worked out, but we would like to offer the following proposed partnership:

Kentucky American Water will fund, design, build, own and operate a regional water treatment plant and intake at pool 3 of the Kentucky River and pipelines needed to service our company's customers. Plant capacity would be based on our customer needs with the ability to expand to meet the needs of the BWSC members. BWSC members can purchase capacity in these facilities at such time as needs dictate. Flow through grid facilities that are needed to service the needs of the BWSC members can be funded, designed and built by BWSC member utilities. Alternatively, the Company may be able to fund all or a portion of these flows through grid facilities to BWSC member utilities provided certain revenue requirements are met, consistent with Kentucky American Water's tariffs.

As indicated in our March 6 meeting, the Company's approach is based on asset investment and ownership and equitable cost of service. At this time, Kentucky American Water is moving forward on preliminary engineering work on a treatment plant and related facilities.

American Water
2300 Richmond Road
Lexington, KY 40502
USA
T +1 859 269 2386
F +1 859 268 6327
I www.amwater.com

T. Calkins
May 12, 2006
Page 2

We are prepared to begin negotiations with BWSC members at your earliest convenience so that we can provide for a regional solution that best serves the water needs of our collective customers.

Sincerely,


Nick O. Rowe
President

Bluegrass Water Supply Commission



Water, Our Future

699 PERIMETER DR. • LEXINGTON, KENTUCKY 40517-4120

PHONE: (859) 269-8021 • FAX: (859) 269-7917

CYNTHIANA • FRANKFORT • GEORGETOWN • LANCASTER • LEXINGTON • FAYETTE • MT. STERLING • NICHOLASVILLE • PARIS • WINCHESTER

June 2, 2006

Mr. Nick O. Rowe
President
Kentucky American Water
2300 Richmond Road
Lexington, Kentucky 40502

Re: Bluegrass Water Supply Commission Public-Private Partnership

Dear Mr. Rowe:

On behalf of the Bluegrass Water Supply Commission (BWSC), we appreciate your letter dated May 12, 2006, concerning a partnership arrangement between BWSC and Kentucky American Water (KAW). After reviewing the letter, we are at somewhat of a loss as to how your offered *partnership* constitutes anything other than a utility-customer relationship. Since 1999, KAW has partnered with other regional public water utilities in the development of a master plan/feasibility study for a new regional water utility, and now that it is time to design and construct said facilities, KAW is apparently prepared to abandon the public/private partnership that it has participated in for the last seven years.

Perhaps we were guilty of a miscommunication during our meeting with you on March 6, when we attempted to explain that we, the BWSC fully expected and continue to want the public/private partnership to be as it has been since 1999. A relationship in which KAW was able to vote in parity with all other members in the selection of engineering consultants, legal representation and the adopted Pool 3 Option. We really do appreciate your offer to fund, design, build and operate the regional water treatment plant and intake structure on Pool 3 to serve your customers and BWSC members. However, we can not accept the offer of your company owning the entirety of the treatment plant and pipelines.

While KAW may be moving forward with the preliminary engineering work on the treatment plant and related facilities, the BWSC has been working in parallel on pursuing a treatment plant and intake site along the Kentucky River and submitting a water withdrawal permit to the Division of Water. Our program manager, O'Brien & Gere, is capable of working on a water treatment plant design memorandum, but it would be a waste of time and resources for BWSC to pursue this if KAW is already 95 percent complete in this area as has been reported.

Our Mission

THE BLUEGRASS WATER SUPPLY COMMISSION WILL ENSURE ADEQUATE POTABLE WATER SUPPLY AND TREATMENT RELIABILITY UNDER ANY CONDITIONS TO UTILITY CUSTOMERS AND CONTRACTUAL PARTNERS. BWSC WILL MAXIMIZE UTILIZATION OF THE KENTUCKY RIVER AS A RAW WATER SOURCE, MAINTAIN REASONABLE RATES, AND ENSURE COMPLIANCE WITH ALL WATER QUALITY AND OTHER REGULATIONS.

Mr. Rowe
June 2, 2006
Page 2 of 2

Again, we are interested in negotiating a public-private partnership agreement with KAW to provide for a regional solution. With time being of the essence, we are respectfully requesting that your firm contact me as soon as possible (885-1121 or 948-2570) with some proposed times/dates/places for a meeting to discuss and work out the details for this agreement.

Very truly yours,
Bluegrass Water Supply Commission

Thomas P. Calkins
Chairman

cc: Don Hassall, BWSC
Bryan K. Lovan, O'Brien & Gere
George B. Rest, O'Brien & Gere
File

Bluegrass Water Supply Commission



Water, Our Future

699 PERIMETER DR. • LEXINGTON, KENTUCKY 40517-4120
PHONE: (859) 269-8021 • FAX: (859) 269-7917

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October 31, 2006

Mr. Nick O. Rowe
President
Kentucky American Water
2300 Richmond Road
Lexington, Kentucky 40502

**Re: Bluegrass Water Supply Commission/
Kentucky American Water
Public-Private Partnership**

Dear Mr. Rowe;

On behalf of the Bluegrass Water Supply Commission (BWSC), I am pleased to respond to Kentucky American's (KAW) Partnership Proposal, as described in the presentation made by Ms. Linda Bridwell at BWSC's September 25, 2006 meeting in Cynthiana. BWSC continues to be keenly interested in pursuing this opportunity. We understand that KAW requires additional time to provide requested details involving costs, connections, etc. While the requested details are important, BWSC is prepared to enter into exploratory discussions immediately.

To maintain momentum toward a regional solution, BWSC requests a meeting as soon as possible to discuss the key issues involved in the proposed Partnership. Attached is a list of Discussion Points which we trust will serve as an effective agenda for this meeting. BWSC looks forward to an open and productive discussion. Please call me with some dates and times that are convenient for you.

Very Truly Yours,
Bluegrass Water Supply Commission

Thomas P. Calkins
Chairman

c: Linda Bridwell, KAW
BWSC Commissioners
Don Hassall, BWSC
Bryan Lovan, O'Brien & Gere
George Rest, O'Brien & Gere
Damon Talley, Esq.

Our Mission

THE BLUEGRASS WATER SUPPLY COMMISSION WILL ENSURE ADEQUATE POTABLE WATER SUPPLY AND TREATMENT RELIABILITY UNDER ANY CONDITIONS TO UTILITY CUSTOMERS AND CONTRACTUAL PARTNERS. BWSC WILL MAXIMIZE UTILIZATION OF THE KENTUCKY RIVER AS A RAW WATER SOURCE, MAINTAIN REASONABLE RATES, AND ENSURE COMPLIANCE WITH ALL WATER QUALITY AND OTHER REGULATIONS.

BWSC/KAW PUBLIC – PRIVATE PARTNERSHIP

Discussion Topics

1. BWSC Level of Participation

- a. Initially: between 5 and 9 MGD
- b. Future Expansions: water treatment plant capacity can be added at Pool 3 in the future for BWSC's sole use, for KAW's sole use, or joint expansion by KAW and BWSC

2. Delivery Points

- a. Multiple points of connection to KAW's system, including metered connections at locations intended to serve: Nicholasville and points south; Winchester and points east; Paris; Georgetown and points west; Cynthiana; and possibly others
- b. Location of each delivery point, the capacity and the hydraulic gradient at which water will be provided
- c. No wheeling charge
- d. Responsibility for improvements within KAW service area

3. Capital Contributions

- a. Each co-owner responsible for providing its share of capital costs
- b. Capital contribution based on a pro-rated capacity formula that recognizes BWSC's dedicated capacity and the design capacity of each facility component
- c. Grant funds secured by BWSC will be credited toward BWSC's capital contribution
- d. Contracted construction cost
- e. Contracted engineering cost
- f. Other costs

4. KAW to Design and Operate Jointly Owned Facilities

- a. Develop Operating Agreement
- b. KAW and BWSC to collaborate on key decisions involving the Pool 3 supply and Phase 1 transmission system such as those affecting water quality, regulatory compliance, delivery points, future investments, treatment process, major equipment changes, etc.
- c. BWSC to have meaningful input

- d. KAW to coordinate operation and maintenance of the Pool 3 supply and Phase 1 transmission system with KAW's other facilities to minimize costs for both KAW and BWSC
- e. Minimize taxes (sales taxes, property taxes, corporate income taxes, etc.) in the costs shared by BWSC
- f. O & M cost to be based on a pro-rated capacity formula that recognizes BWSC's capacity or usage or an agreed amount per 1,000 gallons

5. Joint Ownership

- a. KAW and BWSC will jointly own the real property, intake structure, water treatment plant and other facilities located at Pool 3 and the Phase I transmission facilities
- b. Ownership interest based upon capital contribution
- c. Ownership interest documented by Deed, Bill of Sale, etc.

6. Governance

- a. BWSC to have meaningful input
- b. Voting rights
- c. Coordination Committee

7. Cooperation

- a. BWSC will garner public support for project
- b. BWSC will assist KAW in obtaining PSC and other regulatory approvals

8. Schedule

- a. Notification of BWSC's level of participation
- b. Timing for capital contribution
- c. Public – Private Partnership Agreement (Participation Agreement)
- d. Operating Agreement

9. Miscellaneous

- a. BWSC reserves right to obtain additional sources of supply
- b. KAW to furnish BWSC 1.6 MGD by 7-1-09 for use by Winchester
- c. Other matters

3. Provide in narrative form, together with any relevant documents, a summary of all contacts with LWC regarding the future supply of water to BWSC and Kentucky-American's customers, including any and all discussions of any joint public-private partnership involving LWC or others to provide such supply of water.

RESPONSE:

LWC has submitted a total of four (4) proposals to BWSC and to its predecessor organization, the Bluegrass Water Supply Consortium (the "Consortium"). Under each of these four (4) proposals, LWC would design, construct, own and operate a transmission main from its facilities in Jefferson County to the proposed delivery point in Shelby County near the intersection of I-64 and Kentucky Highway 53. It would be the responsibility of BWSC, under each proposal, to design, construct, own and operate the transmission main and other facilities needed to transport the water from the delivery point in Shelby County to Fayette County and to the member entities of BWSC. The size of the transmission

main would vary depending upon the volume of water that BWSC desired to purchase.

No joint ownership of the proposed transmission main or public-private partnership between LWC and BWSC was ever proposed or discussed. LWC would own the western portion of the proposed transmission main and BWSC would own the eastern portion of the proposed transmission main. LWC would be the seller and BWSC would be the purchaser. The contract term would be for a period of 50 years and could be renewed.

The four (4) LWC proposals are dated as follows:

| | |
|-----------------|-------------------|
| Proposal No. 1: | July 9, 2003 |
| Proposal No. 2: | August 8, 2003 |
| Proposal No. 3: | December 15, 2005 |
| Proposal No. 4: | October 25, 2006 |

The first two (2) proposals were submitted to the Consortium during the course of the Regional Study and were evaluated, along with approximately 40 other distinct proposals or alternatives, by O'Brien & Gere and the Consortium members. As previously stated in Response to Items 1 and 2, the members of the

Consortium unanimously voted to accept the recommendation of O'Brien & Gere and selected the construction of a large regional water treatment plant on Pool 3 of the Kentucky River as the preferred alternative for solving the water supply deficit in central Kentucky.

LWC Proposal No. 3 was requested by BWSC because the members of BWSC and KAWC had signed non-binding letters of intent to purchase a total of 31 million gallons per day ("MGD") rather than the full 45 MGD as discussed in the Regional Report. BWSC also requested LWC to submit a proposal for providing lesser quantities of water. No formal action was taken by BWSC on LWC Proposal No. 3.

LWC Proposal No. 4 was requested by BWSC in 2006 when BWSC was evaluating whether to negotiate with KAWC to become a joint owner of the regional Pool 3 water treatment plant proposed by KAWC. This proposal was tailored by LWC to supply just the needs of BWSC members. It did not provide any capacity for KAWC. BWSC evaluated LWC Proposal No 4 and

determined that becoming a joint owner of the Pool 3 facilities to be constructed by KAWC would result in significantly cheaper water rates for BWSC members than accepting the LWC Proposal No. 4. In addition, joint ownership of the Pool 3 facilities offered other advantages for BWSC and its members. BWSC then voted unanimously at its January 22, 2007 Meeting to continue negotiating with KAWC toward joint ownership of a 25 MGD regional water treatment plant on Pool 3 of the Kentucky River. Those negotiations were ultimately successful as evidenced by the November 20, 2007 Agreement between KAWC and BWSC.

During the pendency of this case, LWC has made numerous **presentations** to Frankfort, Georgetown, Lexington, and, perhaps, others concerning its ability and willingness to supply water to central Kentucky. None of the **presentations** have been made directly to BWSC, although BWSC representatives have attended some of the **presentations** made by LWC.

The latest formal proposal from LWC is contained in Gregory C. Heitzman's Rebuttal Testimony dated October 1, 2007

and filed in this case. This proposal was not made directly to BWSC.

There were no discussions between LWC and BWSC during the Formal Hearing in this case, nor have there been any subsequent discussions, concerning LWC's role in supplying water to central Kentucky.

The documents listed below are relevant to the various LWC proposals and BWSC's evaluation of those proposals. The documents are provided as a part of this Response under the Tab numbers indicated below:

- Tab 11** LWC Proposal No. 1 dated July 9, 2003;
- Tab 12** LWC Proposal No. 2 dated August 8, 2003;
- Tab 13** Letter from O'Brien & Gere to BWSC dated October 12, 2005 confirming that the Pool 3 Option recommended in the Regional Study is both the highest rated and lowest cost when evaluated "apples to apples" to the LWC proposals and other alternatives;
- Tab 14** Letter from BWSC to LWC dated November 14, 2005 requesting a revised proposal;

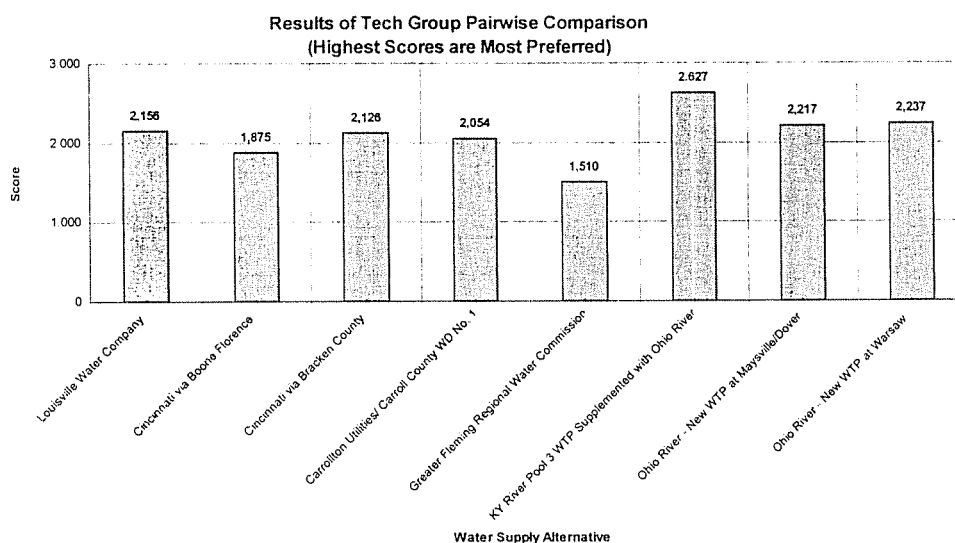
- Tab 15** LWC Proposal No. 3 dated December 15, 2005;
- Tab 16** O'Brien & Gere's Preliminary Review and Analysis of LWC's December 15, 2005 Proposal;
- Tab 17** LWC Proposal No. 4 dated October 25, 2006 (PowerPoint Presentation);
- Tab 18** Program Manager's Report from O'Brien and Gere to BWSC dated January 22, 2007;
- Tab 19** Letter from O'Brien & Gere to BWSC dated June 4, 2007 reviewing all 4 LWC proposals;
- Tab 20** Program Manager's report from O'Brien & Gere dated July 23, 2007; and
- Tab 21** Letter from O'Brien & Gere to LWC dated July 31, 2007 requesting additional information and specific details about the concept proposed by LWC to Lexington on July 10, 2007.

WITNESS: Thomas P. Calkins, Chair, BWSC
Bryan K. Lovan, O'Brien & Gere

Table 3. Estimated project costs and present worth costs for water supply alternatives

| Water Supply Alternative | Available Supply (mgd) | Total Project Cost (\$ millions) | Present Worth of Annual Operation and Maintenance (\$ millions) | Total Present Worth of Alternative (\$ millions) | Unit Present Worth of Alternative (\$/gallon) |
|--|------------------------|----------------------------------|---|--|---|
| Cincinnati Water Works via Boone Florence | 45 | 320.4 | 65.6 | 386.1 | 8.58 |
| Cincinnati Water Works via Bracken County | 45 | 290.4 | 65.6 | 356.0 | 7.91 |
| Louisville Water Company ¹ | 45 | 175.7 | 117.9 | 293.7 | 6.53 |
| Withdrawals and WTP at Maysville/Dover | 45 | 267.8 | 65.6 | 333.4 | 7.41 |
| Withdrawals and WTP at Warsaw | 45 | 278.0 | 65.6 | 343.7 | 7.64 |
| New WTP at Pool No. 3 with Ohio River Pipeline | 45 | 265.0 | 65.6 | 330.6 | 7.35 |
| Purchase water from Carrollton Utilities/CCWD | 45 | 162.3 | 250.7 | 413.0 | 9.18 |
| Purchase water from Greater Fleming | 15 | 45.4 | 137.0 | 182.4 | 12.16 |

¹ Costs shown reflect Louisville Water Company's revised lower purchase price.



At Workshop No. 5, the Consultant Team and BWSC Technical Group ranked each of the eight preferred water supply alternatives using the evaluation criteria and a pairwise comparison technique. The pairwise technique ranks each alternative against every other alternative, and does it separately for each evaluation criteria. The result is a ranking of alternatives for each

evaluation criteria. The weighting factors developed in Workshop No. 3 were then used to consolidate the rankings under each criterion into a composite ranking. The pairwise comparison spreadsheets are included in Appendix L. The pairwise comparison showed that three alternatives were superior to the others:

Figure 1. Unit Present Worth of Alternatives (40 years)

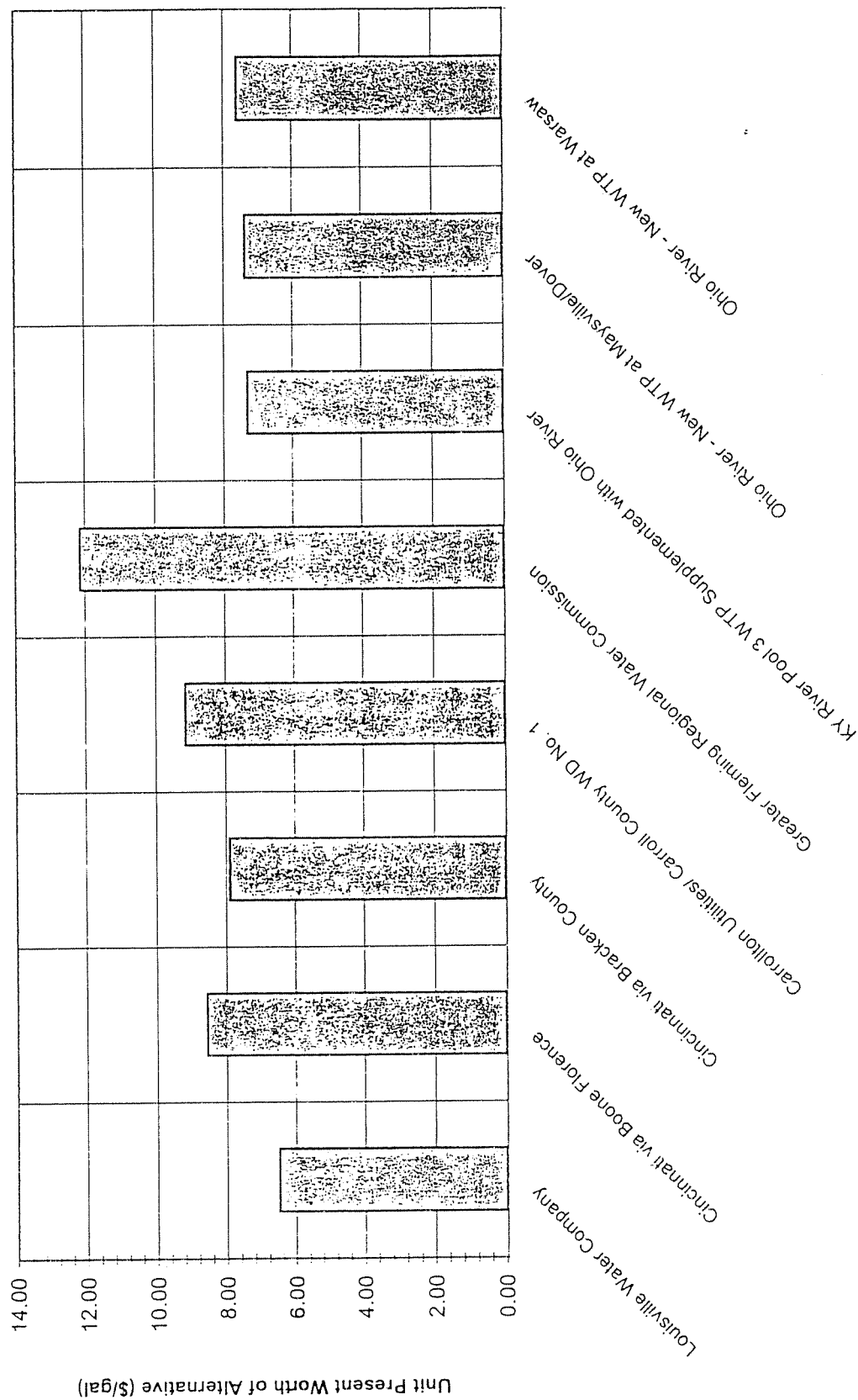
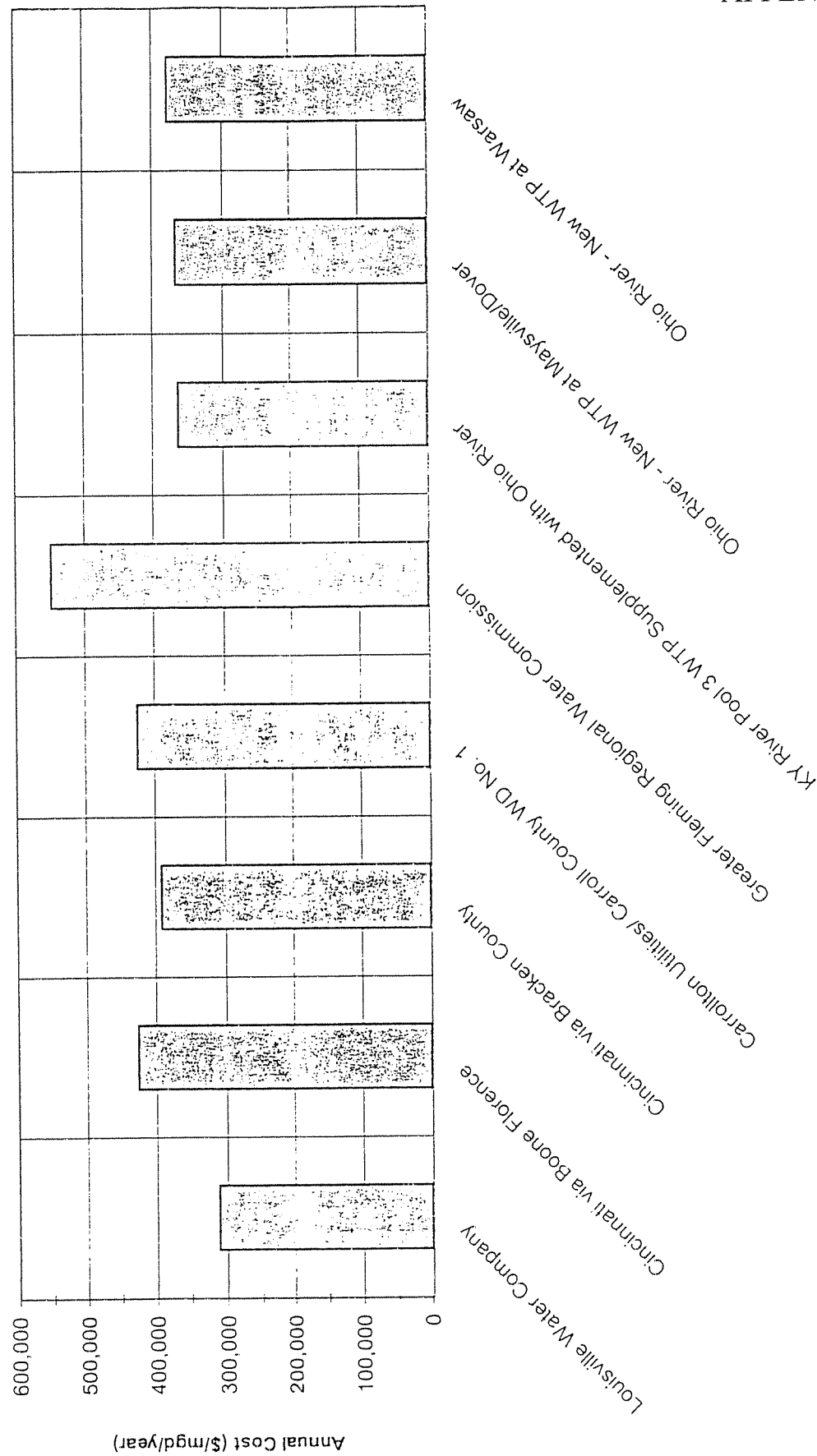
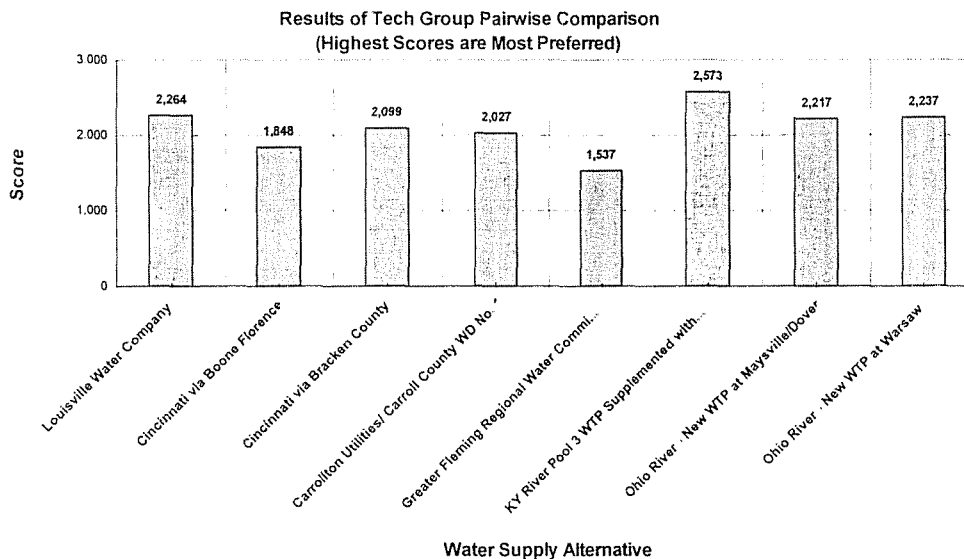


Figure 2. Annual Cost per MGD of Capacity



- Purchase treated water from Louisville Water Company,
- Ohio River water withdrawal and new water treatment plant at Maysville/Dover or Warsaw,
- Kentucky River withdrawal and new water treatment plant at Kentucky River Pool No. 3 with supplemental raw water from the Ohio River.

When these results were presented at Workshop No. 5, several of the organizations that had proposed selling finished water to BWSC asked for the opportunity to review their proposal and possibly submit a new proposal. BWSC allowed all four of the potential "sellers" to resubmit proposals, provided they did so promptly (in about two weeks). One organization, the Louisville Water Company, submitted a new proposal.



Cost estimates were then updated prior to Workshop No. 6, to reflect the new proposal from Louisville Water Company, and other refinements. A series of "sensitivity analyses" were conducted to determine whether the results of the cost analysis or the pairwise comparison were sensitive to any of these assumptions: the duration of the present worth

analysis, the interest rates used in the present worth analysis, and the amount of additional water that will be purchased by the BWSC participants. As shown in Appendix L, changes to these factors did not change the ranking of the pairwise comparison. While purchasing water from the Louisville Water Company was found to be the lowest cost alternative (about 11-14% lower, depending on present worth duration and interest rates), the Consultant Team recommended the Kentucky River Pool No. 3 alternative based on its highest overall score, which was driven by first place rankings in implementability, flexibility, and water quality, and second place rankings in cost and capacity.



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April 14, 2006

Mr. Bruce Southworth
Utilities Director
City of Versailles
City Hall
196 South Main Street
Versailles, KY 40383

Re: BWSC Emergency Water Supply Study
Versailles Water System
City of Versailles, Kentucky
GRW Project No. 2676-18

Dear Mr. Southworth:

Per your request, we have evaluated the ability of City of Versailles's water systems to provide emergency water to the Bluegrass Water Supply Commission (BWSC) at the existing Kentucky American Water Company connection on Huntertown Road.

We utilized Bentley's WaterCAD V 7.0 modeling software to model the existing system and the proposed BWSC water demand. Three (3) different flow rate scenarios were considered in this study. 2mgd, 3mgd and 5mgd. These rates were assumed to be constant rates over a 24-hour period. i.e. $2\text{mgd} / (24 \text{ hrs/day} * 60 \text{ hrs/min}) = 1,388 \text{ gpm}$ or $\sim 1,400 \text{ gpm}$. It was also assumed in this analysis that the water system improvements currently under construction had been completed and the system is operating as designed.

As you know, the current improvements will create a new pressure zone in the southeast portion of the Versailles service area. This will include constructing a new 2,000 gpm booster pump station and a new 1 million gallon tank. The booster station was designed per the Recommended Standard for Water Works, with one 2,000 gpm primary pump, a second standby pump and provisions for a third future pump. The hydraulic grade line for this zone (tank overflow elevation) will be 1,110 feet. It is my understanding that KAWC's hydraulic grade line at the connection point is slightly higher at 1,132 feet. This difference in hydraulic grade will have to be overcome to allow Versailles to supply the requested water. This report is based on providing the requested demands at the metering point and does not address exactly how KAWC (or the BWSC) would achieve this additional pressure boost. We would assume that KAWC would reduce the HGL down to match Versailles, if possible, or a booster pump/station would be installed near the KAWC connection point.



Mr. Bruce Southworth

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April 14, 2006

2 MGD SCENARIO

To begin this evaluation, we modeled the 2 mgd (1,400 gpm) water demand with the booster pump station as it is currently being constructed, that is with one worker pump operating. This resulted in excessive run times, approximately 20 hrs/day, for the new booster station. This result is easily seen by comparing the total system demand versus the booster station pump discharge rate: the Versailles current peak demand (675 gpm) plus the proposed BWSC (1,400 gpm) equals 2,075 gpm compared to the 2,000 gpm pumping rate.

The next step in the analysis was to add the third pump to the booster station, which is currently under construction. This would allow the City to run two (2) pumps with one standby pump. This, at the current Versailles water demand for the new pressure zone, would allow the pump station to operate at an acceptable 14 hrs/day. The system maintained adequate pressures (min. pressure - 52 psi at Node J-411) while meeting the additional 2mgd water demand. Turnover in the new tank was rapid, but acceptable.

This scenario indicated that two short sections of 16-inch diameter water main would have high line velocities, in the 5 to 6 ft/sec range. If the BWSC and Versailles are planning to utilize the KAWC's connection point as a continuous purchase point, then the City may require that new parallel mains to be installed to reduce these velocities and associated friction losses.

