

KENT COUNTY WATER AUTHORITY

BOARD MEETING MINUTES

February 17, 2005

The Board of Directors of the Kent County Water Authority held its monthly meeting in the Joseph D. Richard Board Room at the office of the Authority on February 17, 2005.

Chairman Perry opened the meeting at 3:30 P.M. Chairman Perry, Board Members, Mrs. Graham, Mr. Masterson, Mr. Boyer and Mr. Gallucci, were present together with the General Manager Timothy J. Brown, Director of Administration & Finance Arthur Williams Technical Service Director John Duchesneau, Kevin J. Fitta, System Engineer, Legal Counsel, Joseph J. McGair and other interested parties.

The minutes of the Board meeting of January 12, 2005 and January 19, 2005 were moved for approval by Board Member Graham and seconded by Board Member Boyer and the minutes were unanimously approved.

OLD BUSINESS

High Service Review

The General Manager gave his report in detail (Report dated 2/17/05 attached as "A"). The General Manager recommended a short term moratorium because a standardized review process must be instituted after further study. This is necessary because of the paucity of water and is further compounded by the Department of Environmental Management lack of proper decision making with regard to the expanded Mishnock Wellfield application after a five year ordeal. There is a slim chance that discussions with the assistance of the Governor's office could produce some progress in this area. The General Manager reminded the Board that without additional resources of water, conservation must be the watchword for the system. The Chairman stated that the inactions of the Department of Environmental Management have economic development hanging in the balance which is grossly unfair because of jobs and tax base for our customers and our communities are suffering. Board Member Boyer asked about the time element for the Bald Hill pumping station upgrade project mentioned in the study to which the General Manager responded that if the financial resources were in place that it would take approximately two years.

It was the sense of the Board that the members concurred with the General Manager's report. Board Member Graham, who has been a consistent critic of the Department of Environmental Management in this regard stated that the effect that the Department of Environmental Management has on the Kent County Water system has

been devastating. The Chairman concurred and stated that the Big River Reservoir needs to be built.

In answer to a question from the General Manager, Legal Counsel stated that Kent County Water Authority has always made it a very clear policy with regard to all customers that the Authority is not a guarantor of water and that any approvals that it makes to any future or existing customer is based solely upon the condition at the time of the approval and that all existing and future customers must be aware that the water when or if approved may cease to exist for those customers unless future product is obtained.

The Chairman in concurring with Legal Counsel stated that it would be impossible to gauge or have a crystal ball and that no one ever thought more than a decade ago that there would be an economic upturn on the western part of the system which is, unfortunately, located in the high gradient area.

Guests:

Westwood Estates, John R. Assalone

John Brunero, Esq. appeared along with John R. Assalone, Developer. Mr. Brunero stated the developer has municipal permits from the Town of Coventry for 48 apartment units/adult community. Mr. Brunero produced an analysis of water savings attached hereto as "B" from the Westwood Estates Mobile Home Park demonstrating savings of 744 gallons of water per month and that the proposal is similar to a commercial project in that there will be shrubs, open space and no outside watering. In answer to a question to Board Member Graham, Mr. Brunero stated that there would be two phases of 24 units each. Mr. Brunero stated that this was a matter of reallocation of the water was approved in 1994 for 25% less water.

Mr. Brunero stated that this is really a unique project in that this project is asking for less water than was originally approved, however, despite this knowledge that there may not be water available.

In answer to a question from Board Member Boyer, Mr. Assalone stated that there would be an average of 1.5 persons per unit. Board Member Masterson stated that there is a need for consistency and he concurred with the previous recommendations of the General Manager that a moratorium, however, needs to be established in order to study the project. The Chairman concurred and stated that there should be a project meeting in order to study all of the requests in a global fashion. Mr. Assalone stated that it may be possible to further conserve the water that the project has now and he has been vigilant in the use of the water and continues to be so. Board Member Masterson stated that the demonstration of the Westwood Estates water usage is helpful to understand their needs.

There will be a special meeting is scheduled for March 9, 2005 at 3:30 p.m.

220/240 Moosehead East Greenwich, D. Wayne Daniel

Attorney Mark Fay appeared for the Developer, D. Wayne Daniel to request water services for the two lots with four bedroom, 3,000 sq. ft. homes. The General Manager stated that in 2003, there may have been sufficient supply at the location. Mr. Fay agreed that Kent County Water Authority is not a guarantor of water and that he believes that the Kent County Water Authority does not now have a sufficient water supply based upon the current conditions. Board Member Masterson concurred and further stated that it was more especially a problem with the high pressure gradient. Mr. Fay stated in answer to a question, that the project did have the capability to drill wells for water. The General Manager stated that it would be prudent for the Developer to use wells. The Chairman stated and it was the consensus of the Board that the Board really had no choice but to deny the application and that the General Manager in his capacity will so notify the developer in writing. Mr. Fay thanked the Board for the opportunity to be heard and stated that he understands the dilemma that confronts the board and the developer will have to rely on wells.