The estimated construction cost for this scenario is as follows.

| | |
|--|---------------------|
| Pump Station 3 rd Pump & Controls | \$ 71,350.00 |
| 1,750 LF of 16" Water @ \$50/ft (optional) | <u>\$ 87,500.00</u> |
| Total Construction Cost (2mgd) | \$158,850.00 |

Fire flows were also modeled for a 2 hour, 775 gpm fire in Sycamore Estates with and without the additional BWSC water demand. The 2 mgd demand resulted only in an additional pressure drop of approximately 8 psi in the Sycamore area; however, the system pressure stayed within an acceptable range.

3 MGD SCENARIO

The 3 mgd demand was modeled with the assumptions described above and with the third booster pump described in the 2 mgd scenario being installed in the booster station that is currently under construction. The estimated run time for the booster station, at the current Versailles demand plus the additional 3 mgd to the BWSC, is 17 hr/day. The system also was able to maintain the required pressures of 30 psi (44.5 psi at Node J-411).



Mr. Bruce Southworth

Page 3

April 14, 2006

Also, the velocities in the above mentioned mains increased to the 5 to 7 ft/sec. range. As stated above, these velocities will need to be addressed if the 3 mgd purchased by BWSC is intended to be a "normal" operating situation.

A 775 gpm fire flows scenario resulted in pressures very near the minimum required pressures for Sycamore Estates. During this time, the pressure within Sycamore fell to approximately 17 psi. To avoid this pressure drop, several thousand feet of water main would need to be added to Sycamore. A more cost-effective solution would be to simply limit the amount of water available to the KAWC meter in the event of a fire.

Along these same lines, if the City elects to pursue this alternative, consideration should be given to the expected growth in the new pressure zone and the potential need to reduce the amount of water available to KAWC/BWSC as this growth occurs.

5 MGD SCENARIO

The same modeling assumptions as stated above for the 3 mgd scenario were modeled with the 5 mgd demand. The booster pumping station, as it is currently being constructed (including the third pump), was unable to supply sufficient water to meet the City's needs and the desired 5 mgd BWSC demand.

In an attempt to satisfy the 5 mgd demand, we ran another scenario utilizing larger pumps in the booster pump station. This proposed adjustment satisfied the desired demands for the new pressure zone, however, it also highlighted a larger issue with trying to meet the requested water demand. The Versailles Water Treatment Plant is only rated for 10 mgd. The City's Water Plant currently operates in the 4 to 5 million gallons per day range. If an additional 5 mgd in demand were given to the BWSC, the plant would be operating at capacity, leaving no room for expansion within Versailles or even daily maintenance at the Water Plant. Additional concerns with this would be meeting the required one day storage volume for the distribution system.

Given the above, the City of Versailles should strongly consider the many improvements that would be needed to the system and the extensive associated costs before agreeing to a 5 mgd rate.

Without fully knowing the details of the potential agreement between the City of Versailles and the Bluegrass Water Supply Commission and the intended demand patterns, it is difficult to make a firm recommendation. However, it would appear that the City of Versailles could provide temporary emergency water at the KAWC connection at a rate of 2 to 3 million gallons per day without negatively impacting their operation if the above discussed improvements are implemented. It would further appear that a 5 mgd purchase by BWSC would be impractical with the limiting factor being the capacity of the Versailles Water Treatment Plant.



Mr. Bruce Southworth

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April 14, 2006

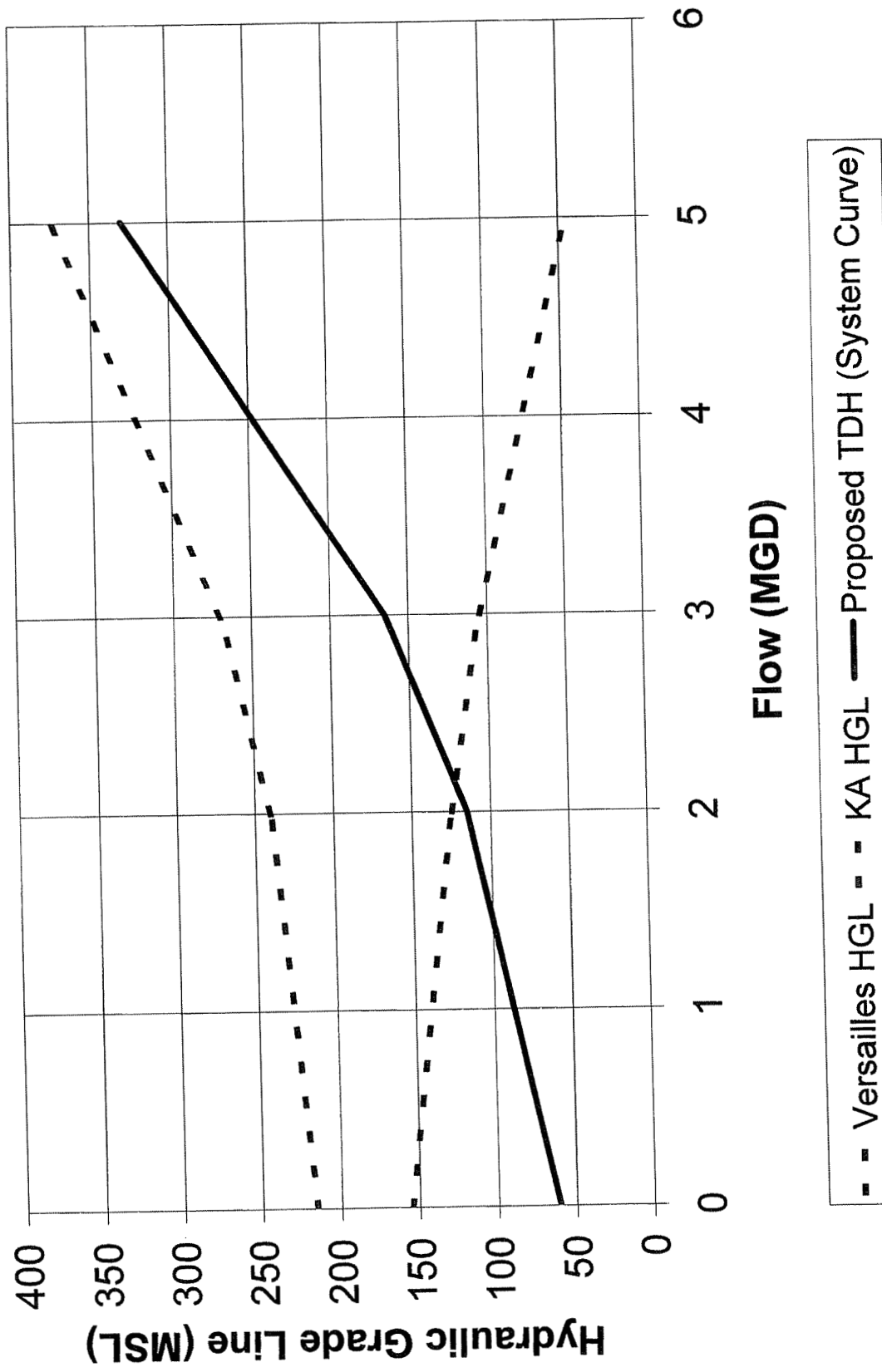
Should you have any questions or comments, feel free to contact Brad Montgomery or me at the above phone number.

Very truly yours,



Michael Jacobs, P.E.
Project Engineer

BWSC - Versailles Connection



Option I -

| | | |
|-----------------------|----|--------|
| Diesel Pump | \$ | 75,000 |
| Misc. Hwy. Trailer | \$ | 60,000 |
| Temp. Piping & Valves | \$ | 50,000 |


| | | |
|--------------|-----------|----------------|
| Total | \$ | 185,000 |
|--------------|-----------|----------------|

Option II -

| | | |
|--------------------------------|----|---------|
| Diesel Pump | \$ | 135,000 |
| Temp. Piping & Valves | \$ | 50,000 |
| Temp. Housing | \$ | 56,150 |
| Versailles Pump Improvements | \$ | 71,350 |
| Versailles Piping Improvements | \$ | 87,500 |

| | | |
|--------------|-----------|----------------|
| Total | \$ | 400,000 |
|--------------|-----------|----------------|

Linda
Bridwell/KAWC/AWWSC
03/17/2006 06:14 PM

To "Bryan Lovan" <LovanBK@obg.com>@AWX
cc briddle@gmwss.com, "Don Hassall" <dhassall@bgadd.org>, DRTalley@alltel.net, "George Rest" <RestGB@obg.com>, tom_calkins@nicholasville.org, VAzevedo@wmutilities.com,
bcc
Subject Re: Agenda for City of Versailles Meeting 

Bryan,

As we discussed previously, I learned after the meeting that the 1132 was a gradient Rich determined was what would be at the connection getting 3 mgd to Versailles, not vice versa. Normal system gradient is about 1170. If I understood correctly, we can provide them up to about 2 mgd at normal system gradient, pumping from the Parkers Mill tank. The water goes out through 2-12" pipes that feed into the 16", so there's a bit of a bottleneck either way.

So we went back and modelled what it would take to get water in at that point. We used peak day conditions and turned off one of the pumps at RRS. Under those conditions, we could take in 2 mgd at a gradient of 1,195 feet, 3.0 mgd at 1,225 feet, and 5.0 mgd at 1,330 feet. That may require a more complex connection than we had originally anticipated.

Unfortunately, there's not a lot of demand out in that area except for the airport, which means the water's got to come all the way back to Parkers Mill tank.

Please let me know if you have any questions.
Linda

Linda Bridwell, PE
Project Delivery & Developer Services Manager - WV, KY TN
Southeast Region
2300 Richmond Road
Lexington, KY 40502
Tel: 859-268-6373
Fax: 859-268-6374

"Bryan Lovan" <LovanBK@obg.com>



"Bryan Lovan"
<LovanBK@obg.com>
02/09/2006 10:33 AM

To: "Don Hassall" <dhassall@bgadd.org>, <briddle@gmwss.com>, <bridwell@kawc.com>, <tom_calkins@nicholasville.org>, <VAzevedo@wmutilities.com>
cc: <DRTalley@alltel.net>, "George Rest" <RestGB@obg.com>
Subject: Agenda for City of Versailles Meeting

Everyone,

Here is what I have found out so far. The existing OF of the Huntertown Tank is 1033.5 and the OF of the new tank (on same property as the one with the horse mural adjacent to Bluegrass Parkway) will be 1110. The HGL for KA's system in the area of Huntertown Road is 1132 +/- according to Rich Svindland.

Now Versailles is also constructing a new booster station to fill the new tank from the existing

tank and has a capacity of 2,000 gpm. The current demand on Versailles system in this area is 500 gpm. The city is supposed to have a 16-inch water main under Bluegrass Parkway to near KA's system @ Sycamore Estates.

The City could supply 2-3 mgd thru the 16-inch main with a temporary pump and piping between the City's system and KA's system. If more flow is needed, then City has a 24-inch main near the intersection of KY 33/Bluegrass Parkway and the new By-pass that is to feed the existing/new tank.

Here is some of the items I would like to get from our meeting on the 13th.

- 1) City of Versailles' system mapping in the area with existing system hydraulic grade line
- 2) Kentucky American' system mapping in the area with existing system hydraulic grade line
- 3) Proposed improvements - both Versailles & KAW that may be needed to meet flows of 2 MGD to 5 MGD
- 4) KA's interim needs (capacity)
- 5) City of Versailles current wholesale contract rate and terms
- 6) "Operational Issues" for this interim connection

Is there anything else you would like for me to cover or ask. Otherwise, I will see everyone in Versailles on Monday.

Thanks,

Bryan K. Lovan , PE, PLS
Project Manager
O'Brien & Gere Engineers, Inc.
1019 Majestic Drive, Suite 110
Lexington, Kentucky 40513-1895
Office - 859-223-0137 Ext. 22
Fax - 859-223-0629
Cellphone - 859-351-1714
e-mail: lovanbk@obg.com

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Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Engineers Presentation
September 19, 2006

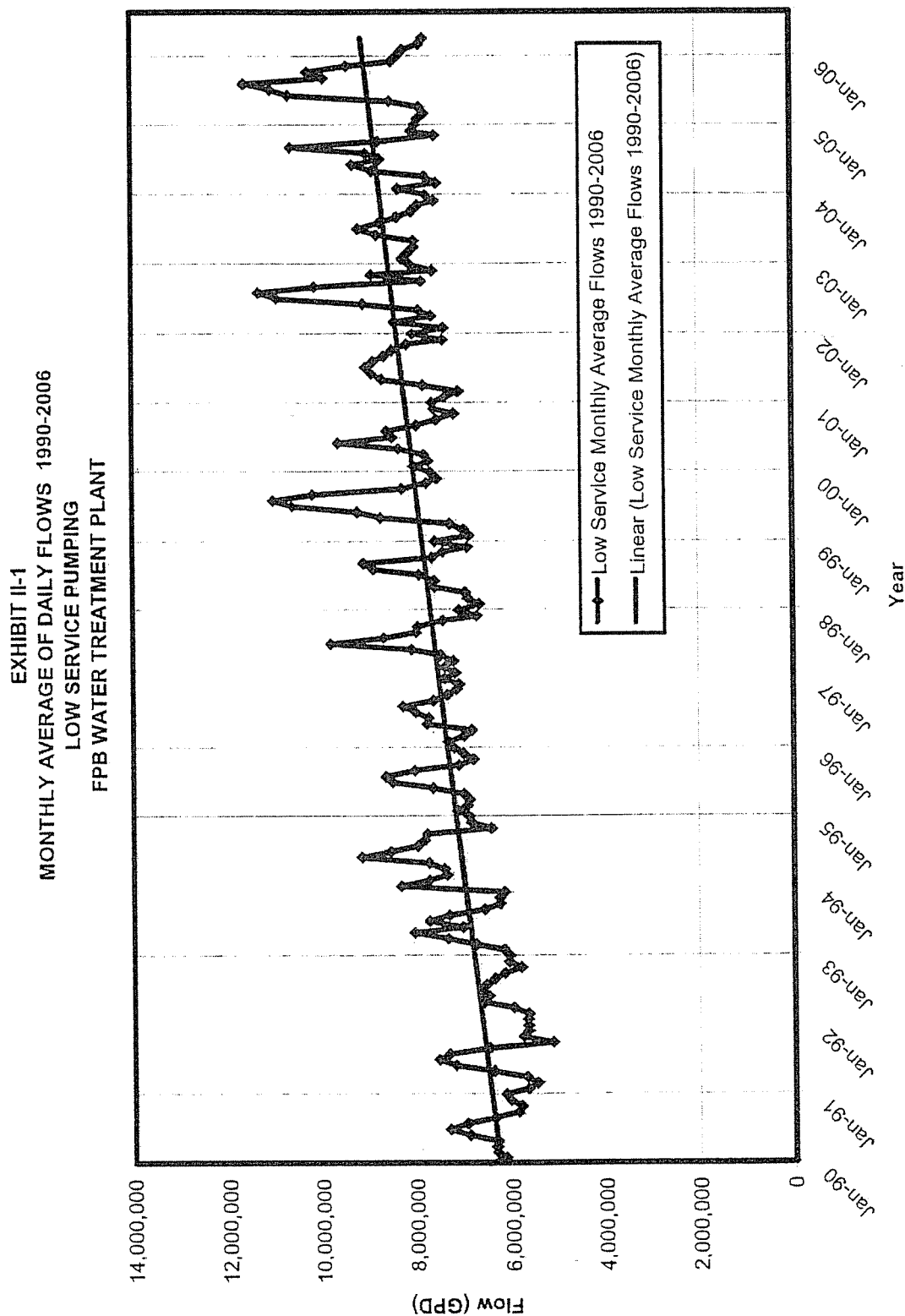
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Water Treatment Plant and Distribution System Evaluation

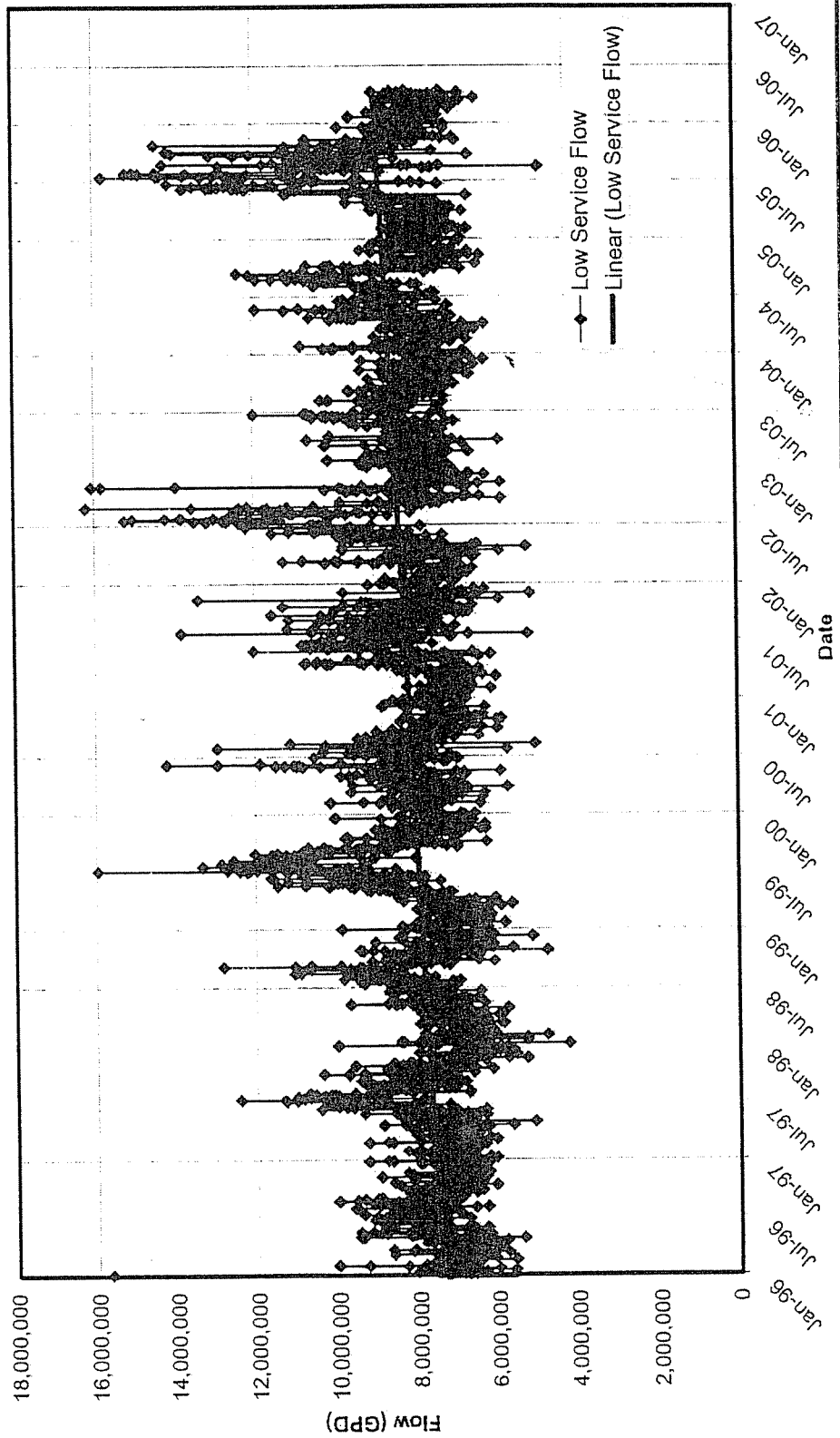
Frankfort Electric and Water Plant Board



Water Treatment Plant and Distribution System Evaluation

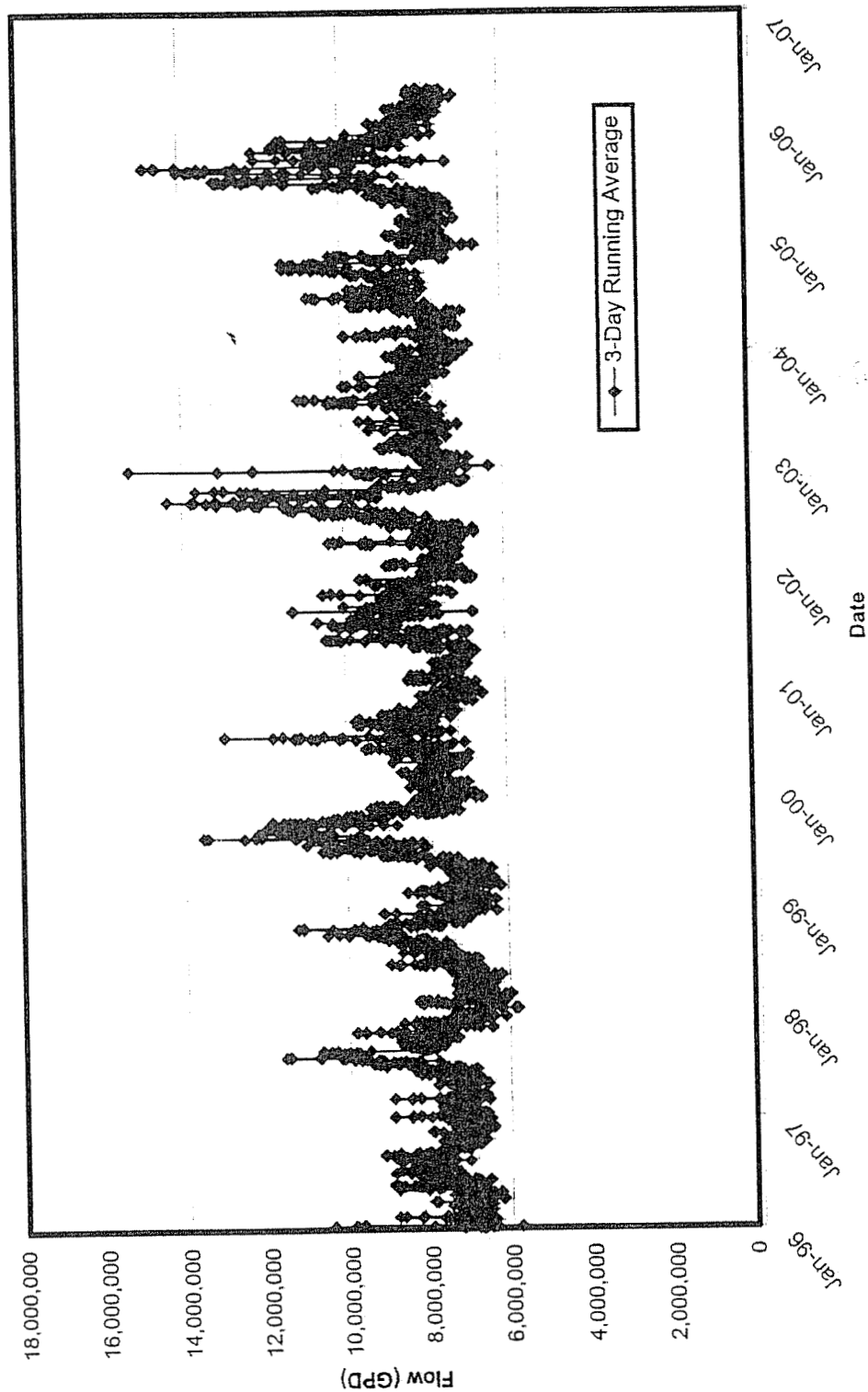
Frankfort Electric and Water Plant Board

EXHIBIT II-3
DAILY FLOWS
LOW SERVICE PUMPING
FPB WATER TREATMENT PLANT



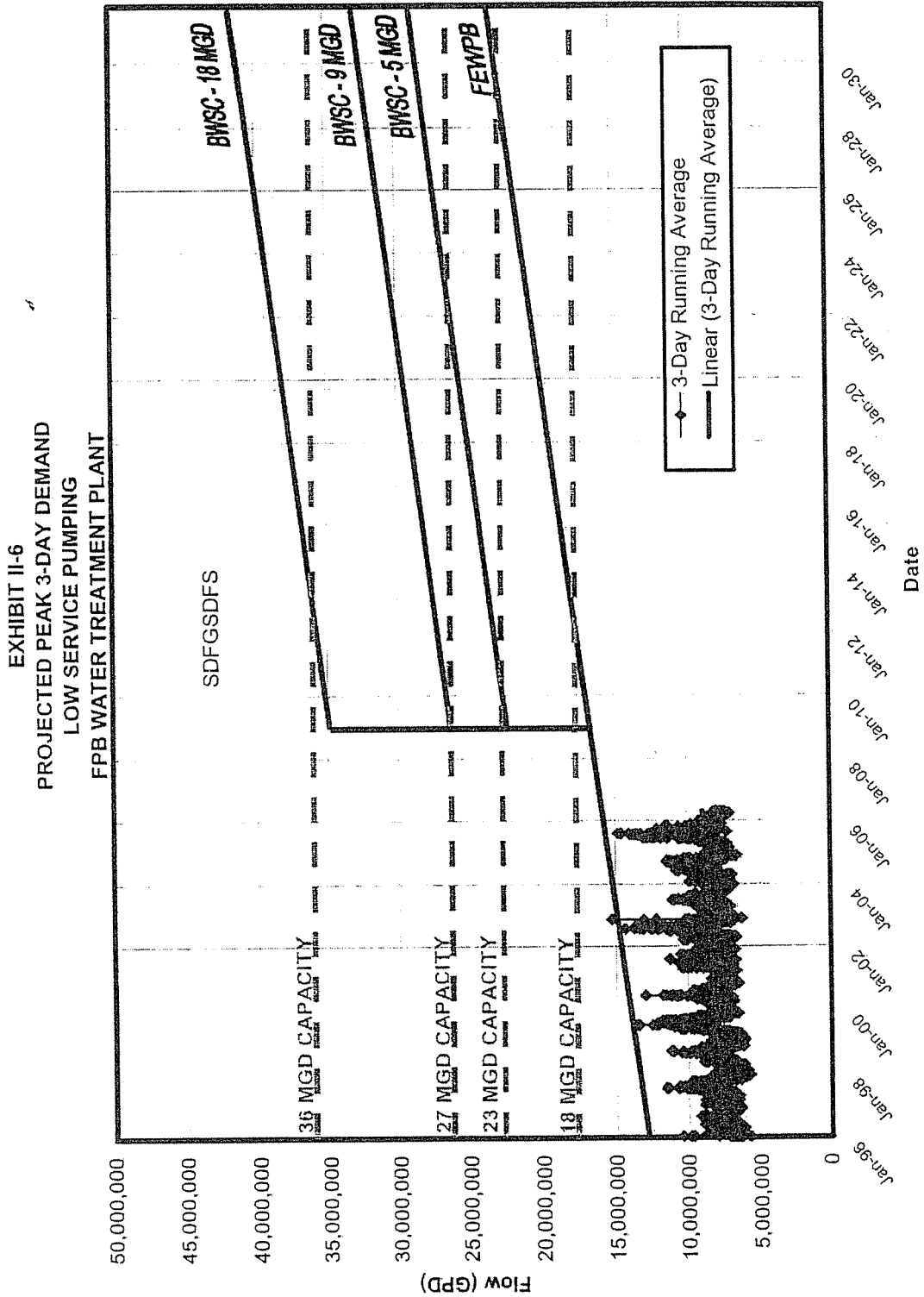
Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board

EXHIBIT II-4
3-DAY RUNNING AVERAGE FLOW
LOW SERVICE FLOW
FPB WATER TREATMENT PLANT



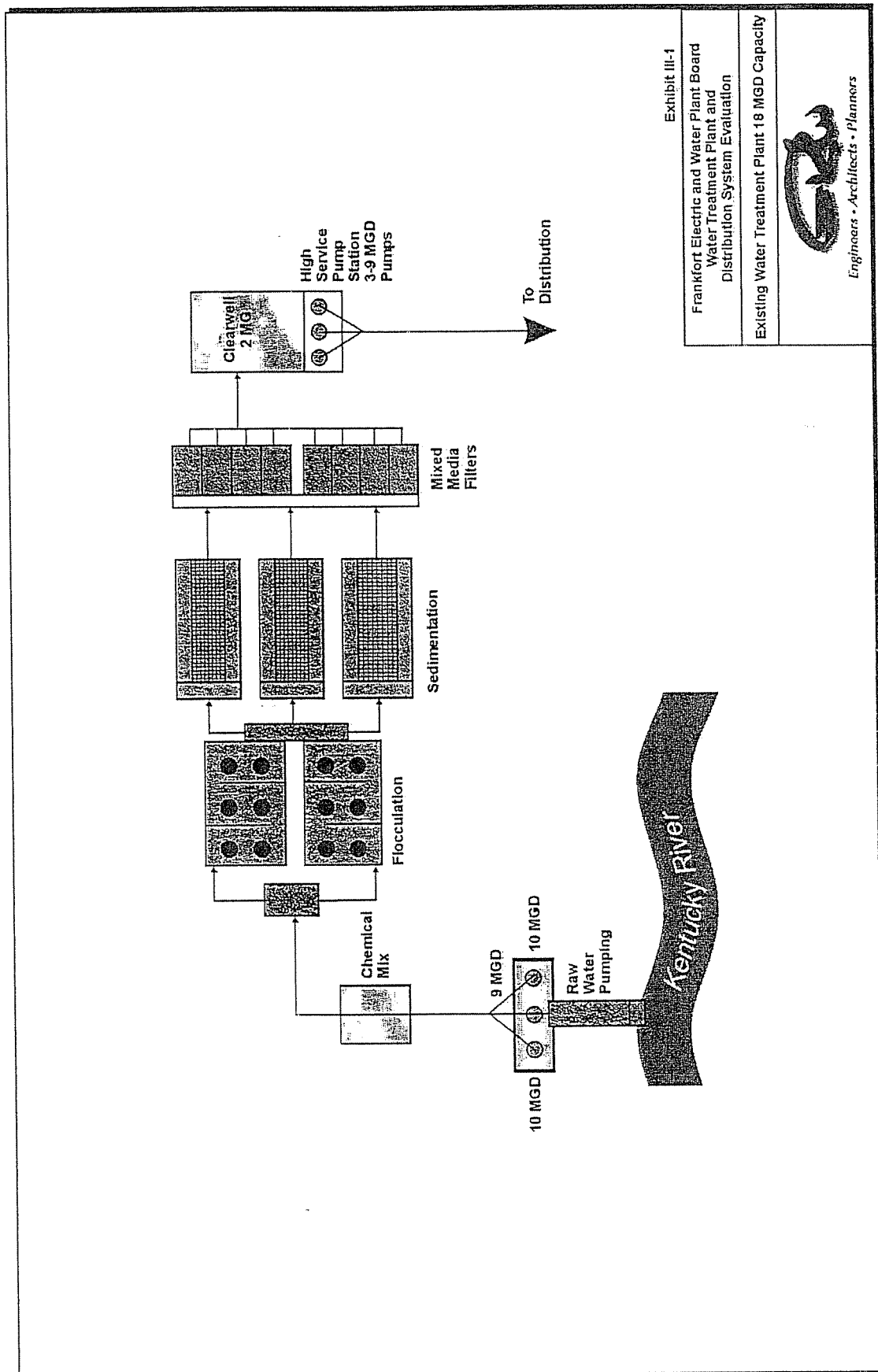
Water Treatment Plant and Distribution System Evaluation

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Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

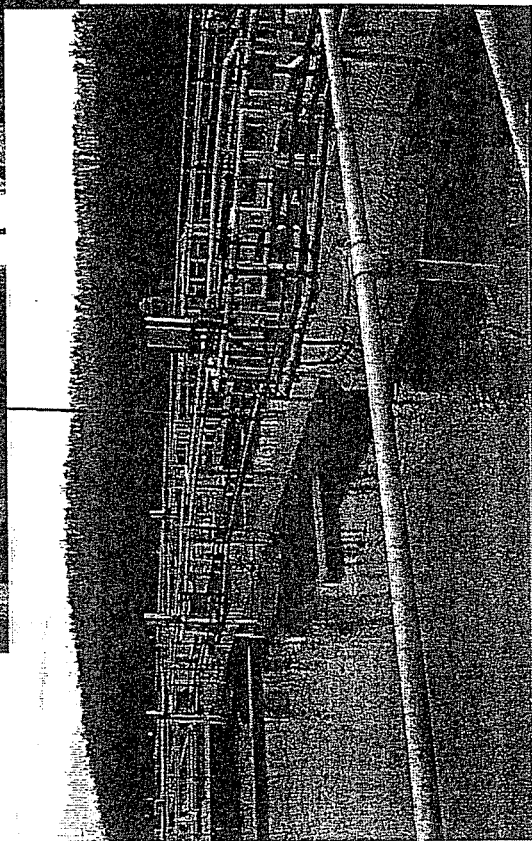
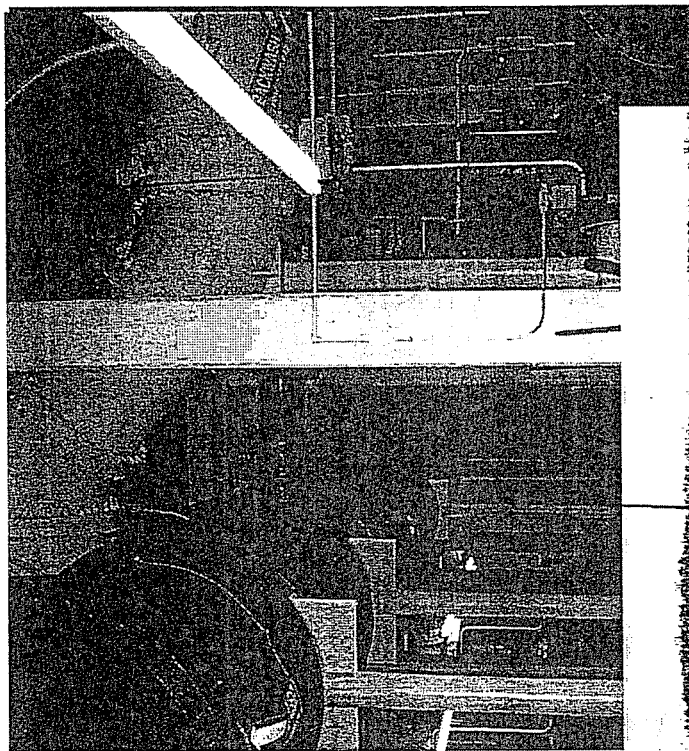


Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

- Raw Water Intake and Pump Station
- Chemical Mix Facility
- Flocculation
- Sedimentation
- Filtration
- Treated Water Storage - Clearwells
- High Service Pump Station



Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board

Process Review Raw Water Intake and Pump Station

Details 3 Vertical Turbine Pumps – 2-10 MGD, 1-9 MGD

Present Reliable Capacity – 18 MGD

Deficiencies

Approach velocity to pumps in excess of recommended
Wetwell design is not to recommendations of the Hydraulic
Institutes Standards.
Can not be removed from service for maintenance

Recommendations

Prior to expansion, create hydraulic model of the intake
As an alternative, construct a parallel raw water pump station

Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

Chemical Mix Facility

Details 1 Mechanical Mixers with 64 Seconds of Detention Time at 18 MGD.
 Present Reliable Capacity – 30 MGD

Deficiencies

Future expansion for flow splitting is not possible

Can not be removed from service for maintenance

Recommendations

Replace chemical mix facility to allow for future expansion to 36 MGD.
Provide dual mixers.

Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

Flocculation

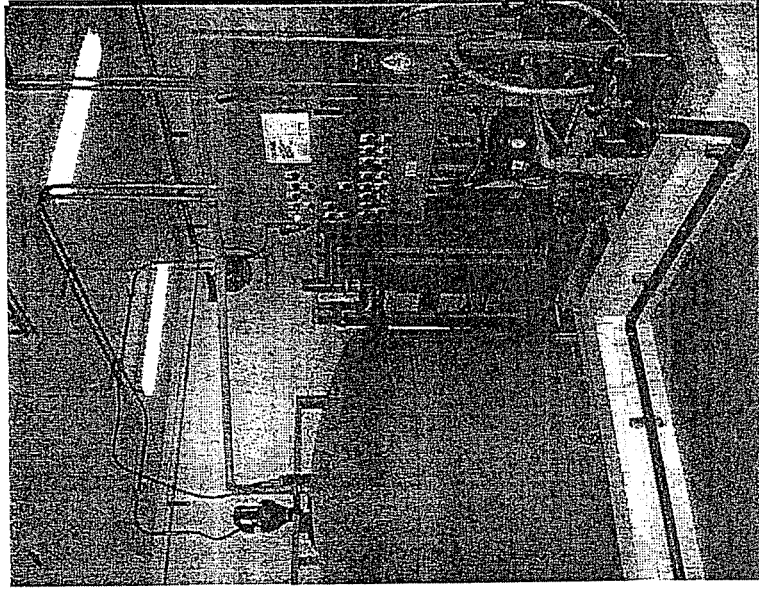
Details 6 Vertical Flocculators in 2 parallel basins.
Present Reliable Capacity – 27 MGD

Deficiencies

Poor Flow-Splitting Characteristics

Recommendations

None. Parallel Flocculation Basins will be required for expansion.



Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

Sedimentation

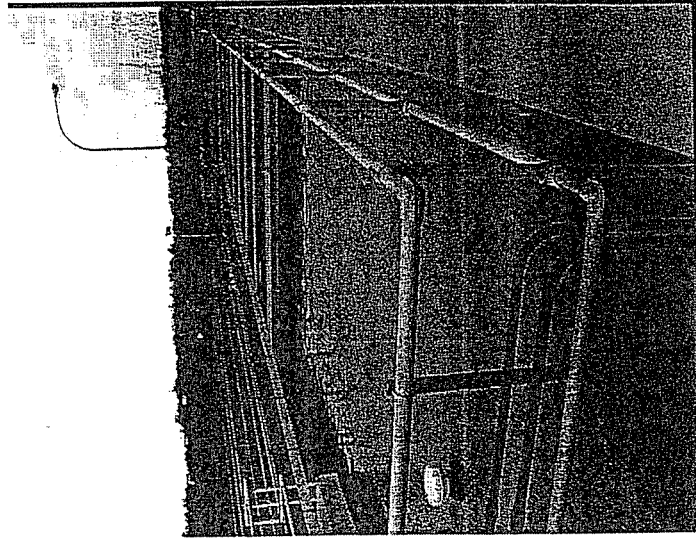
Details Sludge Collection Equipment in 3 Parallel Basins.
Present Reliable Capacity – 14.6 MGD

Deficiencies

Poor Flow-Splitting Characteristics
Detention Time – 15.3 MGD
Tube Settler Surface Area – 14.6 MGD

Recommendations

Increase Tube Settler Area
Review With KDOW Detention Time Criteria



Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

Filtration

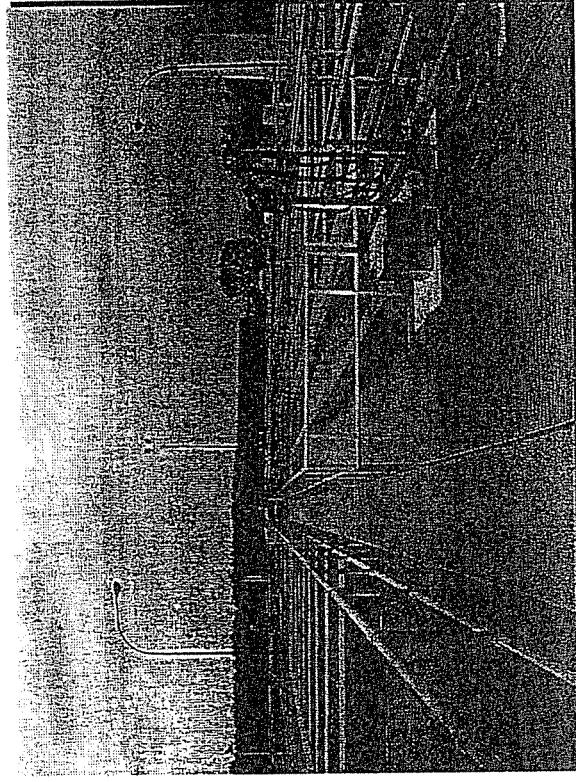
Details 8 Parallel Dual Media Gravity Filters
Present Reliable Capacity – 18 MGD

Deficiencies

None

Recommendations

None Required



Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

Treated Water Storage

Details 3 Concrete Storage Tanks

1-1.8 MG, 2-0.1 MG (Not Included)

Present Reliable Capacity – 12.4 MGD

Deficiencies

Insufficient Volume

No Baffling

Recommendations

Construct Additional Capacity



Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board

Process Review

High Service Pumping

Details 3-9 MGD Pumps

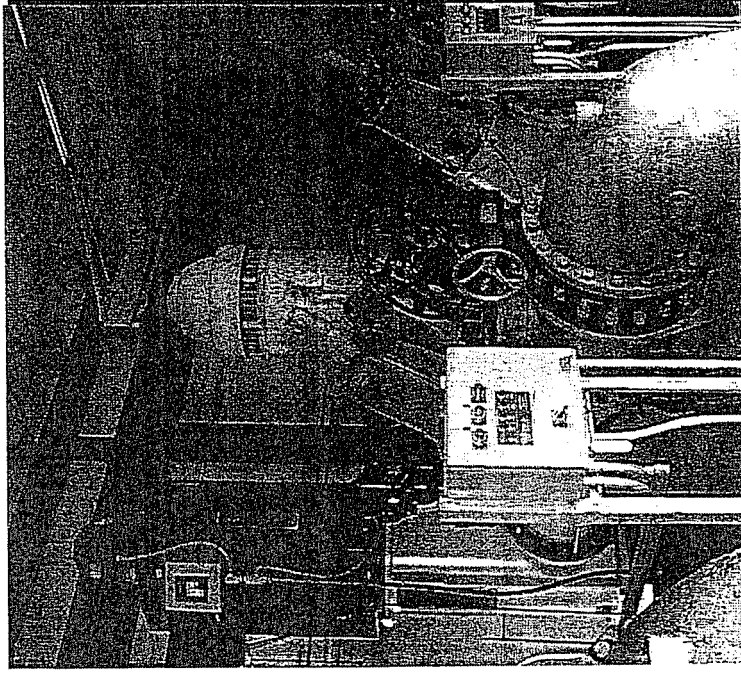
Present Reliable Capacity – 18 MGD

Deficiencies

Can not be removed from service for maintenance

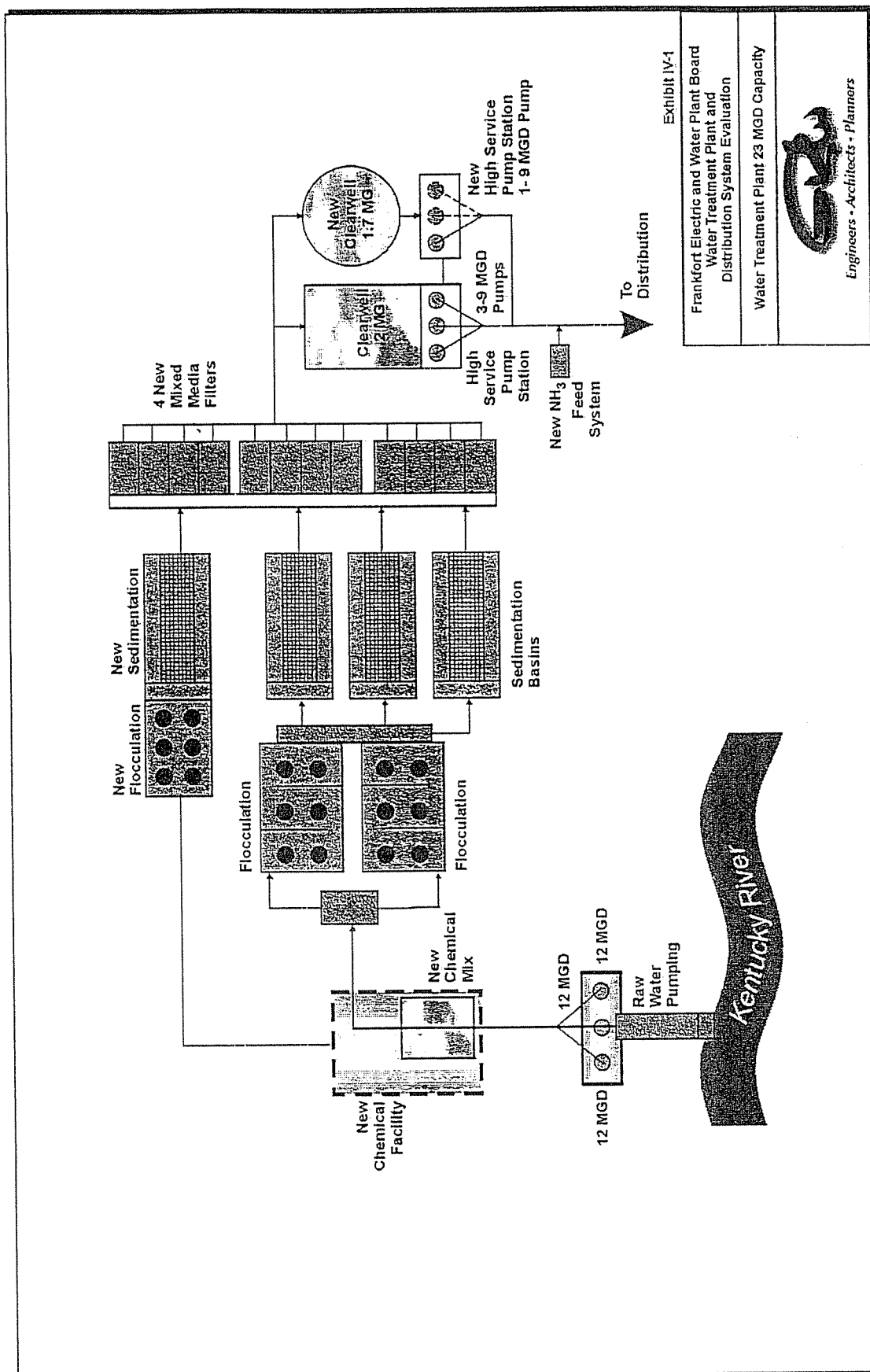
Recommendations

For future expansion, construct parallel facility



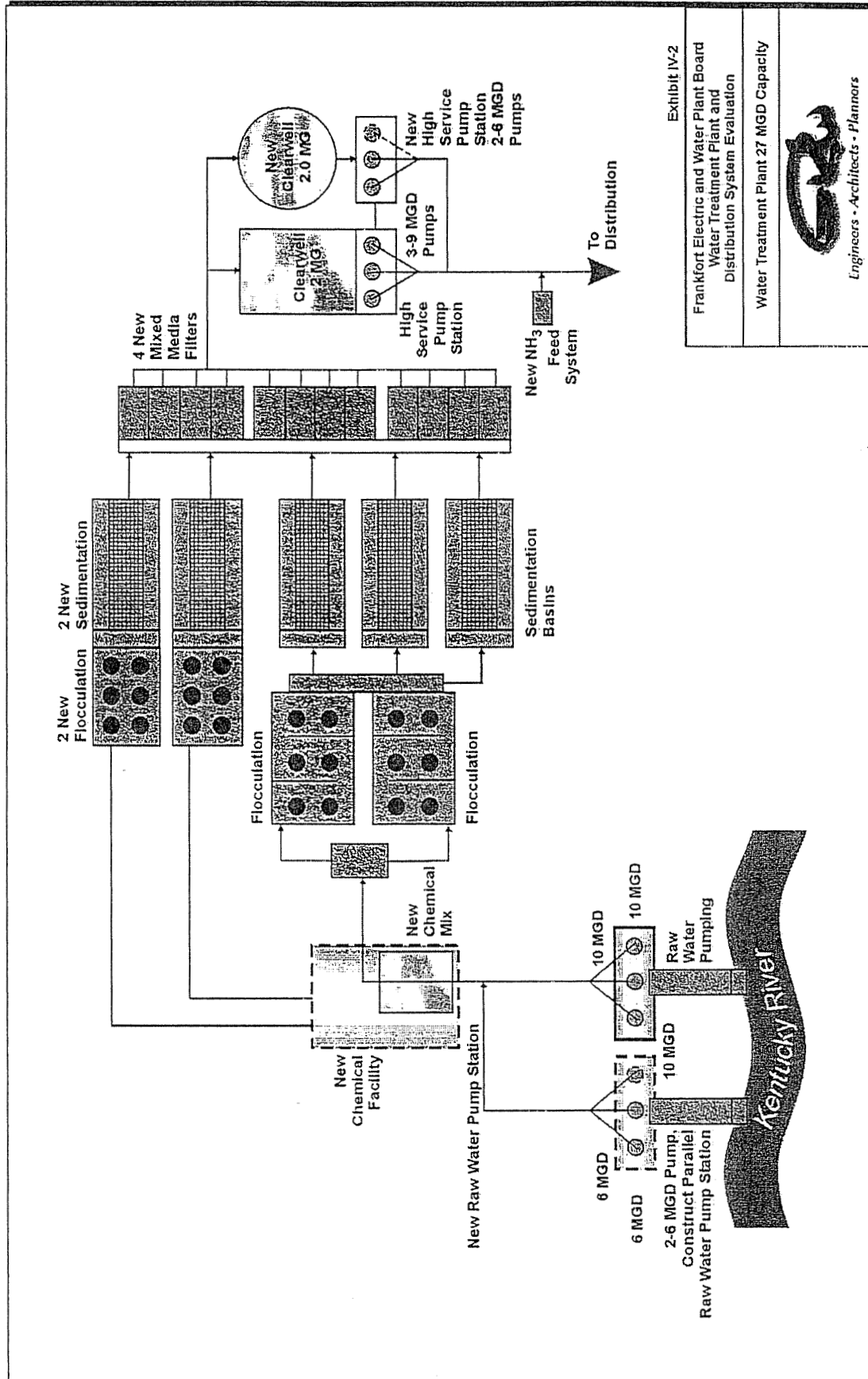
Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board



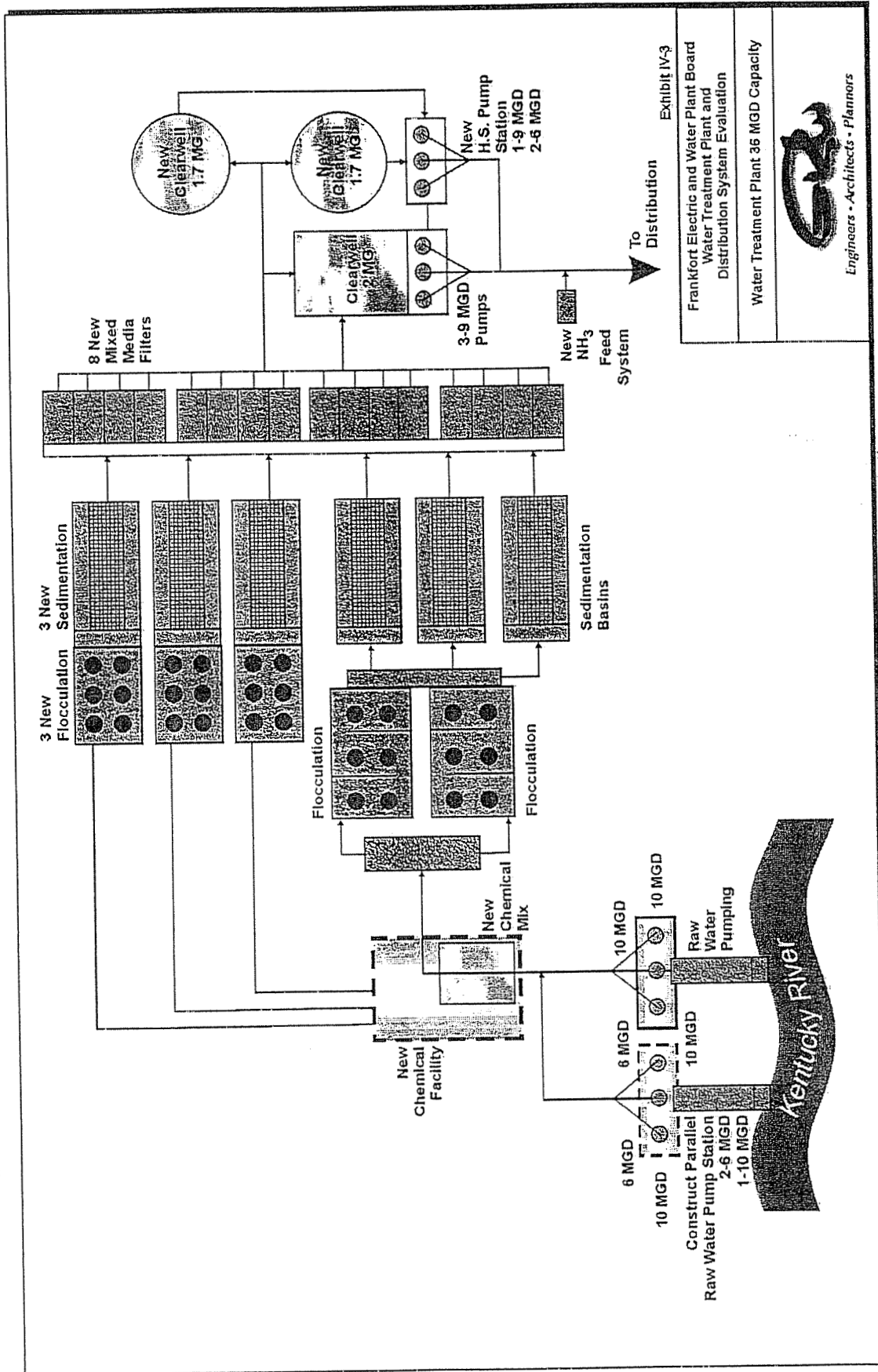
| | |
|--------------------|----------------|
| Total Project Cost | \$ 18,144,816. |
| BWSC Cost Share | \$ 14,148,258. |
| FEWPB Cost Share | \$ 3,996,558. |

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



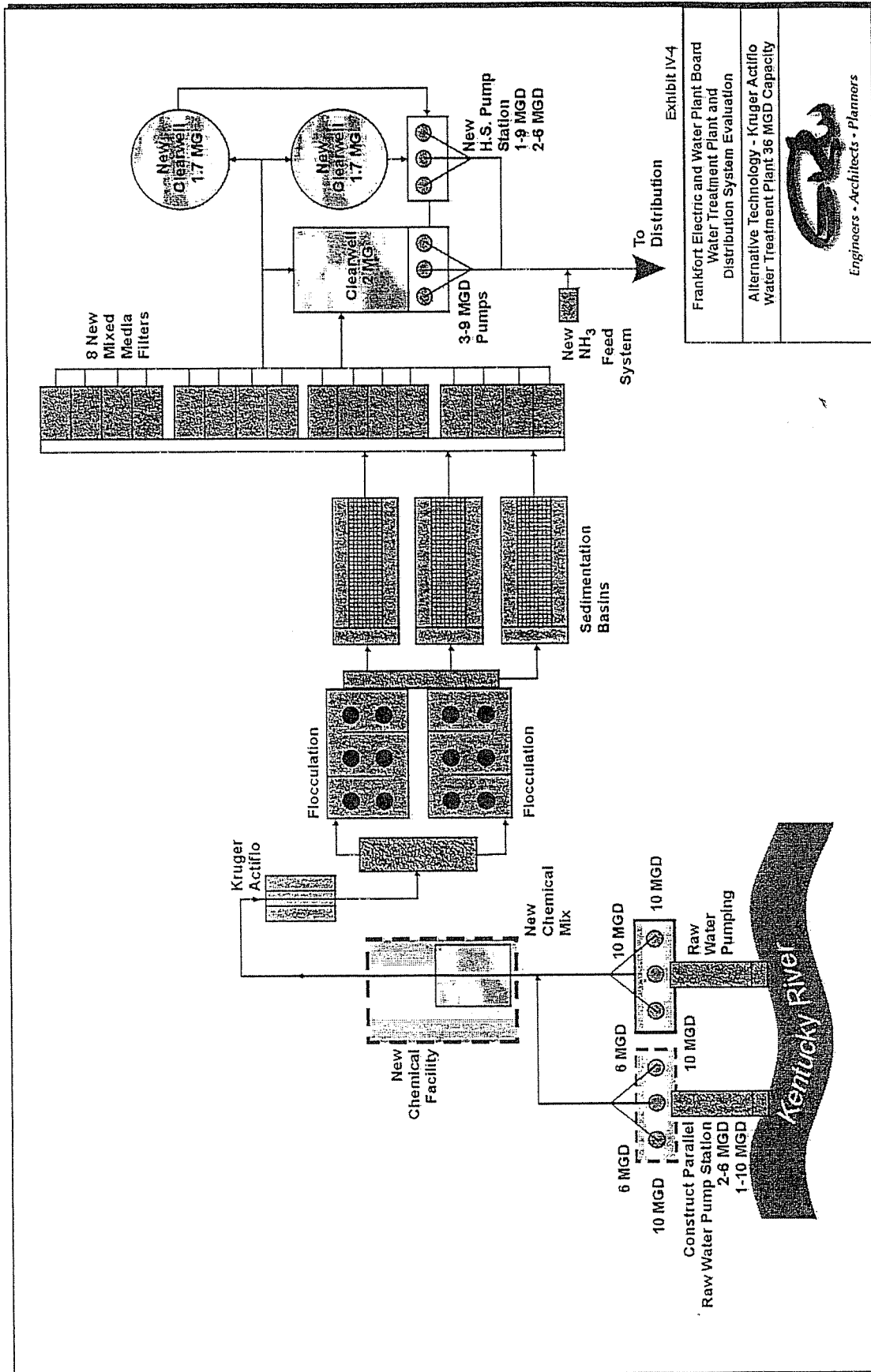
| | |
|--------------------|----------------|
| Total Project Cost | \$ 25,591,001. |
| BWSC Cost Share | \$ 18,765,320. |
| FEWPB Cost Share | \$ 6,825,681. |

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



| | |
|--------------------|----------------|
| Total Project Cost | \$ 33,789,227. |
| BWSC Cost Share | \$ 28,394,299. |
| FEWPB Cost Share | \$ 5,394,928. |

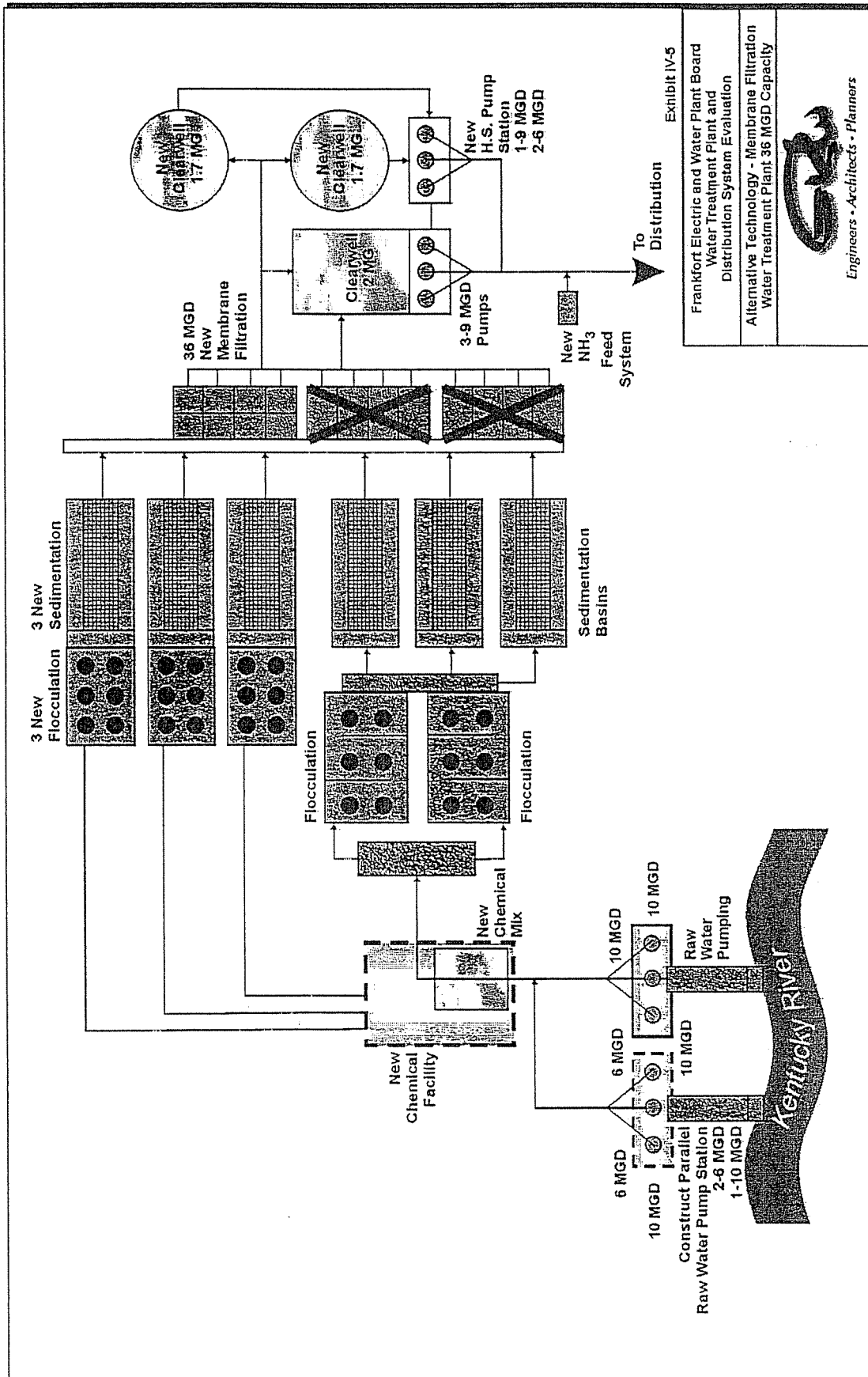
Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



| | |
|--------------------|----------------|
| Total Project Cost | \$ 34,223,363. |
| BWSC Cost Share | \$ 28,828,435 |
| FEWPB Cost Share | \$ 5,394,928. |

Water Treatment Plant and Distribution System Evaluation

Frankfort Electric and Water Plant Board



| | |
|--------------------|----------------|
| Total Project Cost | \$ 44,968,261. |
| BWSC Cost Share | \$ 39,573,333. |
| FEWPB Cost Share | \$ 5,394,928. |