Hopkins Hill Road, Coventry D. Wayne Daniel

Attorney Mark Fay appeared for the Developer, D. Wayne Daniel and Mr. Fay stated that the developer needs to gain access over Kent County Water Authority property to avoid wetlands for the purposes of a road. The General Manager gave the historical background regarding the location of the future manganese treatment plant and that he could not recommend the use as sought by the developer since the land was purchased for the purposes of necessary water treatment.

Board Member Masterson was concerned about future security issues with respect to multiple gates and ingress and egress of any cars over the area. The General Manager reminded those in attendance that the DEM wellfield issue has all of the developers on hold and the treatment plant is fully designed and ready to go. The Chairman stated there can be no decision made at this time. Board Member Boyer also concurred that the consequences of any actions by the Board would make a decision at this time imprudent.

Brooks/Rocky Hill Fair Grounds, Malm Construction

Peter Nolan, Esq. representing Malm Construction, Developer, stated that he heard the General Manager give the High Service review earlier in the meeting and understands the problems that exist in the system and that the Authority is not a guarantor of water. He proposes that the project would call for approximately 2 million dollars of funds by the Developer would be expended for dual lines from J. P. Murphy Industrial Boulevard to the site in East Greenwich. He agreed that the supply issues would demand that there be no outside irrigation and significant conservation measures be made. Scott Moorehead, P.E. gave a detailed water analysis which is attached as "C".

In answer to Board Member Boyer's question, Mr. Moorehead stated that the Brooks Drugs was on 18 months target for occupancy and that would be followed by a hotel, restaurant and 50 elderly units. The General Manager stated that it is unclear that the Brooks Drugs is a separate issue and that the other issues must be studied further. Board Member Masterson stated that this project would also be subject to the March 9, 2005 special meeting.

Arlington RV, Stephen Moran

Stephen Moran, owner of Arlington RV, stated that his business has developed and that it needs to grow and that the parcel in question is at the corner of New London Turnpike and Division Street which was a former junkyard site which he cleaned up. He has gained municipal approvals and that the water needs are not great and would max out at 1,500 gallons per day. He told the Board that he recognizes the crying need for water for the system and that there would be a build out of 1 ½ years. DiPrete Engineering is doing a study and he will submit the same to Kent County Water Authority upon completion.

Mr. Moran stated that cleaning/washing would employ the recapture process and that zero-scape would be implemented. The Chairman stated the project would be subject to no outdoor irrigation. This application will be reviewed.

Pine Ridge Subdivision, DiPrete Engineering

William Landry, Esq. Picerne Properties, state that his project would be 70 residential units and that it will bring the Coventry sewer line into the premises and that he along with DiPrete Engineering appreciate the supply problems of the Authority and would be extremely amenable to mitigate the water usage. Mr. Landry further stated that they would cooperate in regard to assist the water distribution to the site. In answer to a question by Board Member Boyer, he stated that a build out would be 17 per year up to and including 2009. They would stipulate to low flow fixtures, zero-scape and ban on outdoor irrigation and would be prepared to sharpen his pencil to go slower on the project. He mentioned that this project has been in the works for a long time.

Zarella (East Greenwich) Real Estate Parcel

Board Member Masterson asked and it was moved by Board Member Masterson and seconded by Board Member Graham to add the Zarella (East Greenwich) Real Estate Parcel issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Zarella (East Greenwich) Real Estate Parcel issue to the Agenda for discussion only.

Board Member Masterson stated that Debra Zarrella of East Greenwich has a foundation permit for a single family unit for her elderly parents, one of whom has a dementia and that a well can not be employed because of a wetlands issue. Board Member Masterson wanted to bring this to the attention of the Board and it will be considered at a future Board meeting.

Legal Matters

Welgen Tank (Amgen/Immunex) Mechanics Lien (Coughlin)

There has been no recent activity with respect to the Superior Court's granting of Kent County Water Authority Motion to Intervene on September 27, 2004

Welgen Tank (Amgen/Immunex) Mechanics Lien II (D & N Insulation Company)

There has been no recent activity with respect to the Superior Court's granting of Kent County Water Authority Motion to Intervene on December 13, 2004

E. J. Prescott lawsuit

No appeal was filed and the judgment became final.

John Rocchio Corporation – (Monies Owed)

District court and Superior Court discovery phase is now in process.

Blackrock Road Transmission Main/ C.B.

The matter is in investigation by General Manger/Legal Counsel

Read School House Road (as built)

Coventry Councilman Sanetti/Chairman attempting remedy.