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board

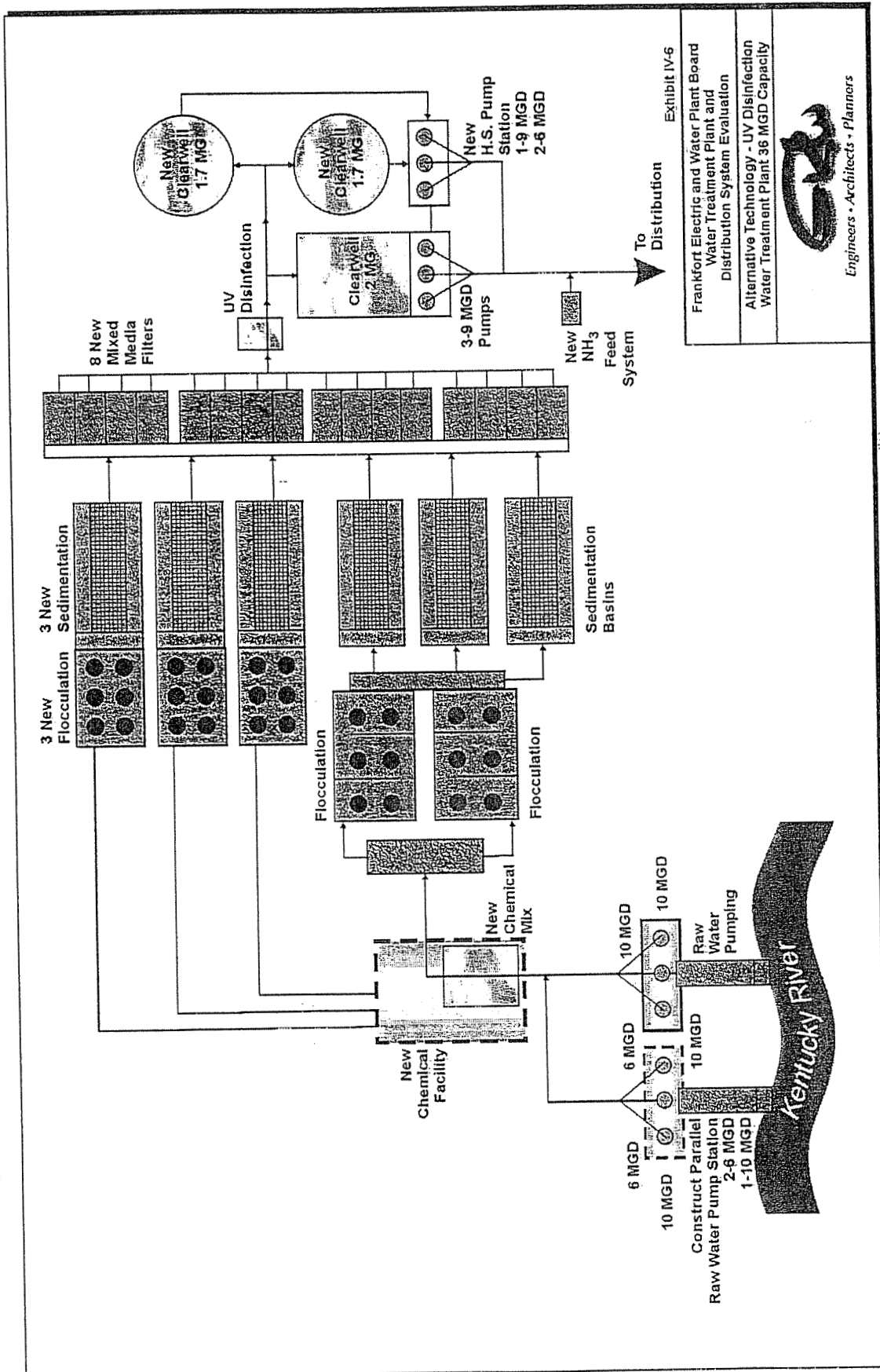


Exhibit IV-6

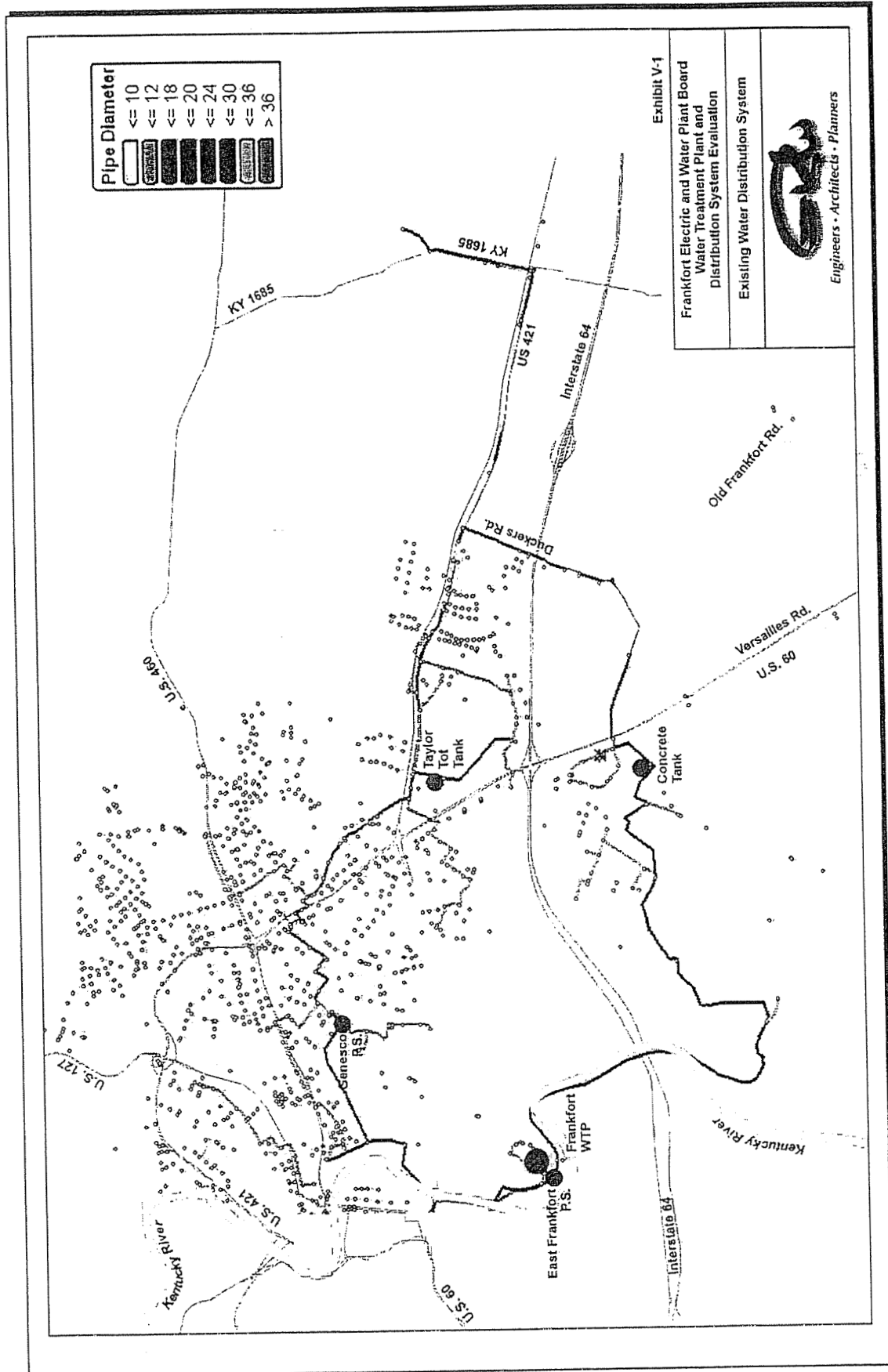
Frankfort Electric and Water Plant Board
Water Treatment Plant and
Distribution System Evaluation

Alternative Technology - UV Disinfection
Water Treatment Plant 36 MGD Capacity

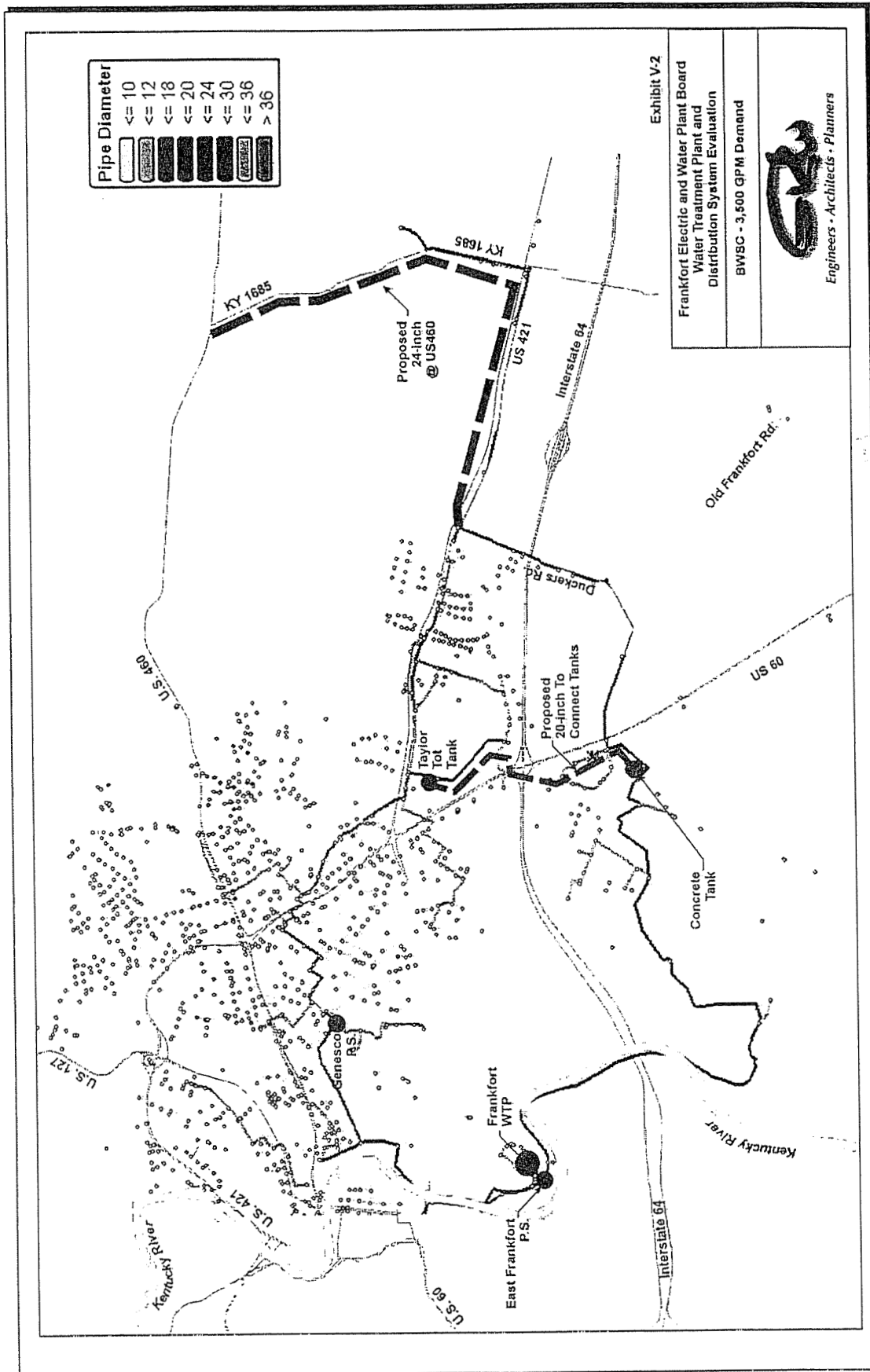


Engineers • Architects • Planners

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board

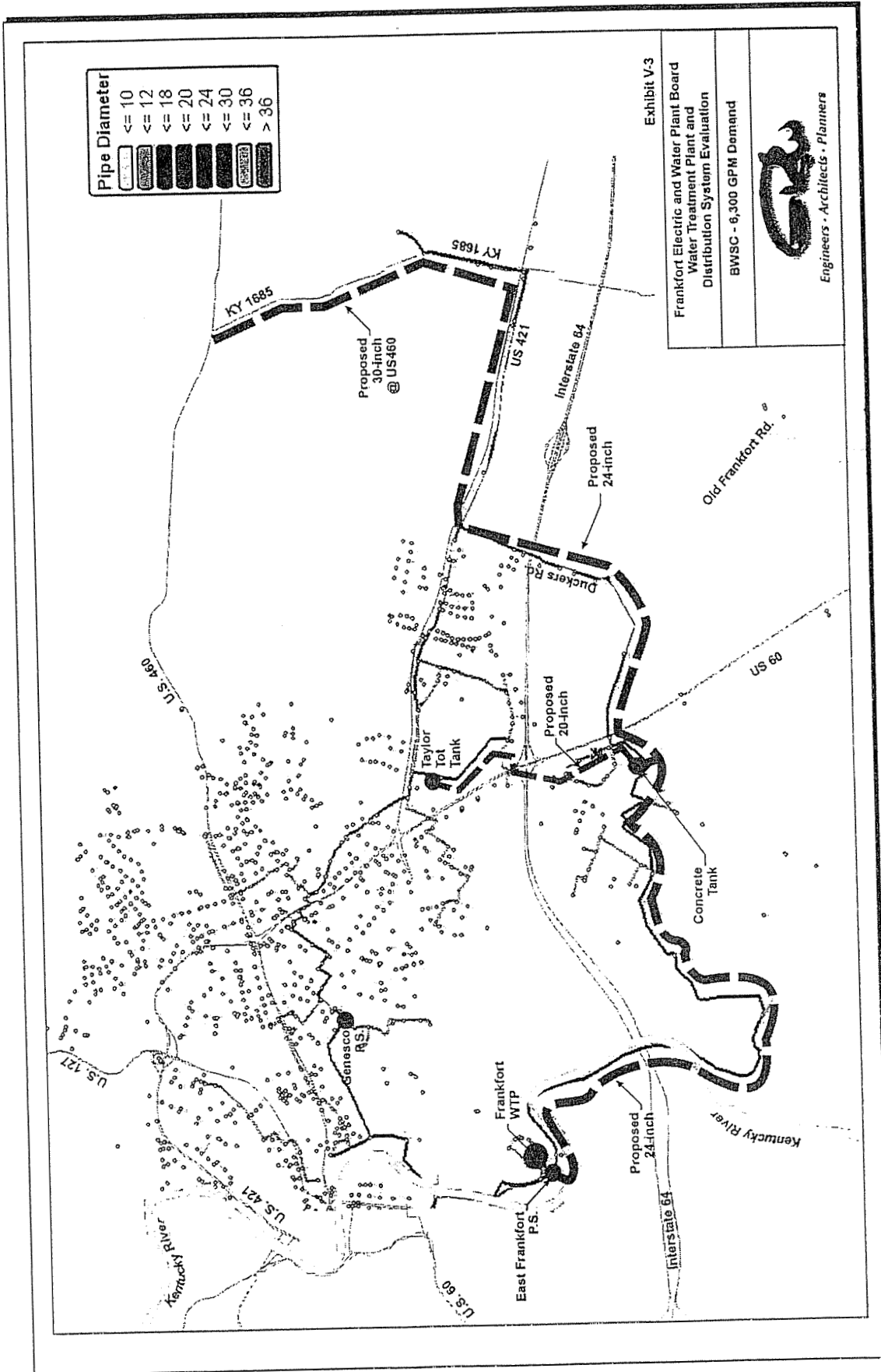


Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



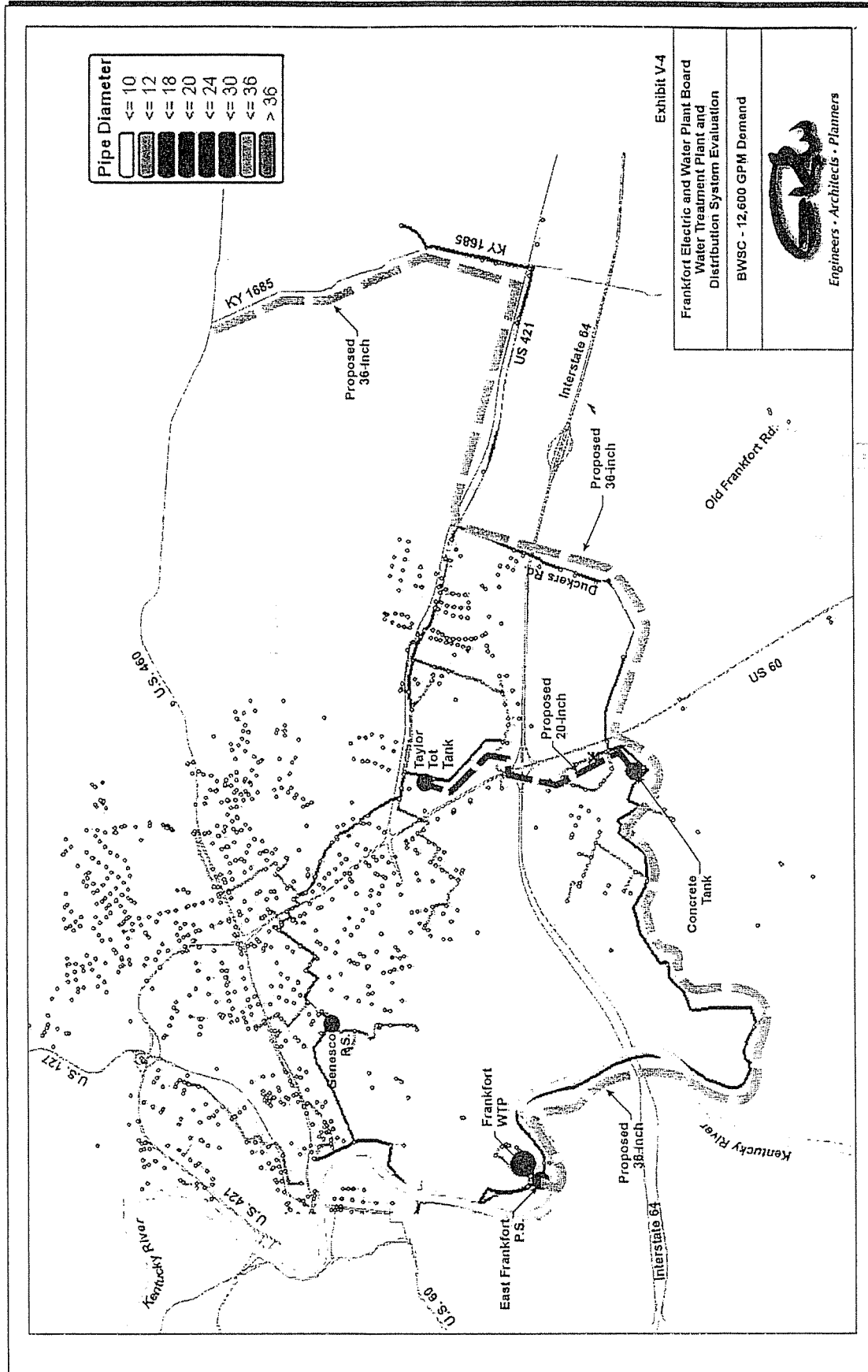
Total Project Cost \$ 5,323,972.

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



Total Project Cost \$ 13,228,779.

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board



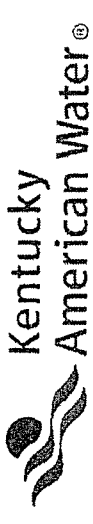
Total Project Cost \$ 20,370,214.

Water Treatment Plant and Distribution System Evaluation Frankfort Electric and Water Plant Board

Table VI-3
Total Project Cost
Water System Improvements*
US 460/KY 1685 Delivery Point

| BWSC Water Supply Quantity | Water Treatment (\$) | Water Distribution (\$) | Total Project Cost (\$) |
|-------------------------------|----------------------------|-------------------------------|-------------------------------|
| 5 MGD | \$ 18,144,816. | \$ 5,323,972. | \$ 23,468,788. |
| 9 MGD | \$ 25,591,001. | \$ 13,228,779. | \$ 38,819,780. |
| 18 MGD | \$ 33,789,227. | \$ 20,370,214. | \$ 54,159,441. |

* Water transmission main to US 460/KY 1685 Included.



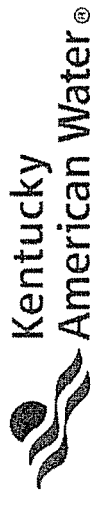
Bluegrass Water Supply Commission

Kentucky American Water

Partnership/Status



BWSC – KAW Partnership/Status

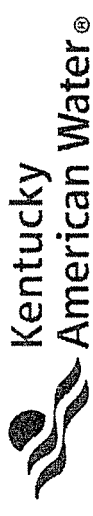


■ KAW Status:

- Options executed WTP, intake sites
- 3 routes identified from plant to KAW system
- Design begun - 20 mgd WTP expandable to 30 mgd
- RFPs for design of pipe/boosters
- On target: file Certificate of Conv & Nec w/PSC Spring 2007
- On target for plant on line in 2010
- KAW will participate only in Phase 1 of grid system



BWSC – KAW Partnership/Status

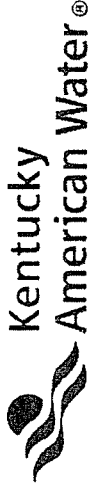


■ BWSC Status:

- Routing study for Frankfort/Lexington segment
- Treatment Plant/Intake property option executed
- Consultant reviewed option: BWSC go alone
- Have retained Financial Advisor
- City of Berea to join in September



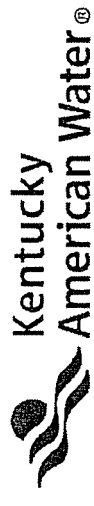
BWSC – KAW Partnership/Status



- Other Considerations:
 - Outstanding 1997 PSC Order to address source of supply
 - Risk of Moderate Drought Impact



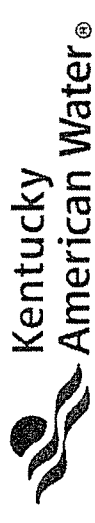
BWSC – KAW Partnership/Status



■ Partnership Status

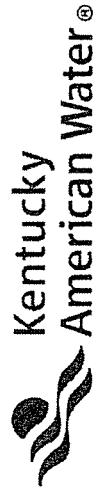
- March 2006
 - KAW & BWSC meet on partnership
 - PSC Conference – KAW commits to design of WTP in Spring 2007
- May 2006
 - KAW offers option to BWSC to purchase water, BWSC to build grid
- June 2006
 - BWSC indicated not interested in water purchase from KAW plant
- July/August 2006
 - KAW reviewed impact of shared ownership and potential options

BWSC – KAW Partnership/Status



- Partnership Status (cont'd)
 - KAW will participate in Phase 1 of grid, BWSC will be responsible for remaining grid components
 - KAW can wheel water through its system in lieu of additional grid components

BWSC – KAW Partnership/Status

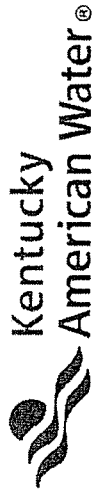


- KAW's facilities alone estimated cost \$144 million

| <u>Facility</u> | <u>20 mgd WTP</u> |
|-------------------------|-------------------|
| Treatment Plant/Pumping | \$69 |
| Phase 1 Grid | \$75 |
| Total | \$144 |



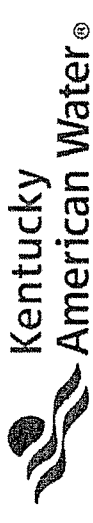
BWSC – KAW Partnership/Status



- Regional plant estimated at \$154 million
- Grid Costs do not include Berea

| <u>Facility</u> | <u>30 mgd WTP</u> | |
|--------------------------|-------------------|------------|
| | KAW-21mgd | BWSC-9 mgd |
| Treatment Plant/Pumping | \$55 | \$24 |
| Phase 1 Grid System | \$52 | \$23 |
| Sub- Total | \$107 | \$47 |
| Remainder of Grid System | \$0 | \$65 |
| Total | \$107 | \$112 |

BWSC – KAW Partnership/Status



- 1) BWSC shares in project with upfront funding while project underway
 - BWSC determines volume of commitment
 - BWSC determines upfront funding available
 - KAW designs/builds facilities with expanded commitment
 - KAW operates co-owned facilities under contract w/BWSC
 - BWSC owns portion of facilities proportionate to investment
 - Grid costs reduced w/more utilization of KAW system

BWSC – KAW Partnership/Status



- 2) BWSC shares in project at later date with contribution of appropriate costs
 - BWSC determines volume and funding commitment after PSC Certificate Case
 - KAW designs/builds facilities based on commitment
 - KAW operates co-owned facilities under contract w/BWSC
 - BWSC owns portion of facilities related to investment
 - Grid costs reduced with more utilization of KAW system

BWSC – KAW Partnership/Status



- Where do we go from here?
 - Letter of Intent between KAW and BWSC
 - BWSC determines level of commitment
 - Negotiate agreements
 - BWSC determines level of funding available

AGREEMENT FOR PAYMENT OF ENGINEERING EXPENSES

This Agreement is entered into this 27th day of February, 2007, by and between Kentucky-American Water Company, a Kentucky corporation, having its office at 2300 Richmond Road, Lexington, Kentucky 40502 ("KAW") and the Bluegrass Water Supply Commission, having its address at 699 Perimeter Drive, Lexington, Kentucky 40517 ("BWSC").

WHEREAS, KAW is in the process of preparing and designing plans for the construction of a 20 million gallons per day water treatment plant for the treatment of water withdrawn from Pool 3 on the Kentucky River;

WHEREAS, as part of the preparation and design process for the water treatment plant, KAW has incurred and is incurring costs and expenses related to the engineering design work that must be performed;

WHEREAS, BWSC has indicated its desire to participate with KAW in the water treatment plant project so that BWSC members will have an increased water supply; and

WHEREAS, BWSC has indicated its desire to increase its members' existing water supply by 5 million gallons per day, and, accordingly, has asked KAW to perform the incremental engineering design work necessary to increase the water treatment plant capacity from 20 million gallons per day to 25 millions gallons per day;

WHEREAS, BWSC has access to non-federal funds to defray the cost of this work;

NOW, THEREFORE, it is agreed as follows:

1. BWSC will deliver to KAW the sum of \$171,000.00 (one hundred seventy-one thousand dollars), which is the proposed amount of the incremental engineering design work necessary to increase the water treatment plant capacity from 20 million gallons per day to 25 million gallons per day. Payment of \$171,000.00 shall occur upon receipt of an invoice from KAW. BWSC covenants that none of its payment will be from federal funds.

2. Based upon the action taken by the Board of Commissioners of BWSC on January 22, 2007, KAW has already taken the necessary steps to cause the incremental engineering design work to commence.

3. BWSC and KAW recognize that the \$171,000.00 payment is for the proposed cost of the incremental engineering design work and that if the actual cost of the work exceeds \$171,000.00, BWSC will pay to KAW the amount by which the actual cost exceeds \$171,000.00 within 30 (thirty) days after KAW notifies BWSC of an amount due. Likewise, if the actual cost of the incremental engineering design work is

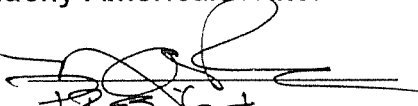
less than \$171,000.00, then KAW will return to BWSC the amount of any savings within 30 (thirty) days after those savings are realized. The parties agree that no incremental engineering design work which causes the actual cost of the work to exceed \$171,000.00 will be performed without KAW first obtaining BWSC's consent.

4. Other than the payments contemplated in Paragraph 3 above to account for the actual cost of the incremental engineering design work relative to the \$171,000.00 proposed cost, the parties agree that the payments made by BWSC pursuant to this Agreement are not refundable for any reason, including any reason relating to the actual results of the current efforts to participate in the water treatment plant contemplated in this Agreement.

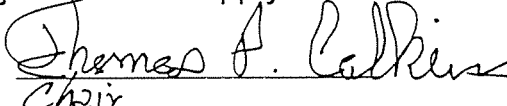
5. Nothing contained in this Agreement shall be construed as creating an obligation for BWSC to participate with KAW in the construction or ownership of the water treatment plant.

6. This Agreement is effective retroactive to January 22, 2007.

Kentucky American Water

By: 
Its: President
Date: 2-27-07

Bluegrass Water Supply Commission

By: 
Its: Chair
Date: 2-26-07

AGREEMENT

THIS AGREEMENT is entered into this the 20th day of November, 2007, between **BLUEGRASS WATER SUPPLY COMMISSION** ("BWSC"), a Regional Water Commission created pursuant to the provisions of Kentucky Revised Statutes 74.420 to 74.520, 699 Perimeter Drive, Lexington, Kentucky 40517, and **KENTUCKY-AMERICAN WATER COMPANY** ("KAWC"), a Kentucky corporation, with offices at 2300 Richmond Road, Lexington, Kentucky 40502.

WITNESSETH:

WHEREAS, BWSC is a Regional Water Commission duly organized, in good standing and created to develop and implement a regional solution to the water supply deficit in Central Kentucky, and

WHEREAS, BWSC's current membership is the cities of Berea, Cynthiana, Frankfort, Georgetown, Lancaster, Mt. Sterling, Nicholasville, Paris, and Winchester and the Lexington-Fayette Urban County Government, and

WHEREAS, KAWC is a public utility subject to the jurisdiction of the Public Service Commission of the Commonwealth of Kentucky ("PSC") and has filed with the PSC an Application for a Certificate of Convenience and Necessity authorizing the construction of a raw water intake and a 20 million gallons per day ("MGD") water treatment plant on Pool 3 of the Kentucky River, approximately 160,000 linear feet of a 42" diameter transmission main, a booster pump station and water storage tank, and

WHEREAS, BWSC entered into an Agreement with KAWC on February 27, 2007, to fund the incremental engineering design work necessary to increase the proposed water treatment plant capacity from 20 MGD to 25 MGD, and

WHEREAS, BWSC has expressed a desire to own an undivided 20% interest in the intake, 25 MGD treatment plant, transmission line, booster pump station, water storage tank, and the land necessary (collectively "Facilities"), and

WHEREAS, KAWC has solicited and received bids for the construction of the intake, 20 MGD treatment plant with an alternative for a 25 MGD treatment plant, transmission line, booster pump station and water storage tank, and

WHEREAS, the bids will expire on February 6, 2008, and

WHEREAS, the successful bidder for the water treatment plant will require timely notification of the decision to build a 20 MGD or 25 MGD water treatment plant,

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein, the parties agree as follows:

1. **OPTION A.** On or before April 1, 2008, BWSC may elect Option A in this Agreement by so notifying KAWC in written form of its intention to acquire a 20% ownership interest in the Facilities and delivering to KAWC collected funds in an amount equal to 20% of the bids accepted by KAWC for construction of the Facilities, to be adjusted to the final cost. The election of Option A shall obligate KAWC to provide BWSC with a 20% undivided interest in the Facilities. The election of Option A shall not obligate BWSC or any of its members to purchase any water produced by the water treatment plant but will obligate them to pay 20% of the cost of operation and maintenance of the Facilities on a monthly basis. When the Facilities are placed into service, KAWC shall provide BWSC with an accounting for the final cost of the Facilities, which cost would be that sum added to the rate base of KAWC by reason of construction of the Facilities if KAWC were the sole owner, and which shall be used as a basis for the determination of the final cost of the obligation of BWSC to acquire a 20% ownership

interest of the Facilities. If BWSC elects Option A, it may purchase up to 5 MGD of potable water directly from the Facilities or from KAWC (at locations to be mutually agreed upon that are hydraulically reasonable and neither party shall unreasonably withhold its agreement) at a rate designed to recover 20% of the cost of operation and maintenance of the Facilities. This rate shall be revised annually in accordance with the cost of operation and maintenance of the Facilities for the preceding calendar year. The actual cost of operation and maintenance in any year shall mean the necessary and reasonable expenses of operating, maintaining and repairing the Facilities; and without limiting the generality of the foregoing, all administrative and operation expenses, insurance, engineering and legal expenses, materials, supplies, labor, rental of equipment and other property, utility services, any taxes which may be lawfully imposed; but not including any allowance for return on capital, depreciation or amortization. BWSC's purchase of potable water directly from the Facilities or from KAWC shall be memorialized by a written agreement.

2. **OPTION B.** On or before April 1, 2008, BWSC may elect Option B in this Agreement by so notifying KAWC in written form of its intention to acquire a 20% undivided ownership interest in the Facilities and delivering to KAWC a written commitment from one or more of its members guaranteeing that commitment, which guarantee must be acceptable to KAWC and which acceptance shall not be withheld unreasonably. The election of Option B shall obligate BWSC and its guaranteeing member(s) to pay KAWC a monthly fee, beginning with the first month after the Facilities are placed into service, consisting of three components: (1) a monthly amortization of 20% of the final cost of the Facilities that would be included in KAWC's rate base, if it were the sole owner, amortized over 30 years; (2) KAWC's cost of the unamortized portion of the cost of the Facilities that would be in its rate base if it were the sole

owner, determined to be the latest PSC approved overall return with the portion of the overall return attributed to KAWC's return on equity to be adjusted for state and federal income taxes; and (3) 20% of the cost of operation and maintenance (as defined in Option A above), all on a monthly basis, for which BWSC will be entitled to no more than 5 MGD of potable water directly from the Facilities or from KAWC (at locations to be mutually agreed upon that are hydraulically reasonable and neither party shall unreasonably withhold its agreement). Prepayment of any part of the final cost may be made by BWSC at any time without penalty.

3. **OPTION C.** On or before April 1, 2008, BWSC may elect Option C in this Agreement by so notifying KAWC in written form of that commitment and providing written commitment(s) from one or more of its members guaranteeing that commitment, which guarantee must be acceptable to KAWC and which acceptance shall not be withheld unreasonably. The election of Option C shall obligate BWSC and its guaranteeing member(s) to purchase or pay for 5 MGD of water each and every day for 30 years at a volumetric rate consistent with the principles enumerated in American Water Works Association Manual of Water Supply Practices, M1, 5th Edition. Option C shall include the right of BWSC to acquire a 20% undivided interest in the Facilities at any time prior to the expiration of five (5) years from the date the plant is first placed in service. That date shall be memorialized by letter from KAWC to BWSC. The acquisition cost for purposes of this Agreement only shall be the cost of the Facilities in KAWC's rate base as of December 31 of the year immediately prior to acquisition. Upon acquisition, BWSC shall pay 20% of the actual costs of operating and maintaining the Facilities as defined in Option A above.

4. **CAPITAL IMPROVEMENTS.** After the Facilities are placed in service, any capital improvements will be paid for by the owners in accordance with their ownership interest(s).

5. **SECURITY.** As security for the financial obligations BWSC may incur as a result of its election of Option B herein, at the time of any such election BWSC will execute and deliver to KAWC a recordable document(s) that will grant to KAWC a lien upon the real estate and a security interest in the Facilities elected to be acquired by BWSC.

6. **TIME.** Time is of the essence of this Agreement.

7. **PSC APPROVAL.** This Agreement shall be subject to approval of the PSC.

8. **FACILITIES OPERATION.** In the event BWSC elects Option A or Option B herein, KAWC shall have the sole obligation and authority to manage, control, maintain and operate the Facilities, giving due consideration to the interest of BWSC as may be determined herein. If BWSC elects any option of ownership, KAWC and BWSC shall form a KRS II Operating Committee which shall be composed of not less than ten (10) members with representation from each owner in proportion to its ownership interest in the Facilities. The KRS II Operating Committee shall meet monthly and shall advise KAWC, if it chooses to do so, on all matters pertaining to the maintenance and operation of the Facilities and the production of potable water. The KRS II Operating Committee shall elect a chairman annually who shall be responsible for the preparation of an agenda and distribution of all necessary information for each meeting.

9. **NOTICES.** Notices required hereby shall be given to Nick O. Rowe, President, Kentucky-American Water Company, 2300 Richmond Road, Lexington, Kentucky 40507, and

Don Hassall, General Manager, Bluegrass Water Supply Commission, 699 Perimeter Drive, Lexington, Kentucky 40517.

10. **SEVERANCE**. If for any reason any paragraph, clause or provision of this Agreement shall be held invalid by any court of competent jurisdiction, the invalidity of such paragraph, clause or provision shall not affect the validity of any of the remaining portions of this Agreement.

11. **AMENDMENTS**. This Agreement may be amended at any time in writing by mutual agreement of the parties hereto.

12. **MERGER**. The parties agree that the execution of this Agreement operates to terminate any and all agreements heretofore entered into by the parties for the delivery of water to BWSC or any of its members from the Facilities.

13. **GOVERNING LAW**. The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the Commonwealth of Kentucky.

14. **FORUM SELECTION**. Any dispute arising from this Agreement which cannot be resolved by the parties shall be litigated in the Fayette Circuit Court.

15. **EXCLUSIVITY**. Options A, B and C above are mutually exclusive and an election of an option under this Agreement cannot be revoked or modified in any way.

16. **RIGHT OF FIRST REFUSAL**. If at any time during BWSC's ownership of a portion of the Facilities or any process where it is acquiring ownership of a portion of the Facilities, BWSC desires to sell its ownership interest and it receives a bona fide offer from any entity to purchase BWSC's ownership interest, that offer shall be forwarded to KAWC within five (5) days of its receipt by BWSC. KAWC shall then have the opportunity to obtain PSC

approval to match the terms of the bona fide offer. If that approval is sought and obtained, KAWC shall have ninety (90) days thereafter to match the terms of any such bona fide offer and acquire BWSC's interest in the Facilities.

17. **NULL AND VOID.** Absent an election of either Option A, B or C, this Agreement and all of its provisions will become null and void at 12:01 a.m., April 2, 2008.

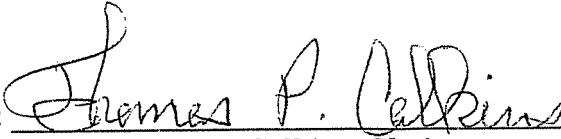
18. **PURCHASE NON-EXCLUSIVITY.** Neither this Agreement nor any election made under this Agreement shall preclude BWSC and/or any of its members from purchasing water from any other entity.

19. **SUBSEQUENT AGREEMENTS:** Subsequent to an election of Option A, B or C of this Agreement, the parties to this Agreement will, in good faith, negotiate and enter into any and all subsequent written agreements that may become necessary to accomplish the purposes of the election made.

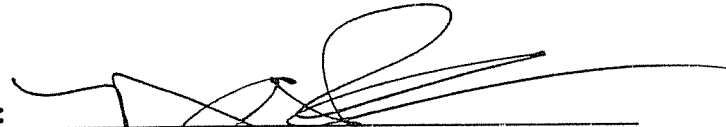
20. **ULTRA VIRES.** KAWC and BWSC each represent and warrant that they have all due authority and power to execute and perform this Agreement and that it is not subject to being limited or prohibited as ultra vires or beyond the scope of authority. BWSC further represents that any guarantee provided by one or more of its members as contemplated in this Agreement shall be enforceable and binding on the guaranteeing member(s).

WITNESS the signatures of the appropriately authorized officers of the parties hereto this the 20th day of November, 2007.

BLUEGRASS WATER SUPPLY COMMISSION

BY: 
Thomas P. Calkins, Chair

KENTUCKY-AMERICAN WATER COMPANY

BY: 
Nick O. Rowe, President



LOUISVILLE WATER COMPANY

550 SOUTH THIRD STREET • LOUISVILLE, KENTUCKY 40202

TEL 502-569-3600 FAX 502-569-0815

July 9, 2003

Mr. Don R. Hassall, P.E.
Assistant Executive Director
Bluegrass Area Development District
699 Perimeter Drive
Lexington, KY 40517-4120

Re: Bluegrass Water Supply Consortium

Dear Mr. Hassall:

Louisville Water Company (LWC) is pleased to respond to your recent inquiry concerning the supply of finished water to the Bluegrass Water Supply Consortium on a wholesale basis.

Our response is attached and considers the two water demand scenarios outlined in your letter of June 13, 2003. We have prepared this response using our understanding of your project objectives. This document is consistent with the engineering and water rate methodology used in the 1998 contract with Kentucky American Water Company to deliver water to Lexington. Our response is based upon a suggested delivery point located at Interstate 64 and Highway 53.

LWC appreciates this opportunity to work with the Consortium. We look forward to furthering our mutual interests in providing a reliable source of high quality drinking water to Central Kentucky. We would appreciate receiving from you as soon as it becomes available, detailed information regarding the legal authority, identity and authorized management structure of the consortium. Additionally, please be aware that should we enter into formal discussions regarding the provision of water to the consortium, all such discussions are subject to approval of the Board of Water Works. Mr. Jim Smith is our designated contact, and he can be reached at (502) 569-3687. If you need additional information please call me at (502) 569-3680.

Sincerely,

John L. Huber
President

Discussion Points: Provision of Finished Potable Water to the Bluegrass Water Consortium of Central Kentucky

July 9, 2003

Delivery Point, Water Quality and Demand Scenarios - Louisville Water Company (LWC) envisions that the point of delivery for finished water will be located in the vicinity of Interstate 64 and Highway 53. LWC would own, operate, and maintain the water transmission main, pump station and storage facilities to the point of delivery. LWC is willing to make a capital commitment towards construction of these pipeline facilities based upon volume, demand factors, length of contract, and other factors negotiated between LWC and the Consortium (or its designee). In consideration of such a capital commitment, LWC recommends a 50-year contract with renewal options, compared to the 20 year term outlined in your letter of June 13, 2003.

LWC's potable, finished water supply could be delivered at a hydraulic grade of 900-950 msl, and working pressure of 40-60 psi (ground elevation 810). The water supply will meet all state and federal drinking water standards. The finished water hardness from both the Crescent Hill and B.E. Payne water treatment plants averaged 162 mg/l in 2002. In 2003, the Company adopted a goal to maintain finished water hardness below 150 mg/l. Through June 2003, the finished water hardness averaged 148 mg/l from both treatment plants. Monthly finished water hardness data is available for review upon request.

In order to meet the demand criteria identified in your letter of June 13, 2003, LWC outlines the following two scenarios for consideration:

Scenario 1 - Provide 5 mgd base rate of flow with maximum day design capacity of 25 mgd. This requires installation of 60-inch water main to Interstate - 64, a 36-inch water main along Interstate 64 to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 3 million gallon storage facility at Highway 53 in Shelby County. The estimated cost for this scenario is \$23 million, subject to adjustment based upon final design, right-of-way acquisition, and competitive bidding.

Scenario 2 - Provide 9 mgd base rate of flow with a maximum day design capacity of 45 mgd. This scenario requires installation of a 60-inch water main to Interstate 64, two parallel 36-inch water mains along Interstate 64 to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 5 million gallon storage facility at Highway 53 in Shelby County. To ensure reliable service to meet this demand, facility improvements such as pumping and clear well upgrades are also needed. We recommend parallel facilities to reduce the higher operating risk and allow future maintenance while maintaining operations to deliver the base rate of flow. Parallel facilities will also allow phased construction and capital investment approach. The estimated cost for this option is \$47 million, subject to adjustment based upon final design, right-of-way acquisition, and competitive bidding.

These two scenarios have been prepared from a preliminary engineering review of the project objectives outlined in your letter of June 13, 2003. We have not performed a detailed engineering or hydraulic analysis of these scenarios. The suggested scope of the project is intended to be a conservative approach to providing the two water demand scenarios identified. Further engineering design, hydraulic analysis, property/easement research, and review of construction procurement methods may yield opportunities for additional cost savings in the project. In addition, our estimates are based upon projects valued at \$5 million or less. A construction scope of this magnitude will likely yield additional economies of scale, further reducing capital costs.

Water Rate Methodology -- In addition to the capital components previously discussed, the rate for volumes of consumption described in your letter would be based upon terms and conditions that need to be negotiated. Based upon LWC staff's current authorization from the Board of Water Works, any contracted consumption over 1 mgd may be negotiated, based upon certain criteria, including peak demand factors, contract duration, and other terms and conditions. LWC would calculate the rate for this kind of water consumption by taking into consideration four elements: operating expenses, depreciation expenses, return on plant investment, and customer costs. These rate elements are defined as follows:

- A. Operating Expense Component - determined for the billing period by dividing the Buyer's usage by the Seller's total sales and multiplying the quotient by Seller's Operating Expenses, less expenses common only to retail customer expenses and to customers generally. This is a variable cost component.
- B. Depreciation Expense Component - determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by the Seller's Depreciation Expense, less depreciation on contributed capital and depreciation common only to retail customers and to customers generally. This is a fixed cost component based upon the requested reserved production capacity.
- C. Return on Plant Investment Component - determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by Seller's Return on Plant Investment, excluding return on plant investment common only to retail customers and to customers generally. This is a fixed cost component based upon the requested reserved production capacity.
- D. Customer Cost Component - determined for the billing period by the Service Charge, at it may change from time to time, currently contained in Section 6.02.1 of Seller's rate schedule. This is a fixed cost component based upon the number and size of meters installed at Buyer's request.

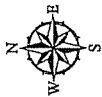
Based upon the above criteria, the Company contemplates several rate scenarios for delivery of water, of which the specifics remain subject to negotiation. The peaking factors identified below are the ratio of the requested reserved production capacity to minimum average day consumption. For the Consortium's planning purposes, those rate elements yield the following imputed water rates based upon current (2003) costs, with periodic adjustment for actual cost of service:

- 1) Contract with peaking factor of 5:1
 - Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 25 mgd is estimated at \$4,198,800.
 - Annual fixed cost for minimum average day of 9 mgd and requested reserved production capacity of 45 mgd is estimated at \$7,508,100.
 - Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity.
 - Imputed rate per 1000 gallons is \$2.33.
- 2) Contract with peaking factor of 4:1
 - Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 20 mgd is estimated at \$3,568,300.
 - Annual fixed cost for minimum average day of 9 mgd and requested reserved production capacity of 36 mgd is estimated at \$6,373,200.
 - Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity.
 - Imputed rate per 1000 gallons is \$1.98.

- 3) Contract with peaking factor of 3:1
 - Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 15 mgd is estimated at \$2,937,700.
 - Annual fixed cost for minimum average day of 9 mgd and requested reserved production capacity of 27 mgd is estimated at \$5,238,300.
 - Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity.
 - Imputed rate per 1000 gallons is \$1.63.
- 4) Contract with peaking factor of 2:1
 - Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 10 mgd is estimated at \$2,307,200.
 - Annual fixed cost for minimum average day of 9 mgd and requested reserved production capacity of 18 mgd is estimated at \$4,103,300.
 - Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity.
 - Imputed rate per 1000 gallons is \$1.28.
- 5) Contract with peaking factor of 1:1
 - Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 5 mgd is estimated at \$1,676,700.
 - Annual fixed cost per minimum average day of 9 mgd and requested reserved production capacity of 9 mgd is estimated at \$2,968,400.
 - Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity.
 - Imputed rate per 1000 gallons is \$0.93

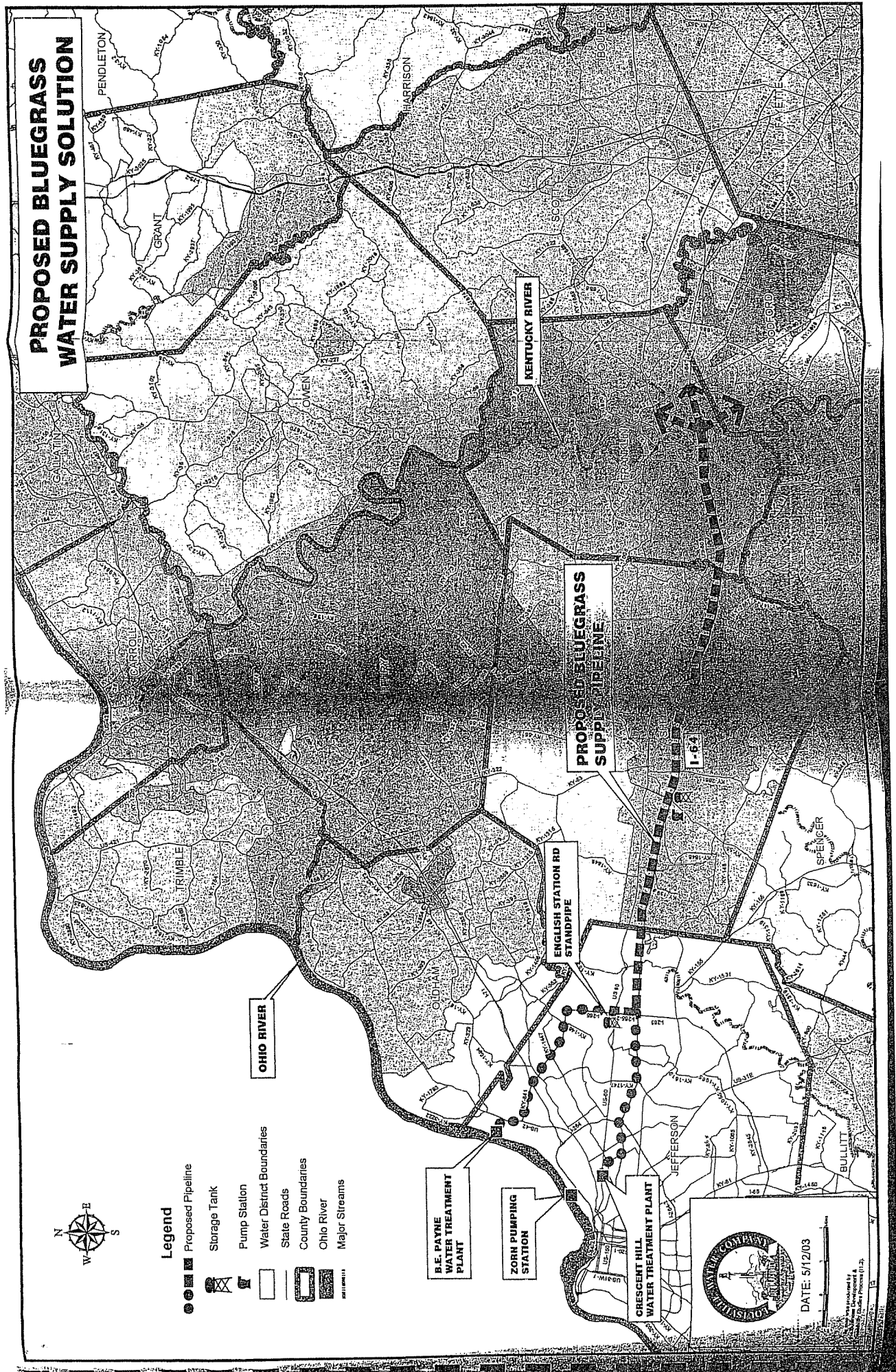
Next Steps - Additional elements must be addressed before we can move forward, offer a formal proposal and enter into final negotiations. These include determination of the investment in the project by LWC, provisions for design services, construction timetables, operating parameters, as well as further delineation of water rate adjustments. We look forward to the opportunity for the detailed discussions which will allow us to further define these parameters. Mr. Jim Smith is our designated contact, and he can be reached at (502) 569-3687.

PROPOSED BLUEGRASS WATER SUPPLY SOLUTION



Legend

- Proposed Pipeline
- Storage Tank
- Pump Station
- Water District Boundaries
- State Roads
- County Boundaries
- Ohio River
- Major Streams



DATE: 5/12/03

Prepared by:
Engineering Department &
Public Affairs Division (11.2)



LOUISVILLE WATER COMPANY

550 SOUTH THIRD STREET • LOUISVILLE, KENTUCKY 40202

TEL 502-569-3600 FAX 502-569-0815

August 8, 2003

Mr. Don R. Hassall, P.E.
Assistant Executive Director
Bluegrass Area Development District
699 Perimeter Drive
Lexington, KY 40517-4120

Re: Bluegrass Water Supply Consortium

Dear Mr. Hassall:

Louisville Water Company is pleased to provide an update to our initial response concerning the supply of finished water to the Bluegrass Water Supply Consortium.

Thank you again for the opportunity to work with the Consortium. We continue to look forward to furthering our mutual interests in providing a reliable source of high quality drinking water to Central Kentucky. Again, should we enter into formal discussions regarding the provision of water to the Consortium, any agreement resulting from the discussion remains subject to approval of the Board of Water Works. Please continue to utilize Mr. Jim Smith as your primary contact. He can be reached at (502) 569-3687. If you need additional information please call me at (502) 569-3680.

Sincerely,

John L. Huber
President

Updated Discussion Points: Provision of Finished Potable Water to the Bluegrass Water Consortium of Central Kentucky

August 8, 2003

Delivery Point, Water Quality and Demand Scenarios – As indicated in our July 9, 2003 communication, the Louisville Water Company (LWC) envisions that the point of delivery for finished water will be located in the vicinity of Interstate 64 and Highway 53. LWC would own, operate, and maintain the water transmission main, pump station and storage facilities to the point of delivery. LWC is willing to make a capital commitment towards construction of these pipeline facilities based upon volume, demand factors, length of contract, and other factors negotiated between LWC and the Consortium (or its designee). In consideration of such a capital commitment, LWC recommends a 50-year contract with renewal options, compared to the 20 year term outlined in your letter of June 13, 2003.

LWC's potable, finished water supply could be delivered at a hydraulic grade of 900-950 msl, and working pressure of 40-60 psi (ground elevation 810). The water supply will meet all state and federal drinking water standards. The finished water hardness from both the Crescent Hill and B.E. Payne water treatment plants averaged 162 mg/l in 2002. In 2003, the Company adopted a goal to maintain finished water hardness below 150 mg/l. Through June 2003, the finished water hardness averaged 148 mg/l from both treatment plants. Monthly finished water hardness data is available for review upon request.

In order to meet the demand criteria identified in your letter of June 13, 2003, LWC outlines the following two scenarios for consideration:

Scenario 1 – Provide 5 mgd base rate of flow with maximum day design capacity of 25 mgd. This requires installation of 60-inch water main to Interstate - 64, a 36-inch water main along Interstate 64 to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 3 million gallon storage facility at Highway 53 in Shelby County. The estimated cost for this scenario is \$23 million, subject to adjustment based upon final design, right-of-way acquisition, and competitive bidding.

Scenario 2 – Provide 9 mgd base rate of flow with a maximum day design capacity of 45 mgd. This scenario requires installation of a 60-inch water main to Interstate 64, two parallel 36-inch water mains along Interstate 64 to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 5 million gallon storage facility at Highway 53 in Shelby County. To ensure reliable service to meet this demand, facility improvements such as pumping and clear well upgrades are also needed. We recommend parallel facilities to reduce the higher operating risk and allow future maintenance while maintaining operations to deliver the base rate of flow. Parallel facilities will also allow phased construction and capital investment approach. The estimated cost for this option is \$47 million, subject to adjustment based upon final design, right-of-way acquisition, and competitive bidding.

These two scenarios have been prepared from a preliminary engineering review of the project objectives outlined in your letter of June 13, 2003. We have not performed a detailed engineering or hydraulic analysis of these scenarios. The suggested scope of the project is intended to be a conservative approach to providing the two water demand scenarios identified. Further engineering design, hydraulic analysis, property/easement research, and review of construction procurement methods may yield opportunities for additional cost savings in the project. In addition, our estimates are based upon projects valued at \$5 million or less. A construction scope of this magnitude will likely yield additional economies of scale, further reducing capital costs.

Water Rate Methodology – In addition to the capital components previously discussed, the rate for volumes of consumption described in your letter would be based upon terms and conditions that need to be negotiated. Based upon LWC staff's current authorization from the Board of Water Works, any contracted consumption over 1 mgd may be negotiated, based upon certain criteria, including peak demand factors, contract duration, and other terms and conditions. LWC would calculate the rate for this kind of water consumption by taking into consideration four elements: operating expenses, depreciation expenses, return on plant investment, and customer costs. These rate elements are defined as follows:

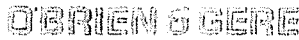
- A. Operating Expense Component - determined for the billing period by dividing the Buyer's usage by the Seller's total sales and multiplying the quotient by Seller's Operating Expenses, less expenses common only to retail customer expenses and to customers generally. This is a variable cost component.
- B. Depreciation Expense Component - determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by the Seller's Depreciation Expense, less depreciation on contributed capital and depreciation common only to retail customers and to customers generally. This is a fixed cost component based upon the requested reserved production capacity.
- C. Return on Plant Investment Component - determined for the billing period by dividing the Buyer's Request by the Seller's production capacity and multiplying the quotient by Seller's Return on Plant Investment, excluding return on plant investment common only to retail customers and to customers generally. This is a fixed cost component based upon the requested reserved production capacity.
- D. Customer Cost Component - determined for the billing period by the Service Charge, as it may change from time to time, currently contained in Section 6.02.1 of Seller's rate schedule. This is a fixed cost component based upon the number and size of meters installed at Buyer's request.

Based upon the above criteria, the Company contemplates a scenario for delivery of water based upon requested reserved capacity of two times the minimum average day and available capacity of up to five times the minimum average day. For the Consortium's planning purposes, those rate elements yield the following imputed water rate based upon current (2003) costs, with periodic adjustment for actual cost of service:

- Annual fixed cost for minimum average day of 5 mgd and requested reserved production capacity of 10 mgd and available capacity of up to 25 mgd is estimated at \$2,307,200.
- Annual fixed cost for minimum average day of 9 mgd and requested reserved production capacity of 18 mgd and available capacity of up to 45 mgd is estimated at \$4,103,300.
- Variable cost per 1000 gallons above minimum average day is estimated at \$0.54 up to requested reserved production capacity. Variable cost per 1000 gallons above requested reserved production capacity is estimated at \$1.35, our standard wholesale rate, up to available capacity.
- Imputed rate per 1000 gallons is \$1.28.
- Any consumption above requested reserved production capacity will be the new reserved production capacity for the next 36 months.

The reserved capacity is the production capacity set aside for the exclusive use of the Bluegrass Consortium. Available capacity is Louisville Water Company reserve production capacity available equally to all LWC customers. It is the Company's intention to provide available reserve capacity above maximum day requirements to meet the Consortium's future growth needs. This approach offers the greatest degree of flexibility to both the Consortium and LWC by allowing a phased-approach to address growth opportunities and needs, while providing low rates for minimum average daily quantities.

Next Steps – Please remember additional elements must be addressed before we can move forward, offer a formal proposal and enter into final negotiations. These include determination of the investment in the project by LWC, provisions for design services, construction timetables, operating parameters, as well as further delineation of water rate adjustments. We look forward to the opportunity for the detailed discussions which will allow us to further define these parameters. Mr. Jim Smith is our designated contact, and he can be reached at (502) 569-3687.



Mr. Don R. Hassall, P.E. General Manager
Bluegrass Water Supply Commission
c/o Bluegrass Area Development District
699 Perimeter Drive
Lexington, KY 40517-4120

At Workshop No. 6, the second offer was considered and the scores were adjusted to use the new, lower cost (Figure 2). However, the Pool 3/Ohio River Pipeline option was still ranked higher than all others (Figure 4), and O'Brien & Gere independently recommended that option. We

Page 2
October 12, 2005

stand by that recommendation today, because on an "apples to apples" comparison, it is both the lowest cost and overall best fit, using the criteria developed for the Feasibility Study. In hindsight, we suspect that the reduction in reserved capacity with Louisville Water Company's second offer was not understood at Workshop No. 6, for if it was, the Pool 3/Ohio Pipeline option should have scored better under the "Adequate Capacity" criteria, thereby making it even more preferred.

Given the importance of this issue, we request the opportunity to discuss it at the October 17th BWSC meeting. If you have any questions, please contact me.

Very truly yours,

O'BRIEN & GERE

A handwritten signature in dark ink, appearing to read "George B. Best". The signature is stylized with a large, sweeping initial "G" and a long, horizontal stroke extending to the right.

George B. Best, P.E.
Sr. Vice President

CC: Bryan Loran, P.E.

Unit Present Worth of Alternatives (40 years using original LWC cost)

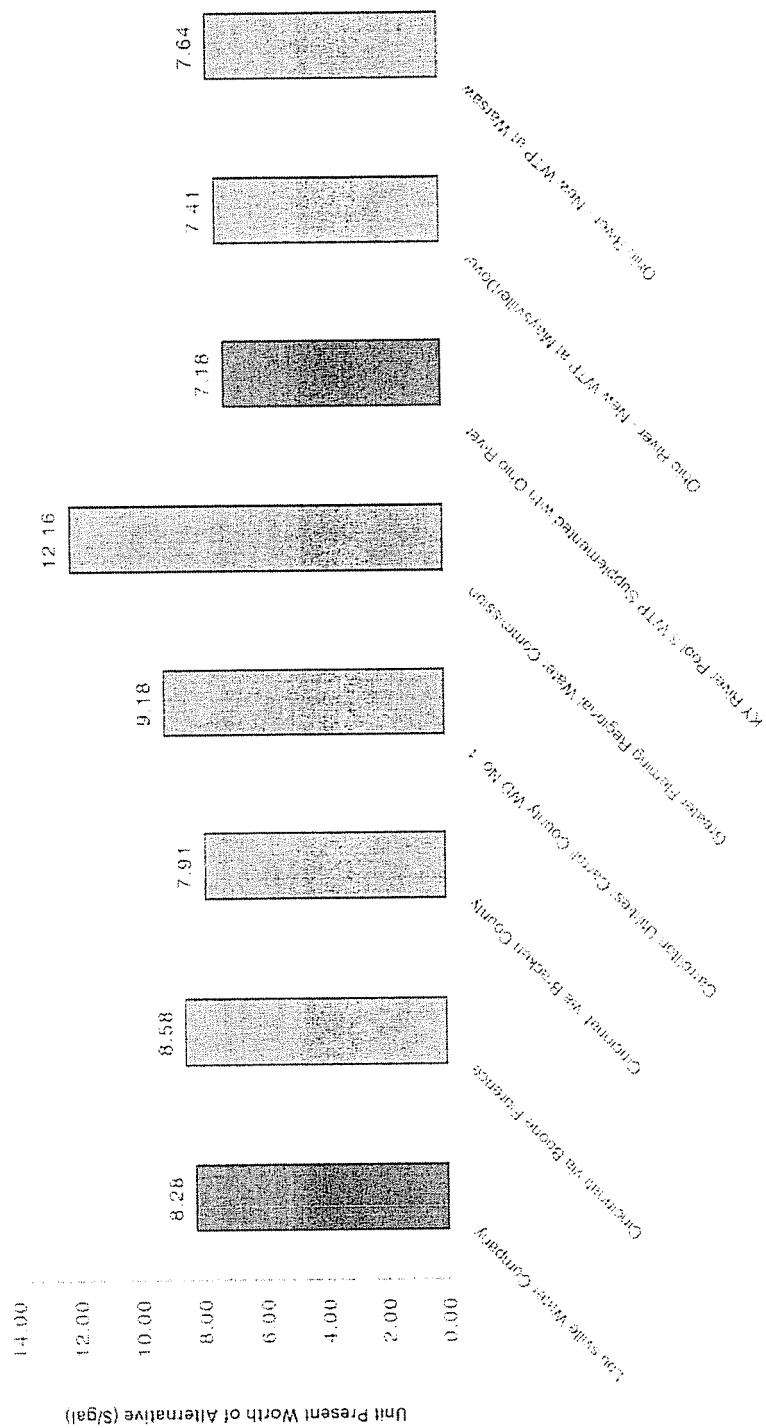


Figure 1 Presented in Workshop No. 5 in July 2003

Unit Present Worth of Alternatives (40 years using revised LWC cost)