Elite Construction Company

Letter has gone out but may be uncollectible funds.

DEM/Wellfield expansion

A meeting February 14, 2005 with Governor staff and DEM, General Manager and Legal Counsel and an answer is anticipated soon.

Bald Hill Pumping Station Easements

Research regarding the status of easements at the subject site has been conducted and forwarded to Kent County Water Authority for review. The station is located on a parcel of land designated as Lot 31 on AP 241. The City of Warwick along with abutting lots 20, 29 and 33 granted easements to Kent County Water Authority for the purposes of a pumping station. More specifically, abutting lot owners (AP 241, Lots 29 and 20) granted easements to Kent County Water Authority for ingress/egress and water line. Kent County Water Authority shares ingress/egress easement rights with abutting lot owners. There is a storm drain easement front Kent County Water Authority site. A 20' sewer easement affects Lot 29 for the benefit of Lot 20.

Substantial Completion Language

Definition of Substantial Completion is being reviewed by Legal Counsel and General Manager

Kent County Water Authority Building Title

Legal Counsel to conduct a 50 year title research of the subject site.

Director of Finance Report:

Mr. Williams explained and submitted the financial report and comparative balance sheets, statements of revenues, expenditures, and cash receipts, disbursements through January, 2005 which is attached as "D" and after discussion, Board Member Boyer moved and seconded by Board Member Graham to accept the reports and attach the same as an exhibit and that the same be incorporated by reference and be made a part of these minutes and it was unanimously,

VOTED: That the financial report, comparative balance sheet statement of revenues, expenditure, cash receipts and disbursements through December, 2004 be approved as presented and be incorporated herein and are made a part hereof as "D".

Point of Personal Privilege and Communications:

The General Manager stated that there was a communication dated January 23, 2005 from Ken Pastore of 55 Sturbridge Drive, Warwick, Rhode Island which is attached as "E" commending the Kent County Water Authority and employee, Dennis Fournier for responding to a water leak during the blizzard in a highly professional manner in assisting them in a time of need to correct the situation.

An article appeared in the Central Rhode Island Chamber of Commerce magazine February Chamberworks concerning Kent County Water Authority partnering with URI to help businesses conserve water and it was a very positive piece of news which is attached as “F”.

General Manager / Chief Engineer's Report:

NEW BUSINESS:

Legislative Affairs:

Meeting

Legal Counsel recommended that the meeting with the legislators be held in abeyance because of the effective date of the new lobbying law which is unsettled at this point as to the extent of lobbying.

Cross Connection Control Legislation

Legislation has been filed by the Kent County Water Authority Lobbyist in the legislature.

Coventry Fast Track Sewer Project-Lost water billing

The General Manager and the Chairman met with the Town Manager of Coventry and a proposal was made to pay the Kent County Water Authority the sum of \$8,000.00 for the lost water and that the waterline work will be completed together with the Washington Street water main “as built” will be produced. Board Member Boyer moved and it was seconded by Board Member Masterson to accept the offer of the Town in the sum of \$8,000.00 and that the waterline work must be completed and the “as built must” be delivered to the Authority by the Town of Coventry for the Coventry Fast Track Sewer project and it was unanimously,

VOTED: To accept the offer of the Town in the sum of \$8,000.00 and that the waterline work must be completed and the “as built must” be delivered to the Authority by the Town of Coventry for the Coventry Fast Track Sewer project.

PUC Abbreviated Rate Filing Motion to Reconsider

Board Member Gallucci stated that since he was on the prevailing side of the vote to approve the Revised Rate Filing with the Public Utilities Commission voted on January 12, 2005, he moved to reconsider the revised rate filing approved by the Kent County Water Authority and it was seconded by the entire Board and it was unanimously:

VOTED: That motion to reconsider is granted and that the Board reconsider the revised rate filing approval.

Board Member Gallucci stated that as a Board Member representing Warwick residents that there is an inherent problem in that Kent County/Warwick rate payers pay taxes to the City of Warwick which partially underwrite Warwick water delivery services which they do not receive and pay Kent County Water Authority rates which represents an unfair burden. Further, Mayor Avedesian does not believe that the situation is proper and that new hydrant charges to the City of Warwick will not be contained in the City budget. Board Member Gallucci understands that the Kent County Water Authority rate increase is necessary but he is in an ambivalent situation because of the position taken by the City of Warwick. He further stated that he will help with the rate increase but that symbolically he must echo the sentiments of his constituents and the City.

Board Member Graham moved for favorable action retroactive to January 12, 2005 on the vote for the approval of the revised rate filing for Kent County Water Authority by the Public Utilities Commission retroactive to January 12, 2005 and seconded by Board Member Masterson and it was unanimously,

VOTED: That the revised rate filing with the Public Utilities Commission is approved retroactive to January 12, 2005. Chairman Perry, Board Member Masterson, Board Member Graham and Board Member Boyer voting the affirmative and Board Member Gallucci voting in the negative.