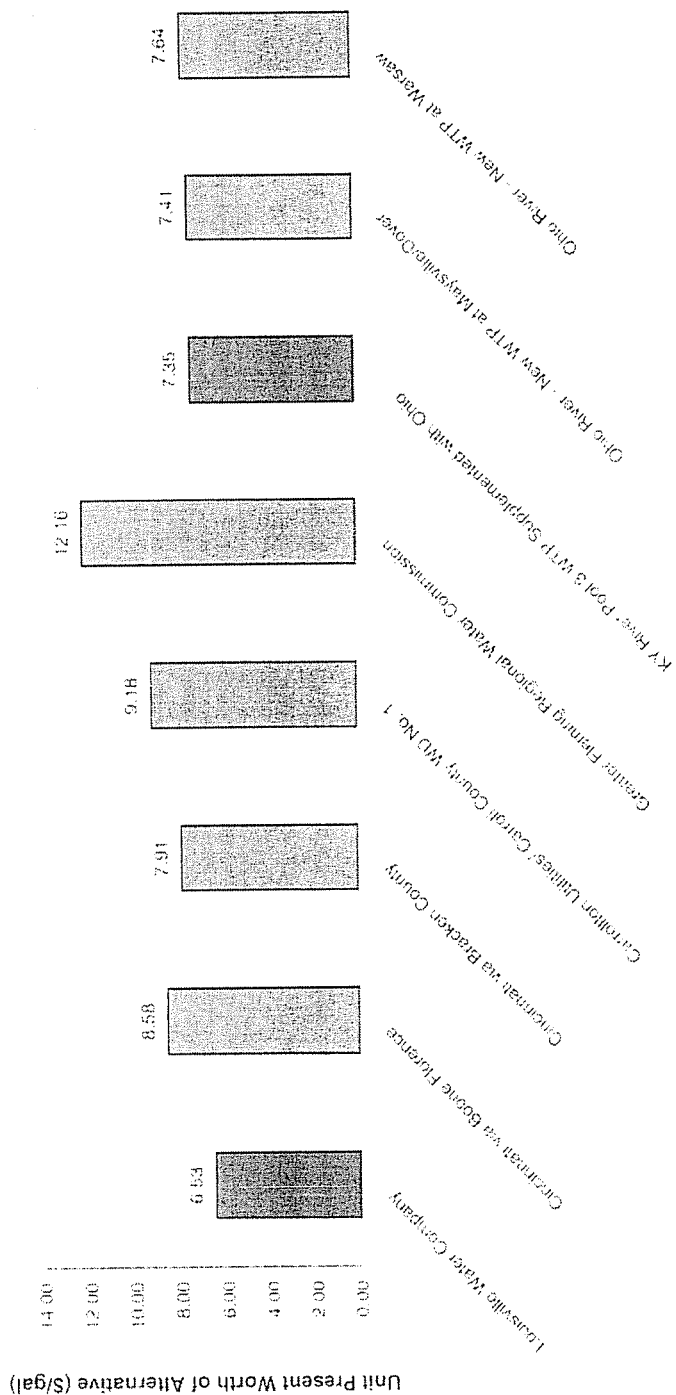


Figure 2 Presented in Workshop No. 6 in August 2003

Results of Tech Group Pairwise Comparison (Workshop 5 using original LWC cost)
(Highest Scores are Most Preferred)

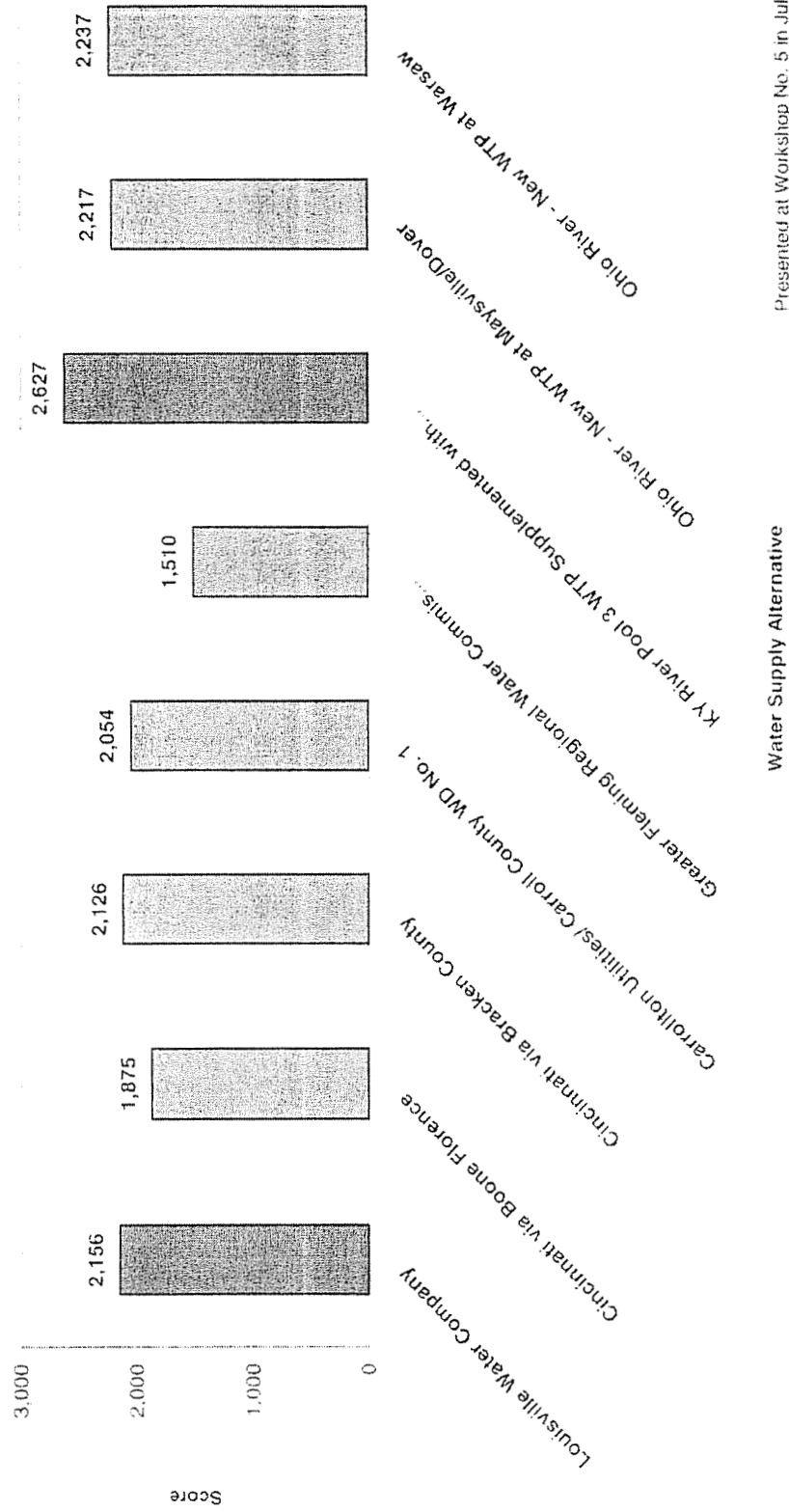
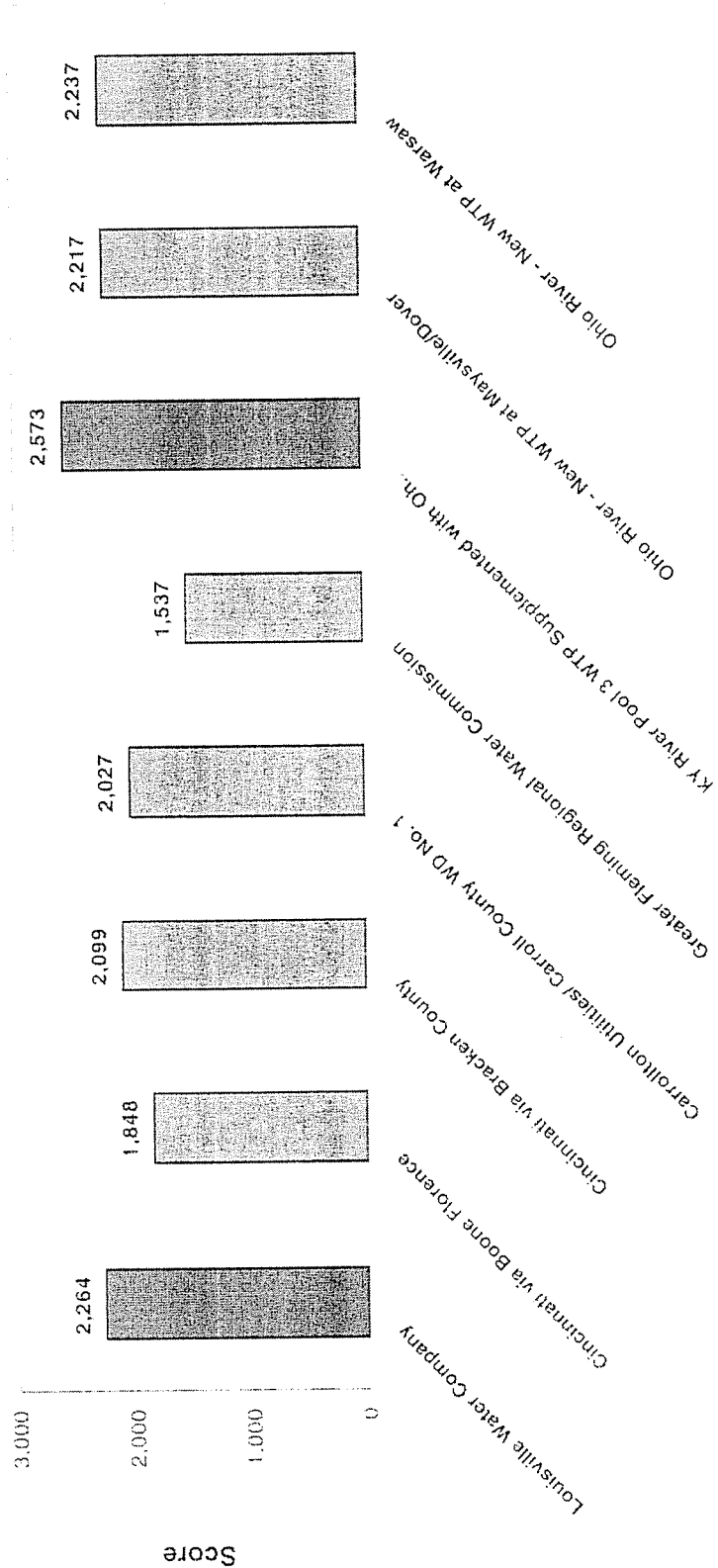


Figure 3

Results of Tech Group Pairwise Comparison (August 2003 using revised LWC cost)
(Highest Scores are Most Preferred)



Prepared by O'Brien & Gere in August 2003

Figure 4

Bluegrass Water Supply Commission



Water, Our Future

699 PERIMETER DR. • LEXINGTON, KENTUCKY 40517-4120
PHONE: (859) 269-8021 • FAX: (859) 269-7917

CYNTHIANA • FRANKFORT • GEORGETOWN • LANCASTER • LEXINGTON • FAYETTE • MT. STERLING • NICHOLASVILLE • PARIS • WINCHESTER

November 14, 2005

Mr. Jim Smith
Louisville Water Company
550 South Third Street
Louisville, Kentucky 40202

Re: Request for Updated Proposal

Dear Mr. Smith:

The Bluegrass Water Supply Commission (BWSC) invites the Louisville Water Company (LWC) to update their proposal to furnish finished water. LWC previously provided proposals dated July 9, 2003 and August 8, 2003, while the Bluegrass Water Supply Consortium was conducting their Water System Regionalization Feasibility Study (O'Brien & Gere, 2004). Since that time several things have changed, including:

- creation of the Bluegrass Water Supply Commission in August 2004
- plans for additional storage on the Kentucky River, via increasing the height of Dam 9, Dam 10, or via a new dam, have not progressed
- implementation of Kentucky Division of Water's Water Credit Program has not progressed
- capacity requirements of BWSC have changed
- the Kentucky Infrastructure Authority is exploring options to interconnect major water supplies, and may support such projects

Recognizing that there may also have been changes that affect LWC, we invite you to submit a revised proposal, including these options:

1. Reserved capacity of 31 MGD, with minimum daily purchase of 6.2 MGD
2. Reserved capacity of about 15 to 20 MGD, at your preference, based on the limits of LWC's existing facilities, with minimum purchase of 20 % of that amount
3. Reserved capacity of 10 MGD, with minimum purchase of 2 MGD
4. Reserved capacity of 5 MGD, with available capacity of 10 MGD and minimum purchase of 2 MGD

Our Mission

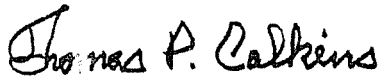
THE BLUEGRASS WATER SUPPLY COMMISSION WILL ENSURE ADEQUATE POTABLE WATER SUPPLY AND TREATMENT RELIABILITY UNDER ANY CONDITIONS TO UTILITY CUSTOMERS AND CONTRACTUAL PARTNERS. BWSC WILL MAXIMIZE UTILIZATION OF THE KENTUCKY RIVER AS A RAW WATER SOURCE, MAINTAIN REASONABLE RATES, AND INSURE COMPLIANCE WITH ALL WATER QUALITY AND OTHER REGULATIONS.

Based on your previous proposals, we understood your preference was to deliver water to Shelbyville, near the intersection of Interstate 64 and Kentucky Highway 53. Please specify whether that has changed. Other terms of our prior request are unchanged.

We request your reply within four weeks from the date of this letter. If you have any questions, please contact George Rest of O'Brien & Gere Engineers, at 301-731-1162, email restgb@obg.com.

Very truly yours,

Bluegrass Water Supply Commission

A handwritten signature in black ink that reads "Thomas P. Calkins". The signature is written in a cursive style with a large, stylized 'T' and 'C'.

Thomas Calkins
Chairman

cc: Mr. Don Hassall, BWSC
Mr. George Rest, O'Brien & Gere
Mr. Bryan Lovan, O'Brien & Gere



LOUISVILLE WATER COMPANY

550 SOUTH THIRD STREET • LOUISVILLE, KENTUCKY 40202

TEL 502-569-3600 FAX 502-569-0815

JOHN L. HUBER
PRESIDENT

December 15, 2005

Mr. Thomas Calkins
Chairman
Bluegrass Water Supply Commission
699 Perimeter Drive
Lexington, KY 40517-4120

Re: Bluegrass Water Supply Commission

Dear Mr. Calkins:

Thank you for your November 14, 2005 letter on behalf of the Bluegrass Water Supply Commission (BWSC). Louisville Water Company (LWC) appreciates the opportunity to update our previous proposals to furnish finished water to the Commission for the residents of Central Kentucky.

As indicated in 2003, LWC continues to anticipate the point of delivery in the vicinity of I-64 and Highway 53. We have prepared our response to the four options outlined in your letter using similar engineering and water rate methodologies as we used before.

LWC submits the enclosed proposal to provide a reliable source of high quality drinking water to central Kentucky based upon the information contained herein and contingent upon an agreement, the terms and conditions of which would be negotiated by the parties. We request the opportunity to present our proposal to the Commission and discuss it further at your convenience. Any such final agreement is subject to approval by the LWC Board of Water Works. Mr. Jim Smith will continue to be our designated contact, and he can be reached at (502) 569-3687. Please feel free to call me if you need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "John L. Huber".

John L. Huber
President

C: Mr. Don Hassall, BWSC
Mr. George Rest, O'Brien & Gere
Mr. Bryan Lovan, O'Brien & Gere

enclosure

Supply of Finished Potable Water to the Bluegrass Water Supply Commission (BWSC)

December 15, 2005

Delivery Point, Water Quality and Demand Options: The Louisville Water Company (LWC) desires the point of delivery for finished water to be located in the vicinity of Interstate 64 and Highway 53. LWC's potable, finished water supply could be delivered at a hydraulic grade of 900-950 msl, and working pressure of 40-60 psi (ground elevation 810). The water supply will meet all state and federal drinking water standards. LWC will design, build, own, and operate the water transmission main, pump station and storage facilities to the point of delivery near KY Highway 53.

LWC will contribute the required capital to fully fund construction of a 10 mgd capacity delivery system terminating at KY Highway 53 for all of the supply options specified below. These facilities will consist of a 24-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 2 million gallon storage facility at Highway 53 in Shelby County. The BWSC will be responsible for any additional costs of upsizing these facilities to meet the required reserved capacities specified. In consideration of such a capital commitment, LWC requires, at a minimum, a 50-year contract with renewal options.

In order to meet the demand criteria identified in your letter of November 14, 2005, LWC outlines the following options for consideration:

Option 1: Provide 6.2 mgd base rate of flow with maximum day design capacity of 31 mgd. LWC recommends the installation of a 42-inch water main along Interstate 64 from the Snyder Freeway (I-265) to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 6 million gallon storage facility at Highway 53 in Shelby County. LWC will design, build, own, and operate these facilities to the point of delivery at KY Highway 53. Alternatively, parallel 30-inch transmission facilities are recommended to reduce the higher operating risk and allow future maintenance while maintaining operations to deliver the base rate of flow. To ensure reliable service to meet this demand, improvements in LWC transmission, clear well and finished water pumping facilities will be needed. Costs for these improvements are estimated to be \$10 million.

As noted above, the BWSC will be responsible for the costs of upsizing these facilities from the base 10 mgd option to deliver the 31 MGD reserved capacity requested to KY Highway 53 in addition to the \$10 million required to upgrade LWC plant and core transmission facilities.

Option 2a: Provide 4 mgd base rate of flow with a maximum day design capacity of 20 mgd. LWC recommends the installation of a 36-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 4 million gallon storage facility at KY Highway 53 in Shelby County. LWC will design, build, own, and operate these facilities to the point of delivery at KY Highway 53. As noted above, the BWSC will be responsible for the costs of upsizing these facilities from the base 10 mgd option to deliver the requested 20 MGD reserved capacity.

Option 2b: Provide 3 mgd base rate of flow with a maximum day design capacity of 15 mgd. LWC recommends the installation of a 30-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 3 million gallon storage facility at KY Highway 53 in Shelby County. LWC will design, build, own, and operate these facilities to the point of delivery at KY Highway 53. As noted above, the BWSC

will be responsible for the costs of upsizing these facilities from the base 10 mgd option to deliver the requested 15 MGD reserved capacity.

Options 3 & 4: Provide 2 mgd base rate of flow with a maximum day design capacity of 10 mgd. This option requires installation of a 24-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 2 million gallon storage facility at Highway 53 in Shelby County. LWC will fully fund, design, build own, and operate these facilities to the point of delivery at KY Highway 53.

The above options have been prepared from a preliminary engineering review of the project objectives outlined in your letter of November 14, 2005. We have not performed a detailed engineering or hydraulic analysis of these scenarios. The suggested scope of the project is intended to be a conservative approach to providing the water demand options identified. Further engineering design, hydraulic analysis, property/easement research, and review of construction procurement methods may yield opportunities for additional cost savings in the project. A construction scope of this magnitude will likely yield additional economies of scale, further reducing capital costs.

Water Rate Methodology: In addition to the capital components previously discussed, the rate for volumes of consumption described in your letter will be included in the final agreement, the terms and conditions of which would be negotiated by the parties. Based upon LWC staff's current authorization from the Board of Water Works, any contracted consumption over 1 mgd may be negotiated, based upon certain criteria, including peak demand factors, contract duration, and other terms and conditions. LWC will calculate the rate for this kind of water consumption by taking into consideration four elements: operating expenses, depreciation expenses, return on plant investment, and customer costs.

For the Commission's planning purposes, those rate elements yield the following imputed water rate based upon our most recent 2006 cost of service study:

Option 1 - Reserved capacity of 31 mgd, with minimum daily purchase of 6.2 mgd:

- The rate per thousand gallons for minimum daily purchase up to 6.2 mgd is \$2.70.
- The rate per thousand gallons above 6.2 mgd, but not exceeding the reserved capacity of 31 mgd, is \$0.57.
- The rate per thousand gallons above the reserved capacity of 31 mgd is \$1.63.

Option 2a: Reserved capacity of 20 mgd, with minimum daily purchase of 4 mgd:

- The rate per thousand gallons for minimum daily purchase up to 4 mgd is \$2.70.
- The rate per thousand gallons above 4 mgd but not exceeding the reserved capacity of 20 mgd is \$0.57.
- The rate per thousand gallons above the reserved capacity of 20 mgd is \$1.63.

Option 2b: Reserved capacity of 15 mgd, with minimum daily purchase of 3 mgd:

- The rate per thousand gallons for minimum daily purchase up to 3 mgd is \$2.70.
- The rate per thousand gallons above 3 mgd, but not exceeding the reserved capacity of 15 mgd, is \$0.57.
- The rate per thousand gallons above the reserved capacity of 15 mgd is \$1.63.

Option 3: Reserved capacity of 10 mgd, with minimum daily purchase of 2 mgd:

- The rate per thousand gallons for minimum daily purchase up to 2 mgd is \$2.70.
- The rate per thousand gallons above 2 mgd but not exceeding the reserved capacity of 10 mgd is \$0.57.
- The rate per thousand gallons above the reserved capacity of 10 mgd is \$1.63.

Option 4: Reserved capacity of 5 mgd, available capacity of 10 mgd, with minimum daily purchase of 2 mgd:

- The rate per thousand gallons for minimum daily purchase up to 2 mgd is \$1.67.
- The rate per thousand gallons above 2 mgd but not exceeding the reserved capacity of 5 mgd is \$0.57.
- The rate per thousand gallons above the reserved capacity of 5 mgd is \$1.63.

For all options, consumption above the requested reserved production capacity will be the new reserved production capacity for the next 60 months. The reserved capacity is the production capacity set aside for the exclusive use of the Bluegrass Water Supply Commission. Available capacity is Louisville Water Company's production capacity in excess of max day demands available equally to all LWC customers. It is the Company's intention to always maintain, at a minimum, a 15% available capacity above maximum day requirements to meet Kentucky Division of Water standards and future growth needs. The current maximum day production demand for LWC was 205 mgd set this summer on June 25, 2005. As a result of this new demand peak, LWC will conduct a production capacity analysis in 2006 to validate our current production capacity of a firm 240 mgd and identify any upgrades necessary to maintain a 15% available capacity above maximum day requirements. Any upgrades necessary will be integrated into LWC's five year capital improvement plan and executed as part of that plan.

Timeline: LWC believes construction of the required supply facilities for all of the options specified can be accomplished within three years of executing of a supply contract. The three year timeframe is based upon one year for facility design and right-of-way acquisition and two years for facility construction. Based on these estimates construction could be accomplished by the summer of 2009.

Further Consideration of Additional Option Alternatives

It is important to note that a lower rate per thousand gallons for the minimum daily purchase can be achieved by increasing the minimum daily purchase quantity or decreasing the amount of capacity reserved for each of the above options. Furthermore, Louisville Water Company would consider additional investment in these facilities based on a larger minimum daily purchase quantity.

| Option | Reserved Capacity MGD | Minimum Daily Purchase MGD | Ratio of Reserved Capacity to Minimum Daily Purchase | Rate per Thousand Gallons for Minimum Daily Purchase |
|---------------------|-----------------------|----------------------------|--|--|
| Additional Option A | 5.0 MGD | 2.5 MGD | 2.0 | \$1.46 |
| Additional Option B | 5.0 MGD | 3.3 MGD | 1.5 | \$1.25 |
| Additional Option C | 4.0 MGD | 2.0 MGD | 2.0 | \$1.46 |
| Additional Option D | 3.0 MGD | 2.0 MGD | 1.5 | \$1.25 |

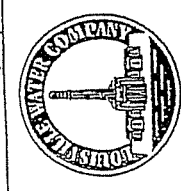
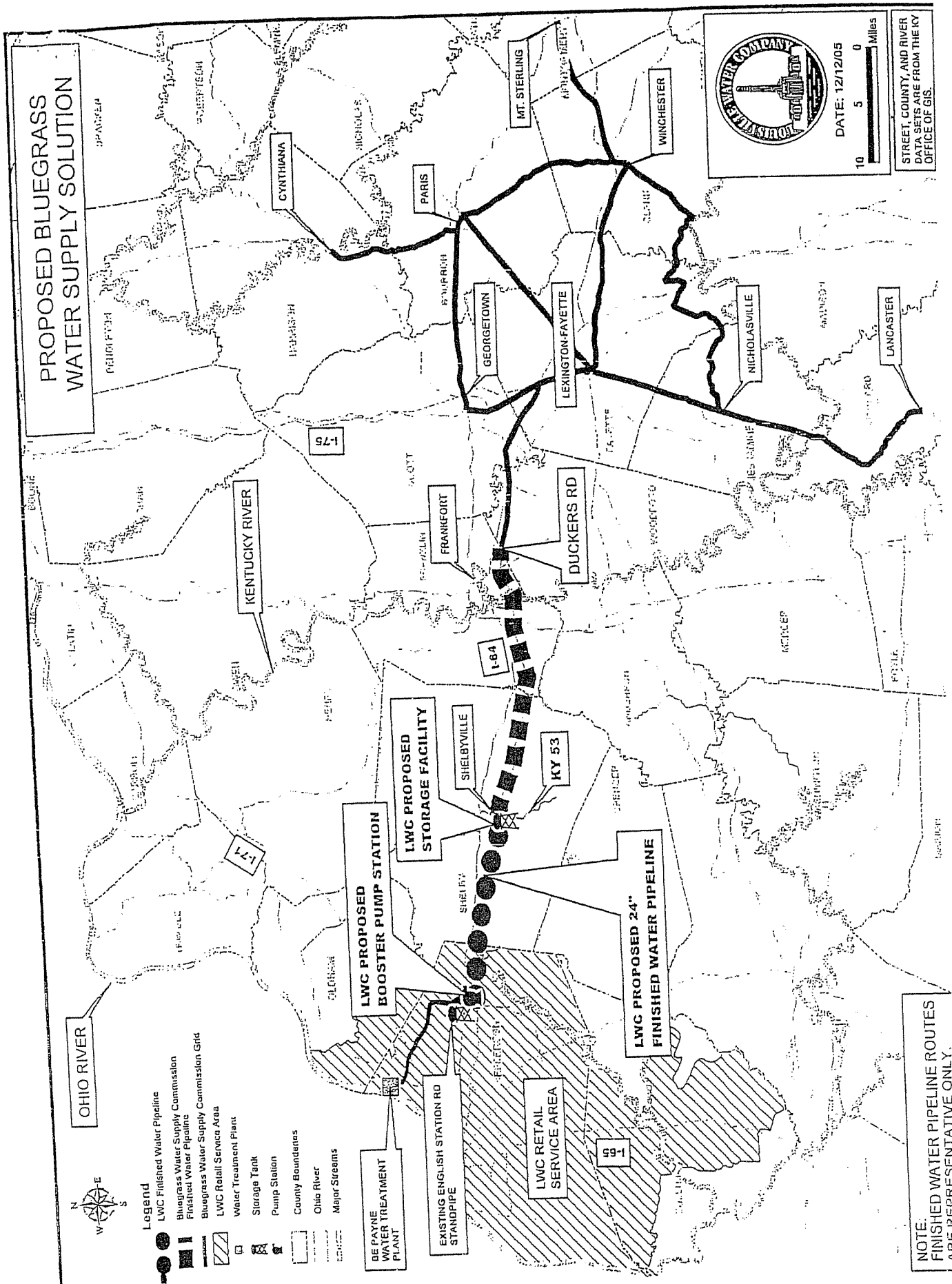
Next Steps: LWC staff would appreciate the opportunity to discuss this proposal with BWSC members at their earliest convenience. Future discussions will be needed to further define detailed engineering and construction parameters, among other things. We look forward to the opportunity to begin these discussions, which we believe will result in a mutually beneficial relationship. Any final agreement will need to be approved by the Louisville Water Company Board of Water Works and appropriate regulatory agencies. Mr. Jim Smith is our designated contact, and he can be reached at (502) 569-3687 or (502) 533-5110.

PROPOSED BLUEGRASS WATER SUPPLY SOLUTION

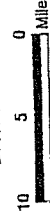


Legend

- LWC Finished Water Pipeline
- Bluegrass Water Supply Commission Finished Water Pipeline
- Bluegrass Water Supply Commission Gtd
- LWC Retail Service Area
- Water Treatment Plant
- Storage Tank
- Pump Station
- County Boundaries
- Ohio River
- Major Streams



DATE: 12/12/05



STREET, COUNTY, AND RIVER DATA SETS ARE FROM THE KY OFFICE OF GIS.

**Preliminary Review & Analysis
Louisville Water Company (LWC) Proposal
(Dated December 15, 2005)**

LWC point of delivery for finished water to be located in the vicinity of Interstate 64 and Highway 53. LWC's potable, finished water supply could be delivered at a hydraulic grade of 900-950 msl, and working pressure of 40-60 psi (ground elevation 810). LWC will design, build, own, and operate the water transmission main, pump station and storage facilities to the point of delivery near KY Highway 53.

LWC will contribute the required capital to fully fund construction of a 10 mgd capacity delivery system terminating at KY Highway 53 for all of the supply options specified. These facilities will consist of a 24-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 2 million gallon storage facility at Highway 53 in Shelby County. The BWSC will be responsible for any additional costs of upsizing these facilities to meet the required reserved capacities specified. In consideration of such a capital commitment, LWC requires, at a minimum, a 50-year contract with renewal options.

Below is the LWC option evaluated in this preliminary analysis for the full capacity and comparison with the New Kentucky River WTP at Pool 3 with Ohio River Pipeline.

Option 1

Provide 6.2 mgd base rate of flow with maximum day design capacity of 31 mgd. LWC recommends a 42-inch water main along Interstate 64 from the Snyder Freeway (I-265) to Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 6 million gallon storage facility at Highway 53 in Shelby County. Alternatively, parallel 30-inch transmission facilities are recommended to reduce the higher operating risk and allow future maintenance while maintaining operations to deliver the base rate of flow. To ensure reliable service to meet this demand, improvements in LWC transmission, clear well and finished water pumping facilities will be needed. Costs for these improvements are estimated to be \$10 million.

As noted above, the BWSC will be responsible for the costs of upsizing these facilities from the base 10 mgd option to deliver the 31 MGD reserved capacity requested to KY Highway 53 in addition to the \$10 million required to upgrade LWC plant and core transmission facilities.

- Option 1 - Reserved capacity of 31 mgd, with minimum daily purchase of 6.2 mgd:
- The rate per thousand gallons for minimum daily purchase up to 6.2 mgd is \$2.70.
 - The rate per thousand gallons above 6.2 mgd, but not exceeding the reserved capacity of 31 mgd, is \$0.57.
 - The rate per thousand gallons above the reserved capacity of 31 mgd is \$1.63.

LWC Cost = \$18.51 million

BWSC Upgrade Cost = \$31.93 million

In addition, BWSC's construction cost to transport LWC supply to within the BWSC service area via Duckers Station Road (Phase I Project) is estimated at approximately \$57.10 million. The total capital cost for transporting the LWC supply to the Phase I project is estimated at approximately \$89.03 million (Construction Cost + Upgrade Cost).

Below is the LWC option that will be used in the evaluation for the interim source of supply and comparison with the upgrade capacity of the Frankfort Plant Board (FPB) WTP study.

Options 3 & 4 (For Interim Source Supply)

Provide 2 mgd base rate of flow with a maximum day design capacity of 10 mgd. This option requires installation of a 24-inch water main along Interstate 64 from the Snyder Freeway (Interstate 265) to KY Highway 53, a booster pump station in Jefferson County at Interstate 265 and a 2 million gallon storage facility at Highway 53 in Shelby County. LWC will fully fund, design, build own, and operate these facilities to the point of delivery at KY Highway 53.

Option 3 - Reserved capacity of 10 mgd, with minimum daily purchase of 2 mgd:

- The rate per thousand gallons for minimum daily purchase up to 2 mgd is \$2.70.
- The rate per thousand gallons above 2 mgd but not exceeding the reserved capacity of 10 mgd is \$0.57.
- The rate per thousand gallons above the reserved capacity of 10 mgd is \$1.63.

LWC Cost = \$18.51 million

BWSC Upgrade Cost = \$ 0

Option 4 - Reserved capacity of 5 mgd, available capacity of 10 mgd, with minimum daily purchase of 2 mgd:

- The rate per thousand gallons for minimum daily purchase up to 2 mgd is \$1.67.
- The rate per thousand gallons above 2 mgd but not exceeding the reserved capacity of 5 mgd is \$0.57.
- The rate per thousand gallons above the reserved capacity of 5 mgd is \$1.63.

LWC Cost = \$18.51 million

BWSC Upgrade Cost = \$ 0

In addition, BWSC's construction cost to transport LWC supply to within the BWSC service area via Duckers Station Road (Phase I Project) is estimated at approximately \$57.10 million. The total capital cost for transporting the LWC supply to the Phase I project is estimated at approximately \$57.10 million (Construction Cost + Upgrade Cost).