High Service Model Review Task Order 5A/5B

The General Manager gave an overview of the technical memorandum for Task Order 5A (Warwick Emergency Interconnections(s) Evaluation) and Task and Task Order 5b (Bald Hill Pump Station Upgrade Evaluation), both of which are hereby incorporated by reference. The General Manager stated that with regard to Task Order 5A this was sent to the City of Warwick for its review and a meeting is imminent to discuss participation. This evaluation is related to investigating the technical feasibility of locating and constructing a multi-directional interconnection for emergency water supply between the water systems of the City of Warwick and Kent County Water Authority. With regard to Task Order 5B, the evaluation is related to investigating the technical feasibility of increasing pumping capacity of the existing Bald Hill Pump Station, which currently supplies the Low Service Zone (334 foot Gradient) for the Kent County Water Authority Service District.

Mishnock Wells R.F. P. Professional Restitution

The General Manager stated that this would be in line for development of a proposal for a year long extension for pilot testing for the Department of Health to accept the technology, however, this must be held in abeyance until the Department of Environmental Management wellfield issue is resolved.

Illegal Hydrant use, Middlewoods Proposed Restitution

The East Greenwich Police Department has recommended to the Authority that they can not successfully prosecute this matter and that the Authority should accept restitution for damages for the water taken from the illegal hydrant use on the Toll Brothers property in the amount of \$300.00. After discussion, Board Member Boyer moved to accept the recommendation of the East Greenwich Police Department to accept restitution for damages for the water taken from the illegal hydrant use on the Toll Brothers Middle-Woods property in the amount of \$300.00 and it was seconded by Board Member Masterson and it was unanimously,

VOTED: To accept the recommendation of the East Greenwich Police Department to accept restitution for damages for the water taken from the illegal hydrant use on the Toll Brothers Middle-Woods property in the amount of \$300.00.

KCWA Conservation Action Plan (approved)

The General Manager gave a detailed presentation of the Kent County Water Authority Conservation Action Plan which is attached as “G”. The General Manager pointed out that the action plan is necessary to develop a comprehensive water conservation program which would reduce the inefficient use of water throughout the system utilizing cost effective and readily available techniques and technologies together with an aggressive public awareness program. The General Manager reminded the Board Members of the High Service Review presented earlier in the meeting and how important that this action plan is to the system as a whole.

The General Manager also stated that it is a strong component of the water conservation plan that there will be a spring/summer of 2005 component which is attached as “H” which will reduce outside water use, reduce turf area and plant drought tolerant plantings through education and encouragement to the Customers.

Board Member Boyer moved and it was seconded by Board Member Graham to adopt the Kent County Water Authority Conservation Plan which is attached as “G” and the Water Plan for the Spring/Summer 2005 which is attached as “H” and it was unanimously,

VOTED: To adopt the Kent County Water Authority Conservation Plan which is attached as “G” and the Water Plan for the Spring/Summer 2005 which is attached as “H”.

And after further discussion of this matter, the Board was in consensus that the State Water Resources Board should implement an odd/even watering for the spring/summer outside irrigation as well as other conservation methods such as was just approved in this action plan.

CIP – 4

The General Manager stated that CIP-4 construction under managers, Garafalo & Associates has experienced a myriad of problems because of a lack of administration, which has put the Authority in an untenable position. The General Manager recommended that Rizzo Associates, Inc. be put on notice that it must take over management of the project and that the unresolved issues such as Hope Mill Culvert Crossing, Colvin Street Bridge, Red Line Drawings, testing and payment estimate 7 & 8 be fully rectified and that the Authority be made whole as a result of the mismanagement.

The Board, in unison, was very concerned about the situation. The Chairman stated that it was obvious that the field representatives were not being properly supervised. Kevin J. Fitta, System Engineer of Kent County Water Authority, who is the most familiar with this situation stated that there has been many warnings from the Authority. The General Manager stated that he had to demand an audit which took months to complete since it was not done contemporaneously. Legal Counsel advised that a letter addressing the general issues should be sent to Rizzo & Associate, Inc. notifying them that it should take over the project from the subcontractor and rectify the outstanding issues and make Kent County Water Authority whole.

It was moved by Board Member Graham and seconded by Board Member Masterson to send communication to Rizzo & Associates, Inc. to take over the administration of the CIP-4 contracts from the subcontractors to rectify the matter and to make the Authority whole with regard to CIP-4 and it was unanimously,

VOTED: To send communication to Rizzo & Associates, Inc. to take over the administration of the CIP-4 contracts from the subcontractors to rectify the matter and to make the Authority whole with regard to CIP-4.