Preliminary Summary of LWC Proposal

In reviewing the proposal and comparison with the Kentucky River WTP at Pool 3 with Ohio River Pipeline alternative, the capital cost for the LWC Option 1 was lower than the Kentucky River Pool 3 option by almost 18%; however, the annual O&M present worth cost of the LWC Option 1 is much greater (more than double) than the Kentucky River Pool 3 option.

Combining these two factors into a present worth indicates that the Kentucky River Pool 3 option would be the preferred option for the long-term source of supply for BWSC, with a present worth cost that is 23% lower than the LWC option, based on this recent proposal.

Once the assessment of the Frankfort option is completed, we will assess the interim source of supply options (#3 & #4) presented by LWC, and provide a final recommendation.

Figure 1 -- Unit Project Capital Cost and Present Worth of Annual O&M Cost per Gallon of Capacity

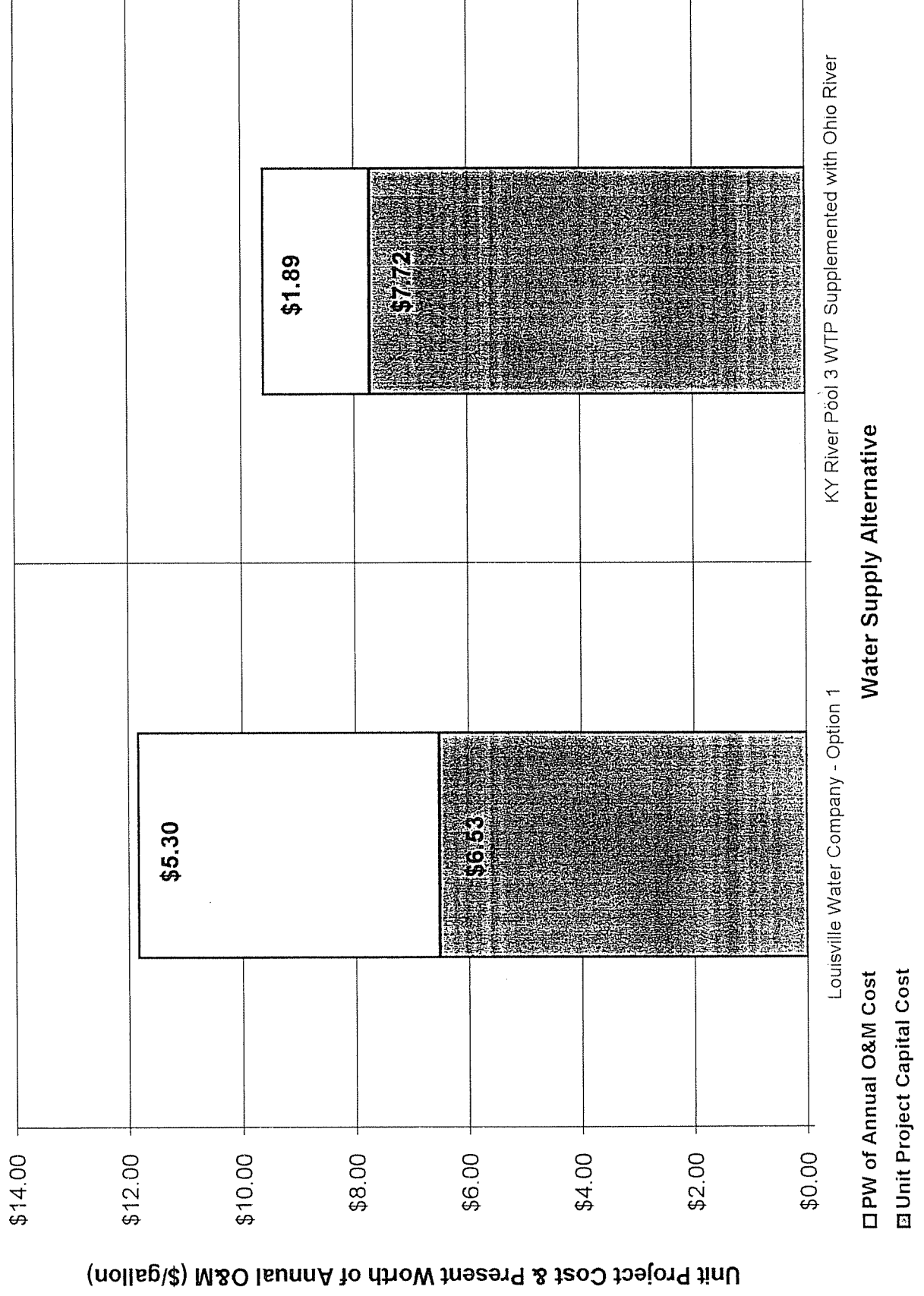
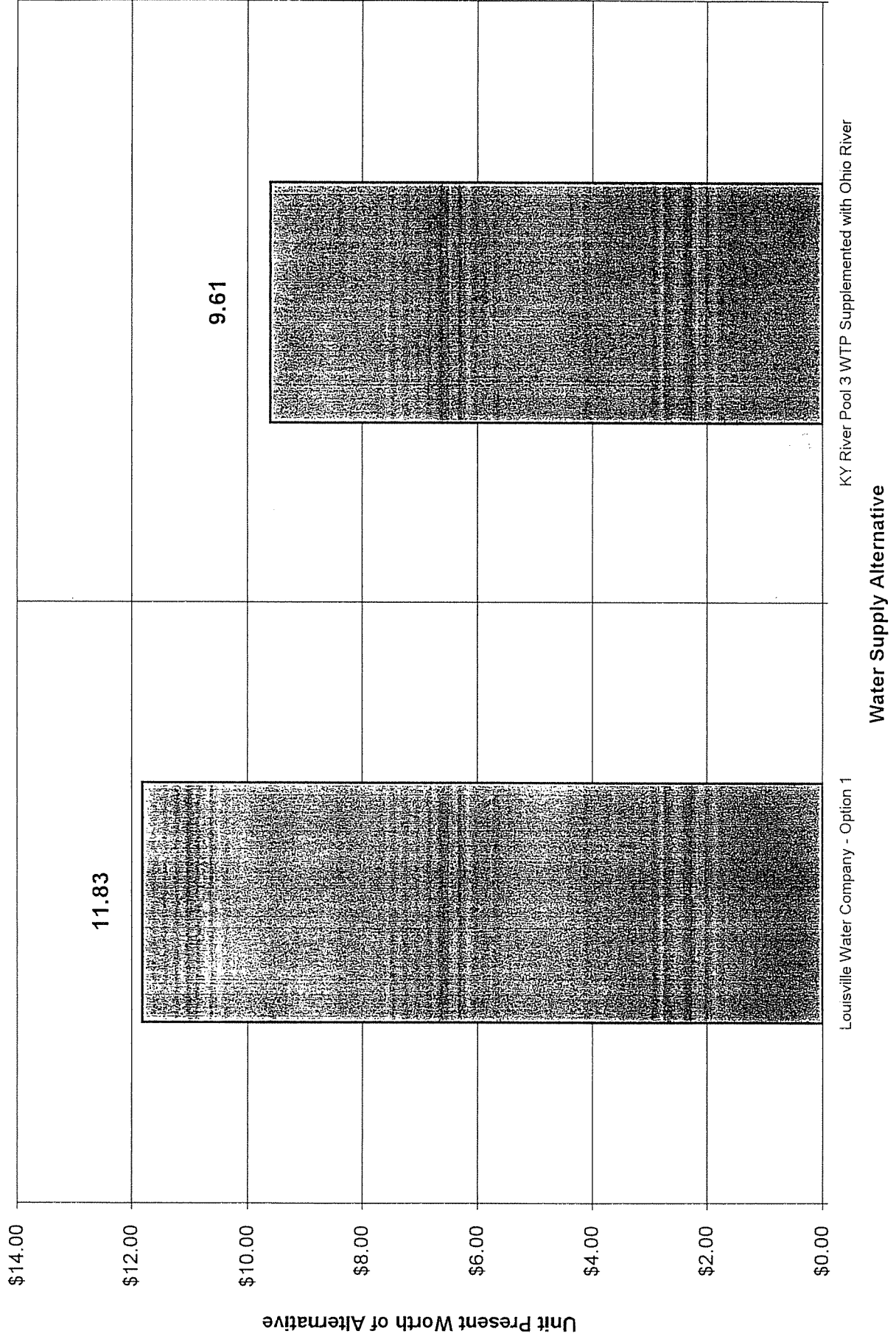
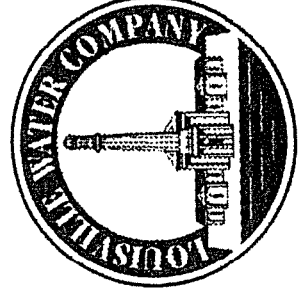


Figure 2 -- Total Unit Present Worth of Alternatives (40 years)



**Presentation to
Master Planning and Capital
Construction Committee of
Bluegrass Water Supply Commission**

October 25, 2006





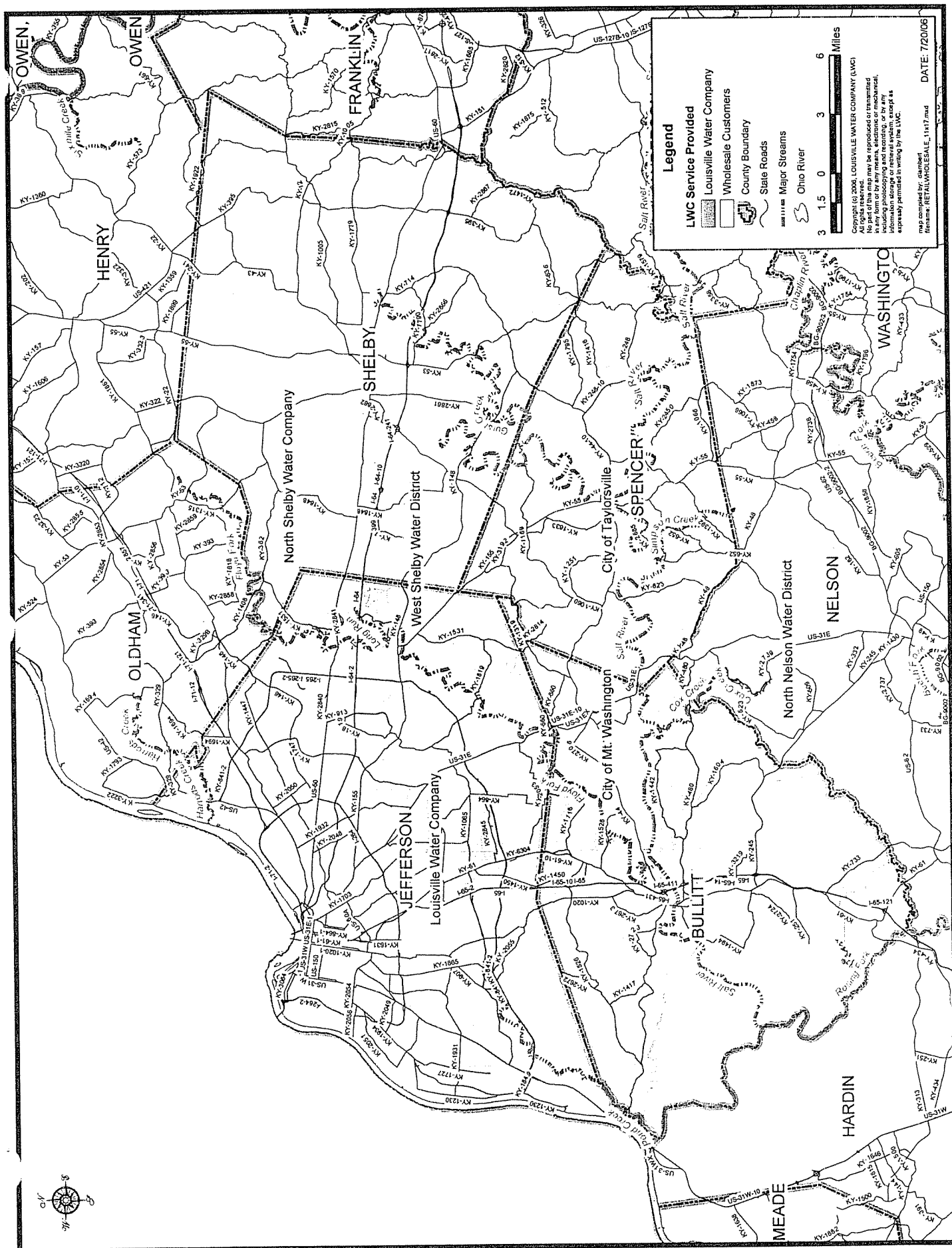
Background Overview

- LWC provides retail water service to about 810,000 people in Metro Louisville, and portions of Oldham and Bullitt Counties.
- We deliver an average of approximately 131 million gallons of water a day, through nearly 3,900 miles of water main.
- LWC has two water treatment plants
 - Crescent Hill Plant has a firm capacity of 180 MGD
 - Payne Plant has a firm capacity of 60 MGD
 - Total firm capacity of 240 MGD
 - Total design capacity of 300 MGD
- Both plants use a chloramine disinfection residual that allows water quality to be maintained over long distances



Wholesale Overview

- LWC currently has wholesale customers and contracts in the following counties:
 - Shelby County (North Shelby Water Company, West Shelby Water District)
 - Spencer County (City of Taylorsville)
 - Bullitt County (Mount Washington, Lebanon Junction)
 - Nelson County (North Nelson Water District)
- Wholesale water sales average 4.6 MGD; 4.2% of total sales (based on 2005 data).





December 2005 Proposal to BWSC

- Four options were outlined in the proposal. All options discussed include:
 - a delivery point at KY Highway 53 (Shelbyville)
 - design capacity
 - reserve capacity
 - minimum daily purchase
 - reserve ratio (ratio of reserve capacity to minimum daily purchase)
- LWC will fund 24-inch pipeline to KY Highway 53 for Options 3 and 4
- BWSC funds upsizing for Options 1 and 2

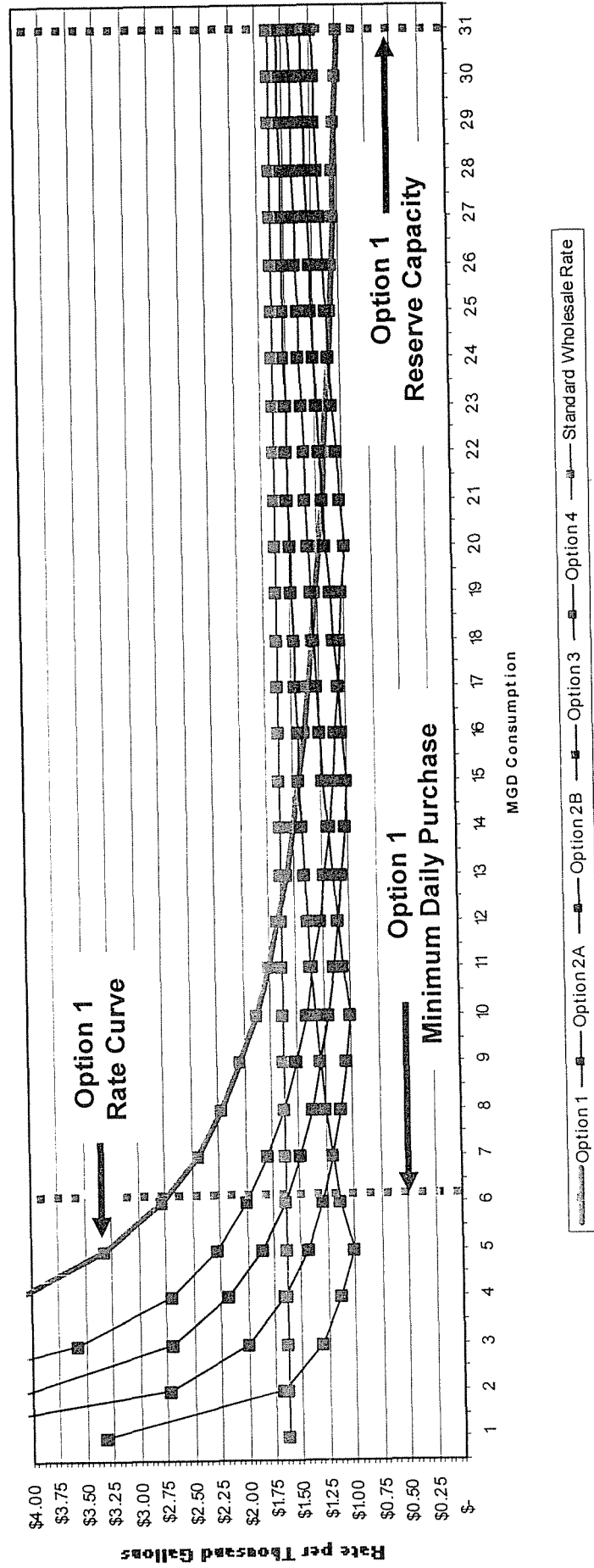
Summarized December 2005 Proposal

| Criteria | Option 1 | Option 2A | Option 2B | Option 3 | Option 4 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| Size main | 42-inch | 36-inch | 30-inch | 24-inch | 24-inch |
| Design capacity | 31 MGD | 23 MGD | 16 MGD | 10 MGD | 10 MGD |
| Reserve capacity | 31 MGD | 20 MGD | 15 MGD | 10 MGD | 5 MGD |
| Minimum daily purchase | 6.2 MGD | 4 MGD | 3 MGD | 2 MGD | 2 MGD |
| Reserve ratio | 5:1 | 5:1 | 5:1 | 5:1 | 2.5:1 |
| Water rate for minimum daily purchase | \$2.70 / 1,000 gal. | \$2.70 / 1,000 gal. | \$2.70 / 1,000 gal. | \$2.70 / 1,000 gal. | \$1.67 / 1,000 gal. |
| Water rate for consumption above minimum daily purchase and below reserve capacity | \$0.57 / 1,000 gal. | \$0.57 / 1,000 gal. | \$0.57 / 1,000 gal. | \$0.57 / 1,000 gal. | \$0.57 / 1,000 gal. |
| Water rate for consumption above reserve capacity | \$1.63 / 1,000 gal. | \$1.63 / 1,000 gal. | \$1.63 / 1,000 gal. | \$1.63 / 1,000 gal. | \$1.63 / 1,000 gal. |

Bluegrass Water Supply Commission
Comparison of Water Rates for Alternative Reserve Capacities
December 2005 Proposal

| Consumption MGD | OPTION 1 | OPTION 2A | OPTION 2B | OPTION 3 | OPTION 4 | Standard Wholesale Rate |
|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|
| | 6.2 MGD Minimum Daily | 4 MGD Minimum Daily | 3 MGD Minimum Daily | 2 MGD Minimum Daily | 2 MGD Minimum Daily | |
| | 31 MGD Reserve Capacity | 20 MGD Reserve Capacity | 15 MGD Reserve Capacity | 10 MGD Reserve Capacity | 5 MGD Reserve Capacity | |
| 1 | 16.59 | 10.74 | 8.08 | 5.42 | 3.33 | 1.63 |
| 2 | 8.30 | 5.37 | 4.04 | 2.71 | 1.66 | 1.63 |
| 3 | 5.53 | 3.58 | 2.69 | 2.00 | 1.30 | 1.63 |
| 4 | 4.15 | 2.68 | 2.16 | 1.64 | 1.12 | 1.63 |
| 5 | 3.32 | 2.26 | 1.84 | 1.43 | 1.01 | 1.63 |
| 6 | 2.77 | 1.98 | 1.63 | 1.28 | 1.12 | 1.63 |
| 7 | 2.44 | 1.78 | 1.48 | 1.18 | 1.19 | 1.63 |
| 8 | 2.20 | 1.63 | 1.37 | 1.11 | 1.25 | 1.63 |
| 9 | 2.02 | 1.51 | 1.28 | 1.05 | 1.29 | 1.63 |
| 10 | 1.88 | 1.42 | 1.21 | 1.00 | 1.33 | 1.63 |
| 11 | 1.76 | 1.34 | 1.15 | 1.06 | 1.36 | 1.63 |
| 12 | 1.66 | 1.28 | 1.10 | 1.11 | 1.38 | 1.63 |
| 13 | 1.58 | 1.22 | 1.06 | 1.15 | 1.40 | 1.63 |
| 14 | 1.50 | 1.18 | 1.03 | 1.19 | 1.42 | 1.63 |
| 15 | 1.44 | 1.14 | 1.00 | 1.22 | 1.44 | 1.63 |
| 16 | 1.39 | 1.10 | 1.04 | 1.24 | 1.45 | 1.63 |
| 17 | 1.34 | 1.07 | 1.07 | 1.27 | 1.46 | 1.63 |
| 18 | 1.30 | 1.04 | 1.11 | 1.29 | 1.47 | 1.63 |
| 19 | 1.26 | 1.02 | 1.13 | 1.31 | 1.48 | 1.63 |
| 20 | 1.22 | 0.99 | 1.16 | 1.33 | 1.49 | 1.63 |
| 21 | 1.19 | 1.03 | 1.18 | 1.34 | 1.50 | 1.63 |
| 22 | 1.16 | 1.05 | 1.21 | 1.36 | 1.51 | 1.63 |
| 23 | 1.14 | 1.08 | 1.22 | 1.37 | 1.51 | 1.63 |
| 24 | 1.12 | 1.10 | 1.24 | 1.38 | 1.52 | 1.63 |
| 25 | 1.09 | 1.13 | 1.26 | 1.39 | 1.52 | 1.63 |
| 26 | 1.07 | 1.15 | 1.27 | 1.40 | 1.53 | 1.63 |
| 27 | 1.05 | 1.17 | 1.29 | 1.41 | 1.53 | 1.63 |
| 28 | 1.04 | 1.18 | 1.30 | 1.42 | 1.54 | 1.63 |
| 29 | 1.02 | 1.20 | 1.31 | 1.43 | 1.54 | 1.63 |
| 30 | 1.01 | 1.21 | 1.32 | 1.43 | 1.55 | 1.63 |
| 31 | 0.99 | 1.23 | 1.33 | 1.44 | 1.55 | 1.63 |

Comparison of Water Rates for Alternative Minimum Daily Purchases and Reserve Capacities



Tailored Solution



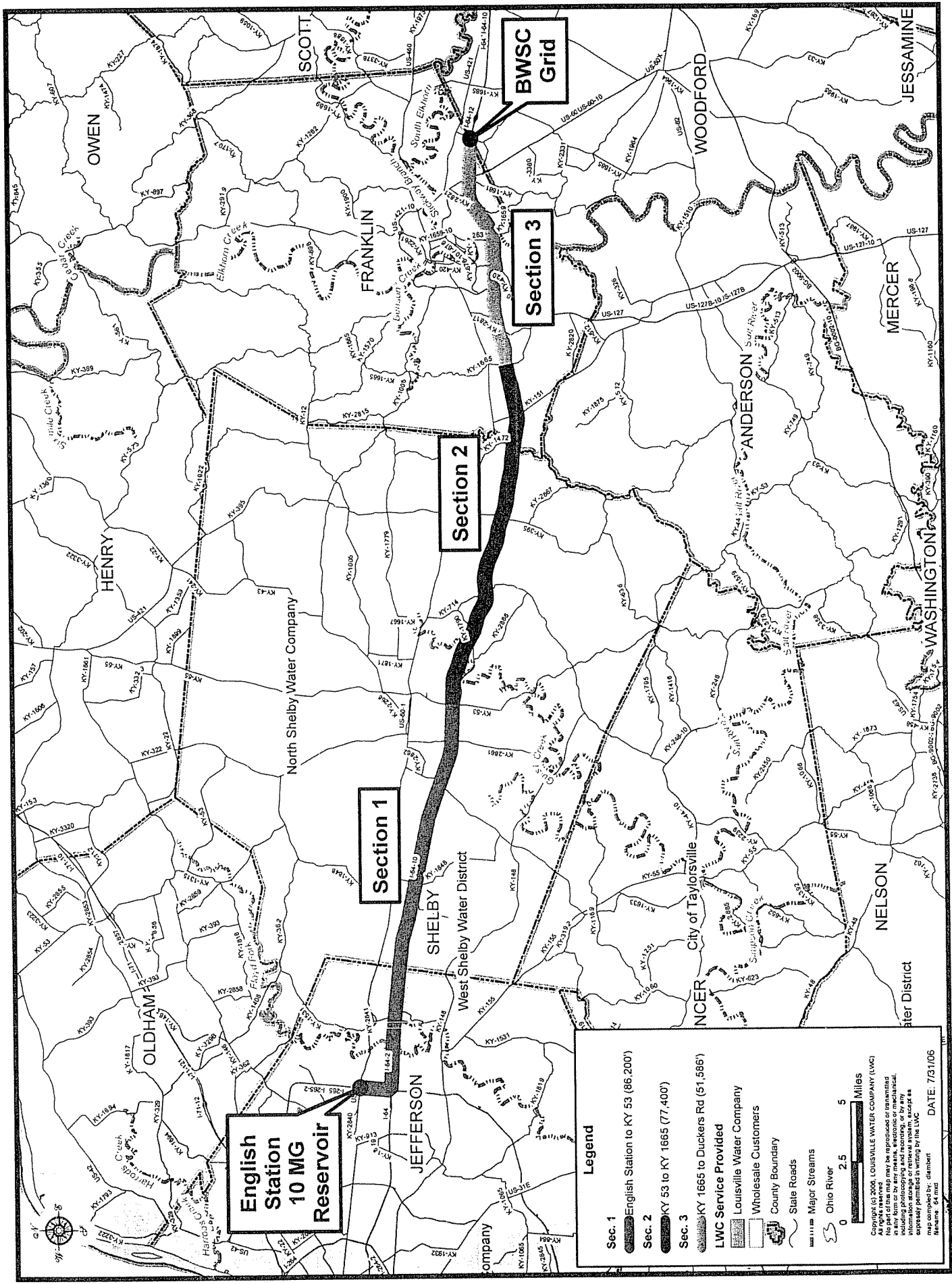
Tailored Solution to Maximize Value of Investment and Manage Operating Risk

- Reliable supply
- Long-term partnership – 50 years
- Lowest life cycle (capital and O&M) yields lowest rate
- Mutual benefits to all participants
- Collaborative regional approach
- Attractive for federal and state grants / loans



Pipeline Solution Attributes

- Timeliness – 24 to 30 months to construct facilities
- Low capital, operating, and maintenance costs
- Long life asset – 100 years vs. 30 to 50 years
- Independent source to supply Bluegrass region
- Scaleable for larger demand requirements
- Preserves Kentucky River as a long-term supply solution
- Secures source to Ohio River without additional investment



English
Station
10 MG
Reservoir

Section 1

Section 2

Section 3

BWSC
Grid

Legend

Sec. 1 English Station to KY 53 (86,200')

Sec. 2 KY 53 to KY 1665 (77,400')

Sec. 3 KY 1665 to Duckers Rd (51,586')

LWC Service Provided

- Louisville Water Company
- Wholesale Customers
- County Boundary
- State Roads
- Major Streams
- Ohio River

0 2.5 5 Miles

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Revised by: dcmh
Revised: 6/4/04

DATE: 7/31/06



Facility Design Capacity

| <i>Facility</i> | <i>Design Capacity</i> |
|-----------------|------------------------|
| 20-inch main | 7 MGD |
| 24-inch main | 10 MGD |
| 30-inch main | 15 MGD |
| 36-inch main | 20 MGD |

Design capacity at approximately 5 feet per second velocity.

Construction Cost Estimates

| Section | Proposed Route | 20-inch Main (7 MGD) | 24-inch Main (10 MGD) | 30-inch Main (15 MGD) | 36-inch Main (20 MGD) |
|---------------------------|----------------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| Section 1 (86,200 ft.) | US Hwy 60 to Hwy 53 | \$12.8m | \$18.5m | \$22.7m | \$27.2m |
| Section 2 (77,400 ft.) | Hwy 53 to Ky 1665 | \$9.3m | \$12.4m | \$14.3m | \$17.4m |
| Section 3 (51,600 ft.) | Ky 1665 to Duckers Road | \$6.2m | \$8.2m | \$9.5m | \$11.6m |
| Total Cost | | \$28.3m | \$39.1m | \$46.5m | \$56.2m |

Construction cost estimates from December 2005.



LWC Participation

- LWC will build, own, and operate Section 1 (to Hwy 53)
 - 20-inch – \$12.8m construction estimate - 1 MGD min. purchase
 - 24-inch – \$18.5m construction estimate - 2 MGD min. purchase
 - 30-inch – \$22.7m construction estimate - 3 MGD min. purchase
 - 36-inch – \$27.2m construction estimate - 4 MGD min. purchase
- LWC can provide financing for Section 2 (to Ky 1665) and Section 3 (to Duckers Road)
- LWC financial commitment requires long-term contract (50 years)

LWC System Capacity

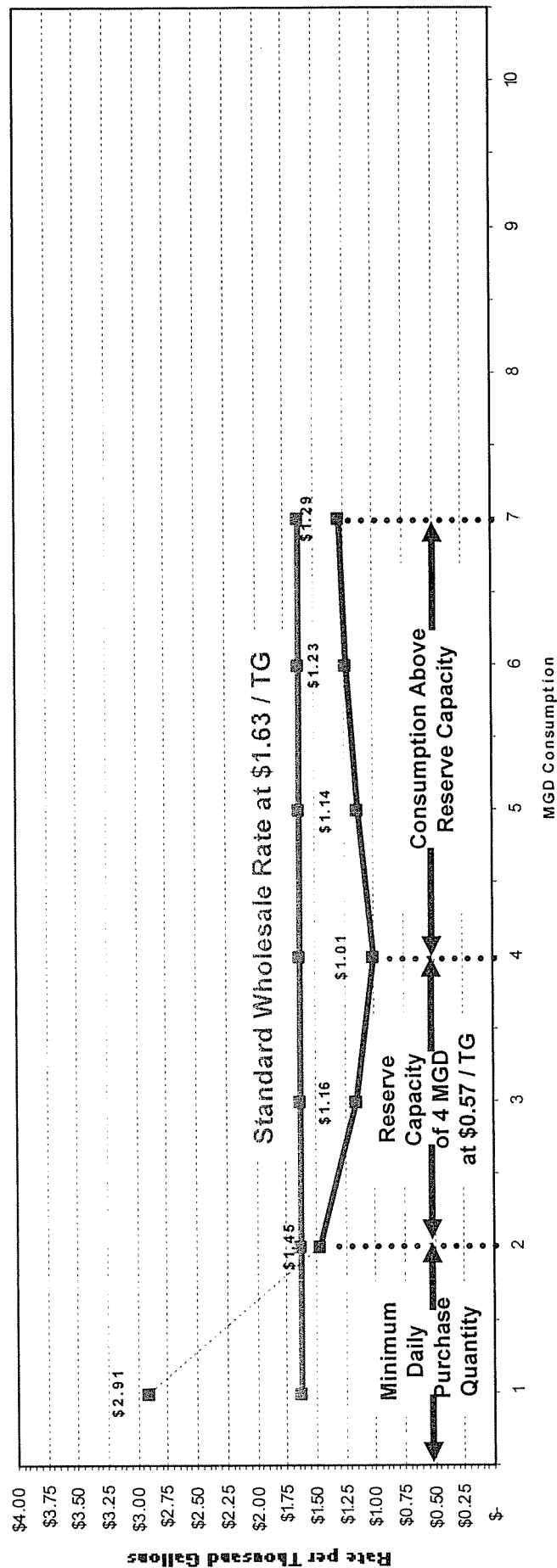
- LWC proposes to assure production capacity greater than 15% for benefit of all customers (retail and wholesale)
- A designated reserve capacity by a single customer advances expansion requirements for existing customers
- LWC production capacity
 - 300 MGD design capacity
 - 240 MGD firm capacity available
 - Max Day 205 MGD (June 25, 2005)
 - Firm capacity ratio $205 / 240 = 85\%$
 - LWC transmission capacity limited by size of facility (i.e. 36-inch main – 20 MGD)

Proposed Scenario

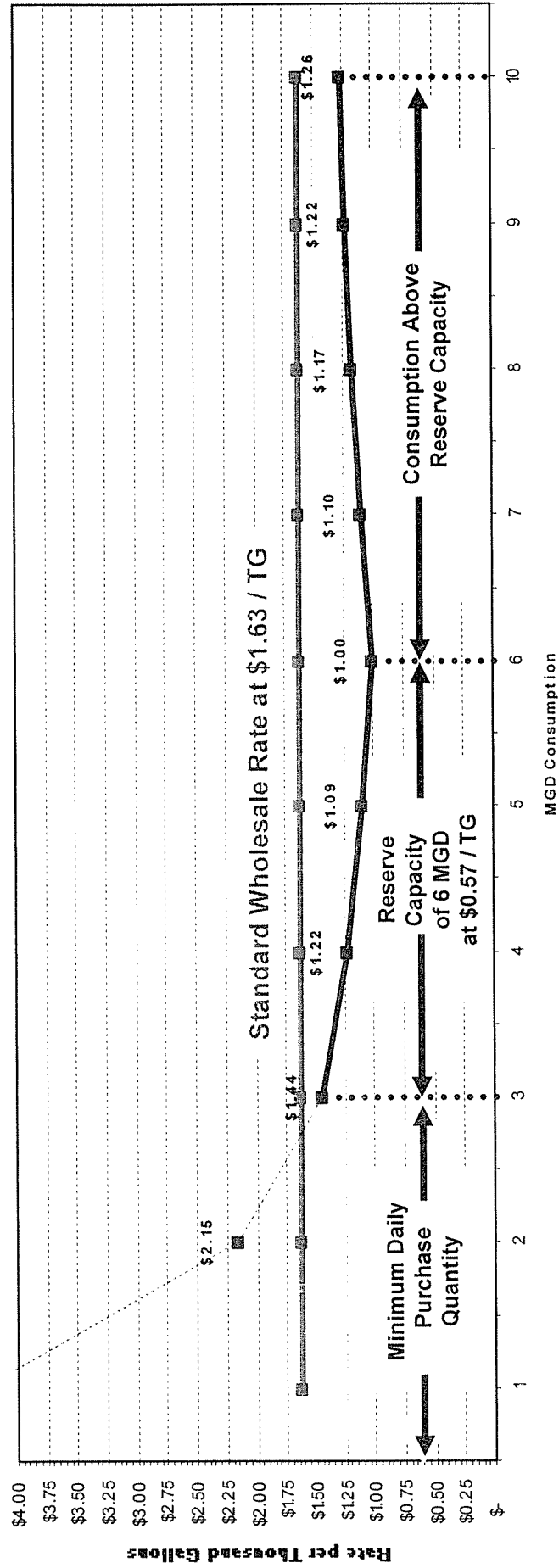
- Max Day Ratio of 2:1 with standard wholesale rate (\$1.63)
- Minimum take or pay contract based upon following demands:

| <i>Transmission Size</i> | <i>Purchase Range</i> | <i>Max Day Range (2:1)</i> | <i>Rate</i> |
|--------------------------|-----------------------|----------------------------|-------------|
| 20-inch | 1 - 3.5 MGD | 2 - 7 MGD | \$1.63 |
| 24-inch | 2 - 5 MGD | 4 - 10 MGD | \$1.63 |
| 30-inch | 3 - 7.5 MGD | 6 - 15 MGD | \$1.63 |
| 36-inch | 5 - 10 MGD | 10 - 20 MGD | \$1.63 |

Louisville Water Company Tailored Proposal
 Example Scenario 1 for 20-Inch Main
 2 MGD Minimum, 4 MGD Maximum, 7 MGD Design Capacity



Louisville Water Company Tailored Proposal
 Example Scenario 2 for 24-Inch Main
 3 MGD Minimum, 6 MGD Maximum, 10 MGD Design Capacity





Standard Wholesale Rate Pricing

Advantages

- Simplified rate methodology
- Easy to understand and communicate
- Allows transition to reserve rate methodology
- Approved by KY PSC

Caveats

- Monthly demand exceeding Max Day demand factors
 - May establish a new minimum daily purchase requirement
 - Limits total consumption to design capacity of facility



Advantages of Tailored Solution

- Variety of rate options available
- Several capital and financing scenarios available
- Timeliness to construct (24 - 30 months)
- Project attractive for federal and state grants / loans
- Independent Ohio River supply from Kentucky River source
- Kentucky River remains long-term option



Other Considerations to Discuss

- Increased minimum take or pay allows LWC to increase financial commitment for the project
- LWC interest in BWSC membership
 - as ex-officio (e.g. KIA, KRA)
 - as supplier



Next Steps

Partner with Bluegrass Water Supply Commission to:

1. Determine the 2020 average and max day water supply need for BWSC participants
2. Select pipeline size based on max day demand (i.e. 10 MGD requires 24" main)
3. Determine minimum purchase quantity to assure water quality (i.e. 2 MGD for 24" main)
4. Determine max day to average demand factors over planning period (i.e. 2:1; 3:1; 4:1; 5:1)
5. Select rate method: Standard Wholesale Rate, Reserve Rate, or combination over time
6. Determine the minimum purchase quantity to maximize LWC financial investment in pipeline (i.e. 3 MGD allows LWC investment of \$22.7 million for 30" main to Highway 53)
7. Allocate minimum purchase quantity to BWSC participants
8. Build regional transmission grid to supply BWSC participants using grants and low interest loans
9. Provide provisions in contract to allow adjustment of minimum purchase, demand factors, and rate methodology to maximize investment value of the regional pipeline (i.e. base load from pipeline and peak from local sources)
10. Continue to pursue options for Kentucky River treatment plant for next increment of water beyond 2020 water demand projection

Thank You!

- Please direct questions or comments regarding this presentation to:
 - Greg Heitzman
Senior Vice President and Chief Engineer
(502) 569-3681
gheitzman@lwcky.com
 - Bob Miller
Vice President and Treasurer
(502) 569-3663
bmiller@lwcky.com
 - Jim Smith
Business System Owner, Infrastructure Planning
(502) 569-3600 ext. 3687
jsmith@lwcky.com



Program Manager's Agenda
Bluegrass Water Supply Commission
January 22, 2007

1. Review of Program Manager Budget
2. Status Report
 - Task Order #2
 - Kentucky River Pool #3 – Water Withdrawal Application – On Hold
 - Phase I Pipeline Routing Study Amendment – On Hold
 - Task Order #4 & Task Order #5
 - Review of Alternatives and Update on Least Cost Alternatives – Executive Summary of Analysis



O'BRIEN & GERE

**Program Manager Status Report
Bluegrass Water Supply Commission
January 22, 2007 Board Meeting**

SUMMARY OF PROGRAM MANAGER BUDGET

| | Budget | Effort Spent to Date | Remaining Budget |
|----------------------|---------------|-----------------------------|-------------------------|
| Task Order #2 | \$ 94,000.00 | \$ 88,012.88 | \$ 5,987.12 |
| Task Order #3 | \$ 79,000.00 | \$ 77,041.16 | \$ 1,958.84 |
| Task Order #4 | \$ 59,500.00 | \$ 18,987.57 | \$ 40,512.43 |
| Task Order #5 | \$ 63,730.00 | \$ 56,476.70 | \$ 7,253.30 |
| Total | \$ 311,230.00 | \$ 255,515.75 | \$ 55,714.25 |

TASK ORDER #2

- **KENTUCKY RIVER POOL 3 – WATER WITHDRAWAL APPLICATION**

This item has been placed on hold pending the final outcome of the alternative evaluation in Task Order #5.

- **AMENDING PHASE I ROUTING STUDY**

This item has been placed on hold by the Master Planning and Capital Construction Committee with the recommended that the selection of the final route be tabled until the completion of Task Order No. 5's alternative evaluation.

TASK ORDER #4

- **LOUISVILLE WATER COMPANY PROPOSAL**

BWSC has received several proposals from Louisville Water Company (LWC) for wholesale supply of finished water. The latest proposal was focused on a water supply alternative to meet the needs of BWSC members only (9 MGD or less). If BWSC agreed to a long term contract with minimum purchase provisions, LWC would contribute the required capital to fully fund construction of a 24-inch main with a 10 MGD capacity terminating at KY Highway 53 for all of the supply options specified.

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The various options specified either design or reserved capacity with minimum daily purchases and a variety of rate options. The latest option presented by LWC was to have a maximum day to minimum purchase ratio of 2:1 with the standard wholesale water rate of \$1.63 per one thousand gallons.

Based on an estimated purchase amount of 2 MGD to 3 MGD, the calculated unit cost to the Commission would be greater than \$4.00 per 1,000 gallons.

- **CITY OF VERSAILLES PROPOSAL**

The City of Versailles recently completed construction of a WTP with capacity in excess of their near term demands. Since KAW service area abuts Versailles, it is plausible that KAW could receive water from Versailles to address current deficits, and in turn, convey water to Winchester to address their near term deficit. In reviewing this information, all of the flow rates from the City of Versailles would require additional pumping on BWSC's behalf in order to deliver the water into KAW's system on a short-term basis. (This analysis is based on a five-year term.)

Preliminary estimates of these booster pump options and the City of Versailles' improvements are in the range of \$185,000 to \$400,000.

Based on an estimated purchase amount of 2 MGD to 3 MGD, the calculated unit cost to the Commission would be in the range of \$2.40 to \$2.50 per 1,000 gallons.

- **FPB WATER TREATMENT PLANT EVALUATION**

Frankfort Plant Board (FPB), in cooperation with BWSC, retained GRW Engineers to evaluate the existing FPB WTP for the possibility to meet the short-term needs of Kentucky American Water (KAW). The study also looked at expanding FPB's capacity to meet the needs of BWSC, or to meet the partial needs of both KAW and BWSC.

In summary, the report by GRW Engineers indicates that the historical raw water pumping demands during peak days and the 3-day running annual average has approached 16 MGD on a few occasions and was recommended that the 16 MGD demand be used as the critical present day peak demand. As a result, there is no reliable treatment plant capacity available for BWSC without substantial improvements to expand the water treatment plant and distribution system in the range of \$17 to \$32 million.

Based on an estimated purchase amount of 2 MGD to 3 MGD, the calculated unit cost to the Commission would be greater than \$3.00 per 1,000 gallons.

TASK ORDER #5

• SUMMARY OF WATER SUPPLY ALTERNATIVES

A Master Planning and Capital Construction Committee meeting was held on January 3rd and January 12th, 2007 to present the conclusion of Task Orders No. 4 & No. 5. A presentation and draft copy of the report has been given to the Master Planning and Capital Construction Committee for review and comments. The following is a summary of these conclusions.

In response to Kentucky American Water's (KAW) offer to construct capacity at Pool 3 for BWSC, BWSC authorized O'Brien & Gere to undertake Task Order No.5. The intent of Task Order No. 5 is to support BWSC through review of KAW's Preliminary Design Memorandum for a new Water Treatment Plant on Pool 3 of the Kentucky River and to review, update and reassess other alternatives for water supply and grid alternatives to the members of BWSC.

O'Brien & Gere developed initial concept level costs for the several alternatives. Some of the alternatives evaluated included looking at a smaller WTP on Pool #3, purchasing water from Louisville Water Company, increasing the capacity at FPB's WTP, purchasing water from Greater Fleming Regional Water Commission, as well as others, and various combinations.

Interim Findings

- If BWSC develops a 15 MGD Pool 3 water supply independent of KAW, unit costs will be nearly 2-1/2 to 3 times the unit costs if KAW and BWSC worked in partnership, due to loss in economy of scale
- If the BWSC facilities were reduced down to the current 9 MGD committed capacity, the capital costs would be less, but the unit costs would be even higher
- Phasing can defer costs for some members, but is relatively ineffective at reducing unit cost
- Of the other (not Pool 3) BWSC-Only Alternatives, the most preferred, based on cost appear to be :
 - Frankfort Plant Board
 - Greater Fleming, including combinations with FPB & LWC
- The above unit costs are nearly double the BWSC/KAW Pool 3 option, and may not satisfy FPB's desire for a substantial back-up supply

• BWSC/KAW PARTNERSHIP

KAW presented to the BWSC on September 25, 2006, a proposal to construct a 20 MGD facility in Pool 3 of the Kentucky River. O'Brien & Gere has been reviewing the KAW partnership proposal and comparing the costs of the proposed Partnership with other supply options available to BWSC.

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KAW proposes to provide multiple connections to BWSC, in order to reduce the size and cost of the BWSC grid. This approach is consistent with the 2004 Feasibility Study, but different than the "independent grid" approach favored by the Commission.

The project cost as presented in the meetings with KAW and pending any update information from the 30% design submittal is as follows:

Proposed Cost – 20 MGD WTP Facilities (30% Design)

| | |
|-----------------------------|---------------|
| Raw Water Intake Facilities | \$ 18,492,892 |
| WTP Facilities | \$ 42,600,616 |
| WTP Residual Facilities | \$ 12,258,535 |

Proposed Cost - Transmission Main (30% Design)

| | |
|-------------------------------|---------------|
| Booster Pumping Facility | \$ 3,055,467 |
| Intermediate Storage Facility | \$ 5,101,998 |
| Pipeline – 42-inch | \$ 76,718,778 |

Total Project Cost – WTP & Transmission Main \$158,228,286

CONCLUSIONS

O'Brien & Gere has re-evaluated the alternatives to KAW's proposal. There are a couple of problems that impact nearly all alternatives:

- **The independent grid is too expensive for BWSC to finance alone, with commitments of 9 MGD.**
- **If BWSC commits to 15 MGD, the unit wholesale costs are more reasonable, but the impact on customer's bills is excessive.**

The estimated cost of the KAW proposal is roughly \$0.20 to \$0.30 per 1,000 gallons more than the "all-in" approach with an independent grid. Assuming that BWSC agrees to using multiple connections to KAW (to avoid cost of the independent grid), the cost could be reduced. It is recommended that BWSC propose to take a smaller share of the Pool 3 facilities (5 MGD out of 25 MGD vs. 9 MGD out of 30 MGD). This allows for a lesser unit cost for the facility and less grid cost to the members.

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RECOMMENDATIONS

It is recommended that BWSC negotiate with KAW for cost sharing of a 25 MGD facility.

If KAW accepts the 5 MGD initial share in Pool 3, then this will allow for lesser unit cost to BWSC for the initial phase and explore further the possibility to combine that with a supplemental supply from the Ohio River for the remainder of the 4 MGD.

Based on an estimated minimum purchase amount of 5 MGD, the calculated unit cost to the Commission would be in the range of \$2.45 to \$2.55 per 1,000 gallons.

It should be noted that the costs per 1,000 gallons are dependent on several factors (terms of borrowing, interest rates, rate coverage, daily withdrawal rates, etc) which should be common to all options.

Both O'Brien & Gere and PFM will work together to conduct additional analysis to provide more detail cost analysis of the rates and will look for guidance on using the appropriate factors for the purpose of projecting wholesale rates.



O'BRIEN & GERE

June 4, 2007

Mr. Don R. Hassall, PE, General Manager
Bluegrass Water Supply Commission
c/o Bluegrass Area Development District
699 Perimeter Drive
Lexington, KY 40517-4120

Re: Lowest Cost Alternative
Water Supply
File: 36270

Dear Don,

This letter is to provide an update and to clarify a matter of significance, which may not have been fully understood during the course of the Feasibility Study. On a number of recent occasions, we have heard some concern that BWSC's approach for regional water supply is not the lowest cost option. The implication seemed to be that some members of the General Assembly, the general public and possibly some of the participants in the BWSC believed that the Kentucky River Pool 3 hybrid alternative is not the lowest cost alternative. Without commenting on the merit of this concern, the fact of the matter is that the recommended option from the Feasibility Study (Kentucky River Pool 3 with a supplemental pipeline to the Ohio River) was both the highest rated and lowest cost, when evaluated "apples to apples" with a firm capacity of 45 MGD from all sources. For your convenience, we attach Figures 1 through 4 which show information presented at Workshops No. 5 and 6. Figures 1 & 2 show cost comparisons with the Louisville Water Company's original and revised pricing, respectively. Figures 3 & 4 shows weighted scoring comparisons with the Louisville Water Company's original and revised pricing.

You no doubt recall that during Workshop No 5, upon showing the results illustrated by Figures 1 & 3, there was a request from Louisville Water Company for a second submittal of their cost proposal. The opportunity to make a second submittal was then provided to all four of the entities which had offered wholesale water supply. Only one, Louisville Water Company, made a second offer (Offer letter dated July 9, 2003). Their second offer was for a substantially lower cost, but also for a substantially lower amount of reserved (guaranteed) capacity. Specifically, the first offer was for 45 MGD

“reserved” capacity, while the second offer was for 18 MGD “reserved” capacity, with provision for up to 45 MGD “if available”. Because the primary driver for the Bluegrass Water Supply Program is the drought deficit, the reserved or guaranteed capacity is a significant issue. The inherent reliability of the Pool 3/Ohio River Pipeline option is more comparable to the 45 MGD “reserved” capacity of the first Louisville Water Company proposal.

At Workshop No. 6, the second offer was considered and the scores were adjusted to use the new, lower cost (Figure 2) for the 45 MGD “if available” capacity. However, the Pool 3/Ohio River Pipeline option was still ranked higher than all others (Figure 4), and O'Brien & Gere independently recommended that option. We stand by that recommendation today, because on an "apples to apples" comparison, it is both the lowest cost and overall best fit, using the criteria developed for the Feasibility Study. In hindsight, we suspect that the reduction in “reserved” capacity and only providing 45 MGD “if available” in Louisville Water Company's second offer was not fully understood at Workshop No. 6, for if it was, then the Pool 3/Ohio Pipeline option should have scored better under the "Adequate Capacity" criteria, thereby making it even more preferred.

In December 2005, Louisville Water Company submitted a third offer letter for a “reserved” capacity of 31 MGD. In reviewing the proposal and comparing with the Kentucky River 31 MGD water treatment plant at Pool 3 with Ohio River Pipeline alternative, the capital cost for the LWC option was lower than the capital cost of the Kentucky River Pool 3 option by almost 18%; however, the annual O&M present worth cost of the LWC option was more than double the present worth cost of the Kentucky River Pool 3 option. Combining these two factors into a present worth analysis indicates that the Kentucky River Pool 3 option would be the preferred option for the long-term source of supply of 31-MGD for BWSC, with a present worth cost that is 23% lower than the LWC option.

In October 2006, BWSC had received another proposal from Louisville Water Company (LWC) for wholesale supply of finished water. The latest proposal was focused on a water supply alternative to meet the needs of BWSC members only (9 MGD or less). The latest option presented by LWC was to have a maximum day to minimum purchase ratio of 2:1 with the standard wholesale water rate of \$1.63 per thousand gallons. This option does not provide a “reserve” capacity and would restrict BWSC to the same water restrictions imposed by LWC on all wholesale customers during a drought or water emergency.

Again, comparing the proposals from LWC with the now equity ownership option with Kentucky American Water Company for a 25 MGD water treatment plant on the Kentucky River resulted in the lower cost for the Kentucky River Pool 3 option. The LWC option resulted in an overall present worth cost of more than 50% greater than the equity ownership option with Kentucky American Water. The primary reason for this significant difference is that the joint ownership option allows BWSC the ability to utilize

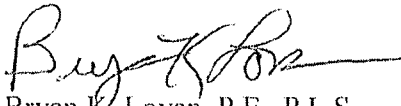
Mr. Don R. Hassall, PE
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Kentucky American Water Company's existing infrastructure with multiple connections to their grid in order to convey the potable water to the BWSC members in Phase I without having to build a separate pipeline grid.

Given the importance of this issue, we request the opportunity to discuss it at the next meeting of the Bluegrass Water Supply Commission meeting. If you have any questions, please contact me.

Very truly yours,

O'BRIEN & GERE

A handwritten signature in black ink, appearing to read "Bryan R. Lovan", with a long horizontal flourish extending to the right.

Bryan R. Lovan, P.E., P.L.S.
Project Manager

CC: George Rest, P.E.

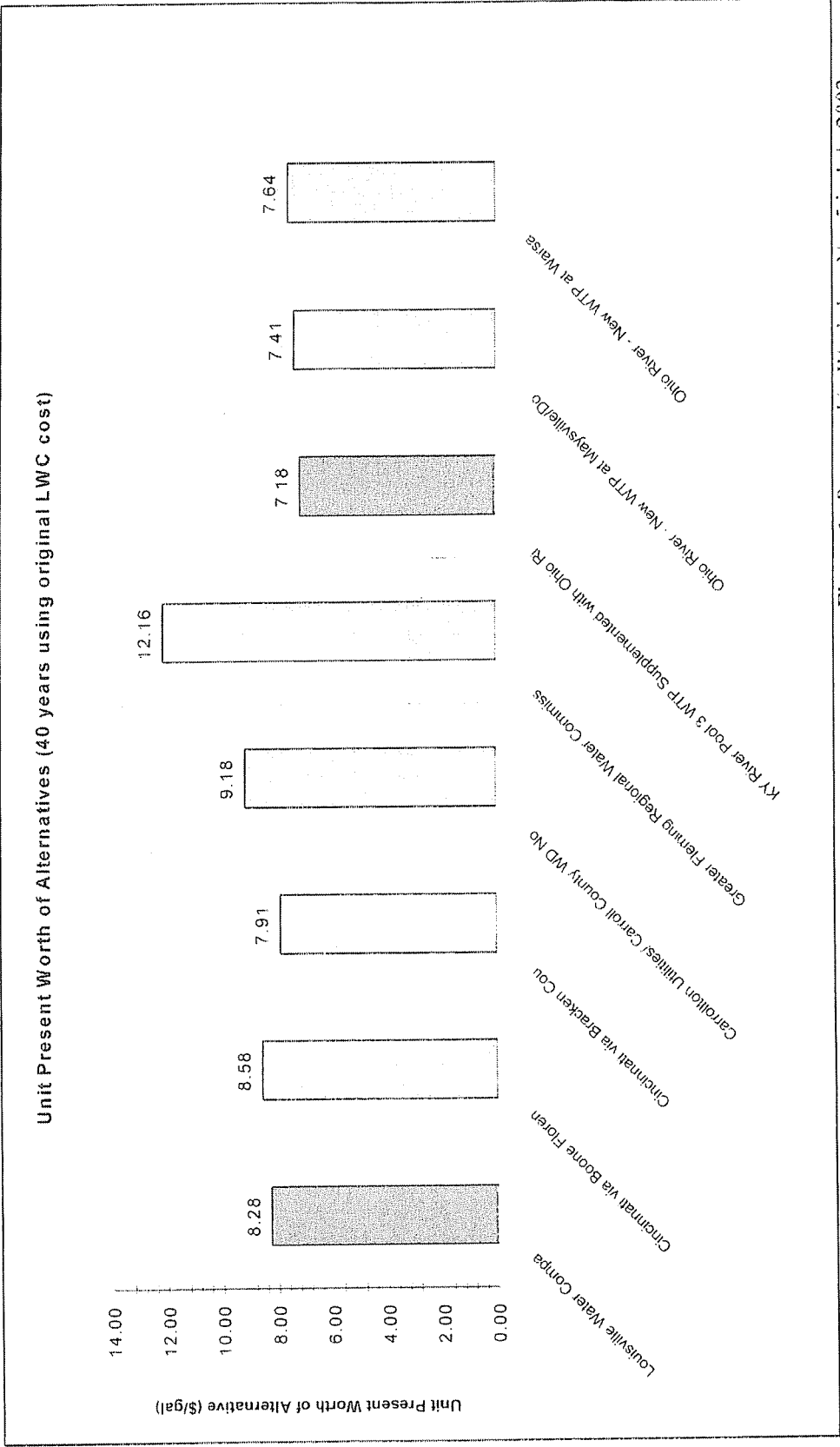


Figure 1 Presented in Workshop No. 5 in July 2003

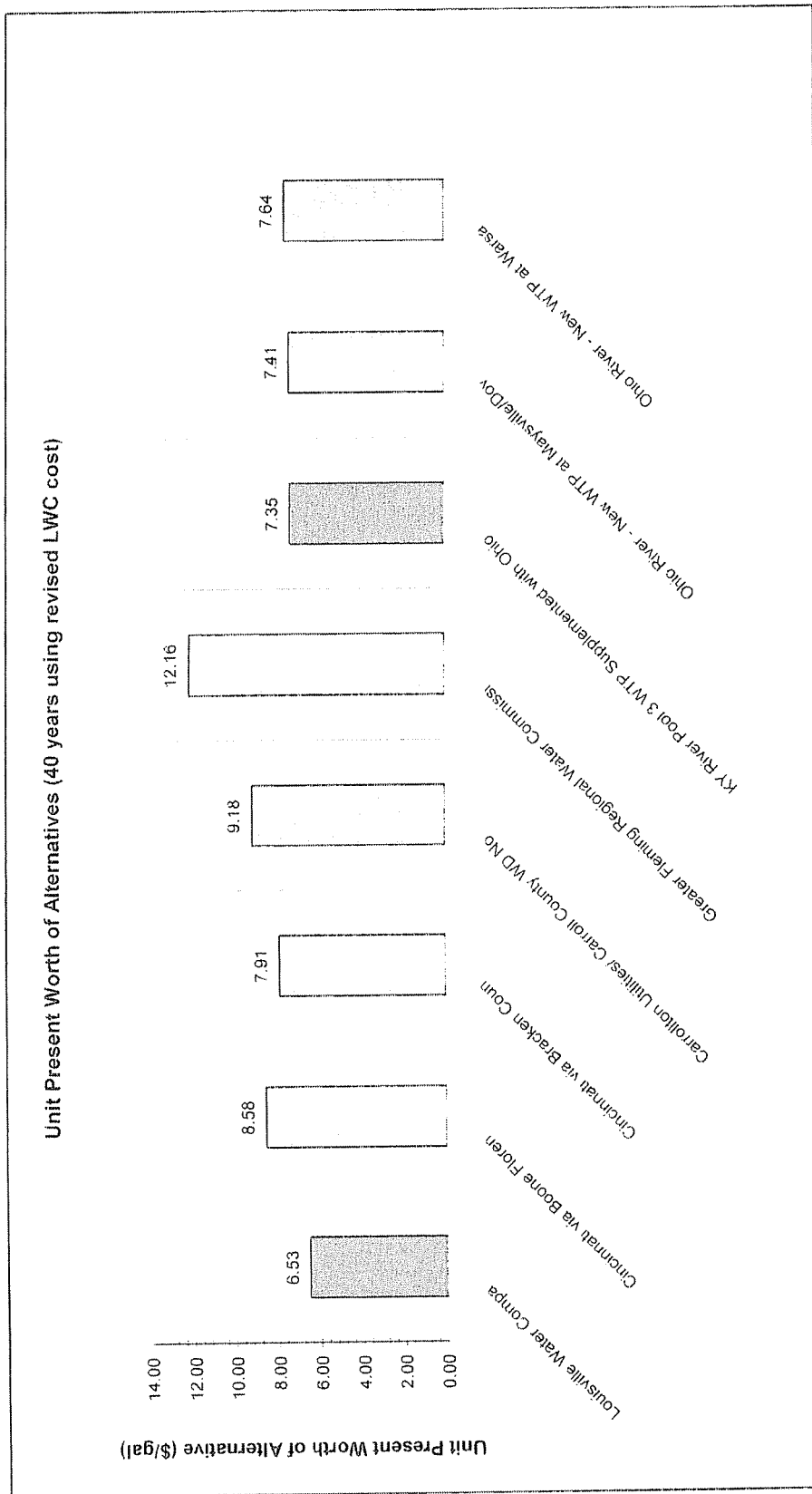
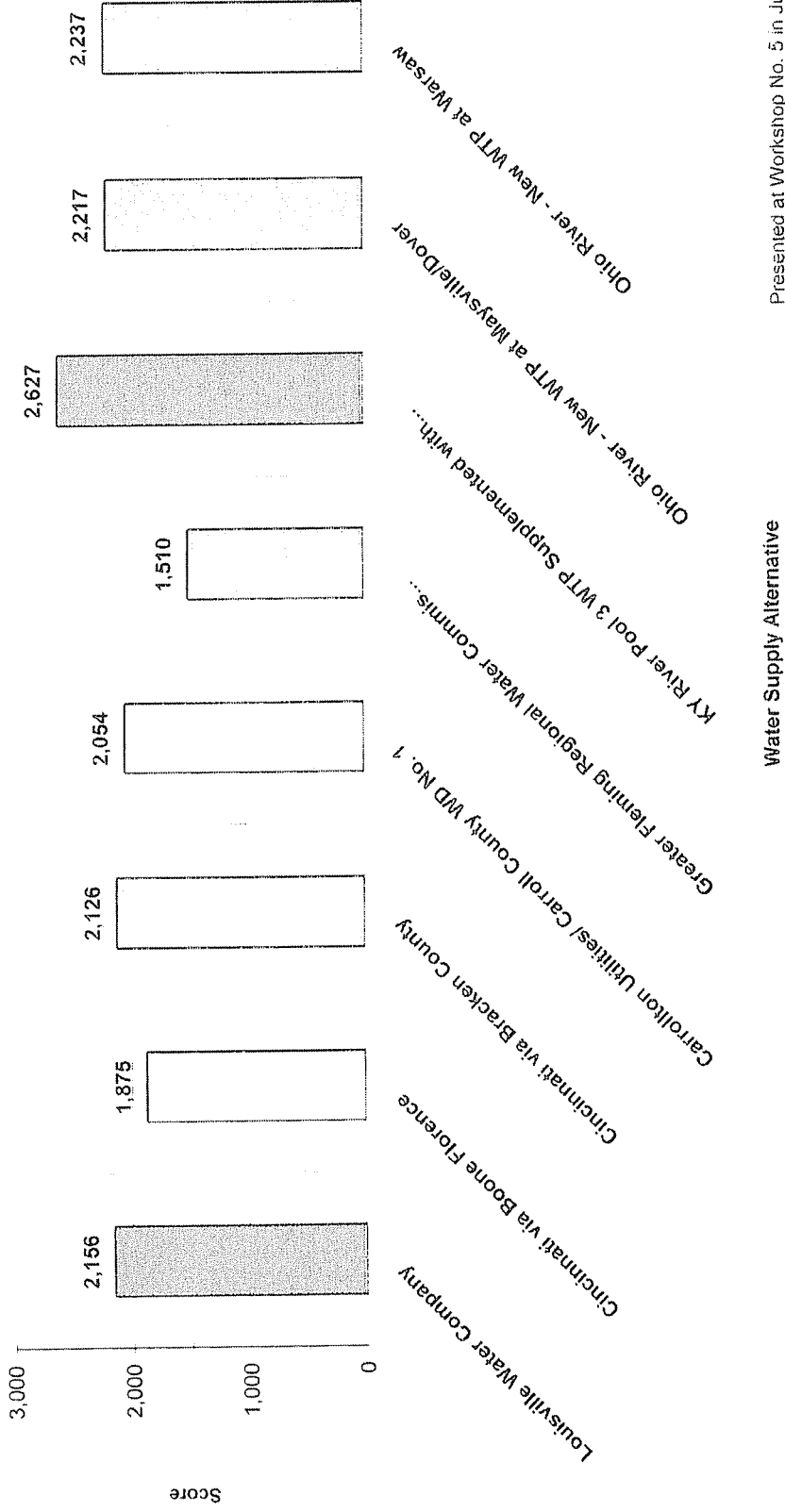


Figure 2 Presented in Workshop No. 6 in August 2003

Results of Tech Group Pairwise Comparison (Workshop 5 using original LWC cost)
(Highest Scores are Most Preferred)



Presented at Workshop No. 5 in July 2003

Figure 3