CAPITAL PROJECTS:
INFRASTRUCTURE PROJECTS :

Tiogue Temporary Booster Pumping Station (C.O. Contract Extension)

The General Manager stated that C.B. Utility requested an extension of time for work to be fully completed by April 1, 2005 with the exception of final pavement which will be completed by May 27, 2005 at no additional cost to Kent County Water Authority.

It was moved by Board Member Masterson and seconded by Board Member Graham to approve the extension of time for the Tiogue Temporary Booster Pumping Station at no additional cost to Kent County Water Authority for work to be fully completed by April 1, 2005 with the exception of final pavement which will be completed by March 27, 2005 which is attached as "I" and it was unanimously,

VOTED: To approve the extension of time for the Tiogue Temporary Booster Pumping Station at no additional cost to Kent County Water Authority for work to be fully completed by April 1, 2005 with the exception of final pavement which will be completed by March 27, 2005 which is attached as "I".

Oaklawn Meter Pit

The easement deed expanding the easement area has been executed by the owner and forwarded to Citizens Bank for execution. Upon receipt of the deed from Citizens Bank, recording will be accomplished and the project will be completed. Legal Counsel contacted Citizen's Bank and their legal department needs to become more active and Robert F. Permanente, Vice President, Real Estate Management, will continue to work on it.

Infrastructure Programs Update

The General Manager asked that the Infrastructure Programs update be added to the Agenda for discussion only and that the memorandum to that effect is incorporated by reference.

It was moved by Board Member Graham and seconded by Board Member Masterson to add Infrastructure Program Updates issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Infrastructure Program Updates to the Agenda for discussion only.

The General Manager stated that this is for the update of the infrastructure programs for the communities the Authority serves which includes the cost of the replacements for which logs have been kept since 1988.

Meter Replacements

The General Manager asked that discussion of meter replacements for July 1, 2005 be placed on the Agenda for discussion only.

It was moved by Board Member Graham and seconded by Board Member Masterson to add Meter Replacement issue to the Agenda for discussion only and it was unanimously,

VOTED: To add the Meter Replacements to the Agenda for discussion only.

The General Manager stated that there is technological breakthrough in meter reading which would allow for more accurate and faster readings. He further stated that the meters will need to be replaced with the latest technology and he will bring all aspects to the Board soon.

All other Capital Projects and Infrastructure Projects are addressed in an exhibit attached as "J" as prepared and described to the Board by the General Manager with general discussion following.

Board Member Graham made a Motion to adjourn, seconded by Board Member Gallucci and it was unanimously,

VOTED: To adjourn the meeting at 7:30 P.M.

Secretary Pro Tempore

EXHIBIT A

February 17, 2005

HIGH SERVICE FEASIBLE ALTERNATIVES

February 17, 2005

Kent County Water Authority Board Meeting

The Problem:

The situation is quite simple, system demand that Kent County Water Authority now experiences or expects to experience has out stripped our ability to supply (4 million gallons per day which could easily be doubled over the next five years). The planning outlook developed in the Water Supply System Management Plan, twenty year projection, will be exceeded within the next few years. This is distinct to the high service gradient and the allocation of water to the high service system. This gradient is only fifteen years old and under extreme demand.

Rhode Island is pursuing economic growth at a rapid pace. Kent County Water Authority service area is uniquely situated in one of these areas by the development corridor straddling I-95 which is part of the service area of the high service gradient. Our ability to supply this high service gradient either from new sources or the existing source low service gradient, boosted to high service, cannot supply the projected demand.

The wellfield situation has not changed and we are in a position of no forward momentum. Additional supply in the form of new sources is non-existent and currently out of reach of this Authority. This fact is critical, without expanded production at the wellfields our supply of the projected demand will not be met

Constraints:

These can be categorized in three basic elements; supply, financial, and time. Supply: Kent County Water Authority does not have the supply currently available. We will not have sufficient supply in the near future. Long term we will have inadequate supply without other sources, in that, additions from our current supply connections and expanded well production. Financial: without a doubt funding for infrastructure improvement is critical for supply

augmentation. This might be constrained by PUC/Bond Filings, our Regulations and the cash fund for the IFR program. This is expected to continue outside of our control unless a different method of funding is sought. Time: nothing occurs overnight and any program to enhance supply will take time. Not only in securing financing, design, construction and start up but the bureaucracy that must be followed for an agency of this type to be sure the selected programs meet all requirements.

Analysis:

We have completed the analysis of our high service system and low service utilizing our current hydraulic model. The Board has authorized additional task orders to that hydraulic model to assist in viewing our system and the potential for supply to our system. It has been invaluable and provides us a tool to understand our system and allow us to evaluate our system under all demand conditions. The Board has had an opportunity to review all of those and is certainly aware of the situation that was found in the analysis. There is no simple solution and we need to look at a planning horizon for all requirements based on this analysis to achieve the goals of additional supply to high service.

The Solution:

In my report to the Board dated May 19, 2004 and the memo of the Board dated August 31, 2004, I outlined recommendations on how to address the supply situation.

1. Develop a hydraulic model analysis of the current and proposed demand of the high service gradient to analyze the current and future condition of supply (excess or deficiency) and what options are available to correct any deficiencies expected. This would not be difficult, but would be invaluable to us moving forward with the anticipated demand of that area.
2. Look for available supply sources and their affect upon our system for increased demand needs. For instance,
 - a. Upgrade the Clinton Avenue Pumping Station and its increased ability to supply.

- b. Purchase additional supply from Warwick, at the Bald Hill Station, and increase the station capacity.
 - c. Add to the existing supply from, the Amgen Station.
 - d. Add to the existing supply from, the new Setian Lane Station.
 - e. Upgrade the Setian Lane Station with added Warwick supply, if acquired with one additional pump.
 - f. Consider the effect of East Greenwich Well upgrade utilizing its full capacity with treatment.
 - g. Explore the potential of the unutilized Quonset supply and its acquisition.
 - h. Explore the potential of the unutilized supply and acquisition of the Ladd School supply.
 - i. Explore the availability to purchase treated Big River water.
3. Control the existing usage of supply as an additional source by conservation.
 4. Formalize maximum day factors.
 5. Realistic look at build out schedules and master metering to control design flow verses actual usage.

To date the hydraulic model has been completed. We are well on our way with the upgrade of the Clinton Avenue pumping station. We are ready to begin discussions with Warwick concerning additional purchase of supply and modification to our Bald Hill station along with emergency interconnection possibilities. The Amgen station is available to us for use. The new Setian Lane station is installed, however, does have some legal issues and a mechanical issue that must be straightened out before our full acceptance. The potential of Setian Lane adding additional high service supply with the increase in Warwick Supply is viable since an additional pump is present but cannot be utilized consistently until more low service is added and it is “balanced” with a total demand from the Warwick connection. The East Greenwich well upgrade is ongoing; we’ll finish the sequestering study this summer and move to an RFP for preliminary and final design. This will secure our supply, provide a better product and implement treatment. The potential of Quonset supply has been discounted at this point because of the differential pressure and the treatment chemicals that are being utilized. It is unfortunate

that it was at the opposite end of our system where the need is. The potential for Ladd School supply is also a distance and has not been considered as a potential supply. It will also be a very difficult supply to get approved for funding. The potential of Big River is still on the horizon and would have the same stumbling blocks as our expanded wellfield has undergone. It should not be considered a viable alternative at this time. We have for Board review and approval a Conservation Action Plan to address new supply from existing customer base. The formalized maximum day factors will appear in our revised regulations. Build out schedules and master metering should be requested for all large projects as a matter of course to assist in planning.

The current solution for Kent County Water Authority is to increase our existing supplies. A conservation initiative must begin this Spring. The betterment of Clinton Avenue will provide us a future for a "source" supply from Scituate directly to the high service gradient as we re-service the Read School House Road area and tie into the southern high service gradient in Coventry. The redevelopment of our existing wellfield must move along at a quickened pace to secure at least two and a half million gallons that could be split between low service and high service. This will require major engineering and of course construction to, again, utilize this source. The funding should be available under the current bond issue. The East Greenwich treatment facility has available funding under the current bond issue. The proposal for Bald Hill pumping station which was evaluated in detail under Task Order 5B is the most promising if viable and financially feasible for activation. Utilizing the same philosophy of Clinton Avenue we would break or split the pumping from the Bald Hill station into high service and low service. Low service would follow the same mains and corridor that it has always done since it was built; to the South, East and West of Route 2. The high service distribution would need to tie into the Cowesett; East Greenwich Avenue proposed system to back feed the high service gradient with this "direct" source supply. The capital improvement program (13a) would also need to be completed on Bald Hill Road to Cowesett Road in order to effectively utilize the water from the high service booster pumps at Bald Hill. This is not a funded program. Any work done for this additional source supply from high service will need financing. Of course it also needs the approval of the City of Warwick to utilize additional supply from the Bald Hill tanks. I see three main positives from the Bald Hill improvements. One, the mechanical equipment at the existing station has met its life expectancy; therefore, it becomes a scheduled replacement. The upgrade

will benefit all Kent County customers including our Warwick customers. The third being an unintentional assistance in the turnover of the very large Bald Hill tanks. Certainly not the reason for our request for additional supply, but a secondary benefit that would be very valuable to the City of Warwick.

Current Financial Needs:

Since the program that seems to be the better solution initially requires financing. An innovative approach must be considered. Financially we have the ability to ask for aid in construction from developers and contractors. There is also a possibility of a tariff filing to set a specific tariff for connections to the high service gradient, which could be at a different rate such as an impact fee for these improvements. This could be set in motion for a period of time in order to collect sufficient funds for the improvements to the high service gradient. Another approach could be private funding construction by developers. Similar to the Amgen pumping station project, this could include the water main installation and/or modification of the booster station. Any proposal of this type will require extensive study and legal review.

Temporary Interim Measures:

Since we are now on a case by case review by the Board for all high service connections, and dealing with a number of major developments requesting water service that is unavailable, the board should develop an interim policy to deal with this situation. This will avoid subjective reviews and standardize the review and decision process. The Board could consider distinguishing between existing services and future services with main extension and the way they are reviewed. This could allow priority to existing customers first. Another more difficult situation would be to limit supply to commercial users versus residential users; residential being the higher maximum day factors contributing to the maximum day conditions in our system, commercial, having less effect on maximum day conditions. These factors were explored in depth in one of our modeling task orders that we analyzed in the high and low service gradient. It is not prudent for the Board to commit future water demand when supply may not be available. This would jeopardize the existing customer's access to sufficient supply. It is, however, important for the Board to consider a short term moratorium on connection until a policy and program has been developed that will secure a continued high service supply. This is critical

now that the DEM is going to “limit” our existing well supply and not uphold our “grandfather” rights. If this occurs it will be devastating to this agency.

EXHIBIT B

February 17, 2005

Service Location: Westwood Estates
Water Consumption 11/01/03 through 10/31/04

Account Number	Bill Period	Consumption (cubic feet)	Billed Amount
115851	11/01/03 - 01/31/04	390000	\$8,891.23
	02/01/04 - 04/30/04	230000	\$5,265.63
	05/01/04 - 07/31/04	640000	\$14,556.23
	08/01/04 - 10/31/04	<u>470000</u>	<u>\$10,704.03</u>
	cubic feet used	1730000	\$39,417.12
	gallons used	12975000	

Account Number	Bill Period	Consumption (cubic feet)	Billed Amount
115850	11/01/03 - 01/31/04	497000	\$15,257.90
	02/01/04 - 04/30/04	394000	\$11,788.80
	05/01/04 - 07/31/04	478000	\$14,874.60
	08/01/04 - 10/31/04	<u>480000</u>	<u>\$14,736.00</u>
	cubic feet used	1839000	\$56,457.30
	gallons used	13792500	

Total Gallons	28,767,500
Total # residents	748
Average consumption	35,785.43
Average per day	98.04
Additional residents 48 units	72
Additional water per day	7,059.04
% of increase in consumption	9.63%

Service Location: Westwood Estates

Average Household per month	7,000
Current # Households	425
Average per month	2,975,000
Actual per month	2,230,625
Savings	744,375
% of Savings	25.02%

EXHIBIT C

February 17, 2005

SFM ENGINEERING ASSOCIATES

Scott F. Moorehead, P.E., P.L.S.

410 TIOGUE AVENUE

COVENTRY, RHODE ISLAND 02816

Phone: (401) 826-3736

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ROCKY HILL COMMONS

Projected Water Usage for
Build Out to 2009
Supplemental Information
February 9, 2005

Average Day Flow

Brooks:	1,000 persons at 7.5 GPD = 7,500 GPD
Hotel:	123 rooms at 100 GPD = 12,300 GPD
Restaurant:	200 seats at 35 GPD = 7,000 GPD
Condos:	80 units at 140 GPD = 11,200 GPD
Elderly Housing:	150 units at 50 GPD = 7,500 GPD

Total average day flow = 45,500 GPD

Notes:

1. Brooks flow based upon water use records for existing Brooks headquarters on Service Avenue in Warwick.
2. Hotel flow based on data from Buffalo Lodging Associates (Hampton Inn at Centre of New England is one of their properties.)
3. A specific user for the restaurant is not known at this time so the restaurant flow is estimated based on D.E.M. maximum day design rate of 35 to 70 GPD per seat.
4. Condo flow based on water use records for Pine Glen Condominium on Route 2 in East Greenwich.
5. Elderly housing flow based on water use records for Plaza Esperanza on Tiogue Avenue in West Warwick.

Maximum Day Flow

The proposed development will not include any lawn or landscape irrigation systems connected to the Kent County Water Authority system. Therefore this development will not have significantly higher maximum day water use. Maximum and minimum day use will be affected primarily by fluctuations in occupancy rather than season. We would anticipate that maximum and minimum use should not vary by more than 20 percent from average use.

EXHIBIT D

February 17, 2005

KENT COUNTY WATER AUTHORITY
CASH LOCATION
FISCAL YEAR 04-05

CASH LOCATION:	JUL 2004	AUG 2004	SEP 2004	OCT 2004	NOV 2004	DEC 2004	JAN 2005	FEB 2005	MAR 2005	APR 2005	MAY 2005	JUN 2005
Citizens Bank - Payroll	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00					\$
Fleet Bank - Deposit	80,551.73	80,696.80	70,261.77	62,467.96	211,810.68	70,986.15	48,859.18					
Fleet Bank - Checking	(17,764.20)	6,273.92	8,057.31	11,325.15	23,441.57	496.82	27,955.99					
	102,787.53	126,970.72	118,319.08	113,793.11	273,232.25	111,482.97	116,815.17					
U. S Bank - Project Funds												
Revenue	102,550.15	11,869.97	36,062.40	38,932.12	168,586.39	467,303.48	223,907.15					
Infrastructure Fund	2,256,036.61	2,268,209.85	2,389,804.35	2,674,809.13	2,659,450.30	3,268,753.10	3,296,246.46					
Operation & Maintenance Fund	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Operation & Maintenance Reserve	1,898,250.00	1,898,250.00	1,898,250.00	1,898,250.00	1,898,250.00	1,898,250.00	1,898,250.00					
Renewal & Replacement Fund	118,687.18	127,084.54	125,564.49	133,999.87	81,025.91	89,483.42	97,916.74					
Renewal & Replacement Reserve	521,820.03	521,820.03	521,820.03	521,820.03	521,820.03	521,820.03	521,820.03					
General Project - 2001	6,203,405.73	4,827,169.98	4,235,936.69	4,236,732.90	2,773,305.86	2,776,936.32	2,723,309.93					
Debt Service Fund - 2001	296,788.01	367,235.08	437,613.26	408,077.54	578,667.54	649,865.35	685,313.44					
Debt Service Reserve - 2001	807,683.58	807,683.58	807,683.58	807,683.58	807,683.58	807,683.58	807,683.58					
Cost of Issuance - 2001	37,604.52	37,626.16	37,652.67	37,682.74	37,718.56	37,757.82	37,803.64					
General Project - 2002	22,925,966.79	22,939,162.62	22,955,327.36	22,973,657.10	22,993,496.55	23,019,430.71	23,045,076.12					
Debt Service Fund - 2002	1,115,121.26	1,217,059.99	1,318,856.41	1,420,842.27	1,571,939.95	1,723,258.91	1,874,336.04					
Debt Service Reserve - 2002	1,823,560.01	1,823,560.01	1,823,560.01	1,823,560.01	1,823,560.01	1,823,560.01	1,823,560.01					
Cost of Issuance - 2002	5,704.20	5,707.48	5,711.50	5,716.06	5,721.49	5,727.45	5,734.40					
Debt Service Fund - 2004	21,197.92	50,382.87	79,561.09	108,765.59	138,006.55	174,833.56	217,422.80					
Debt Service Reserve - 2004	1,279,133.75	1,275,608.12	1,275,608.12	1,280,172.60	1,296,881.63	1,296,881.63	1,279,133.75					
Cost of Issuance - 2004	5,734.73	5,742.72	5,746.77	5,751.36	5,756.83	5,762.82	5,769.81					
Redemption Account - 2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	\$ 39,522,032.00	\$ 38,314,669.35	\$ 38,070,077.81	\$ 38,590,286.01	\$ 37,639,123.43	\$ 37,828,292.16	\$ 37,098,540.49	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

KENT COUNTY WATER AUTHORITY
CASH RECEIPTS & DISBURSEMENTS
FY 2004 - 2005

	JULY 2004	AUGUST 2004	SEPTEMBER 2004	OCTOBER 2004	NOVEMBER 2004	DECEMBER 2004	JANUARY 2005	FEBRUARY 2005	MARCH 2005	APRIL 2005	MAY 2005	JUNE 2005	RATE REVENUE FY 04-05	RATE REVENUE FY 05-06
BEGINNING MONTH BALANCE	53,466,382	39,522,032	38,314,669	38,070,078	38,590,286	37,639,123	37,828,292							
CASH RECEIPTS:														
Water Revenues	1,336,534	1,270,930	1,332,028	1,743,524	1,583,484	1,381,069	1,317,673							
Interest Earned	97,029	21,632	37,160	28,007	49,975	36,416	92,671							
Contribution in Aid-Construction	60,000	-	1,500	49,500	-	-	-							
Inspection Fees	18,500	950	-	16,775	9,250	17,955	-							
Other														
TOTAL CASH RECEIPTS	54,978,445	40,815,544	39,685,337	39,907,884	40,232,995	39,091,363	39,238,656							
CASH DISBURSEMENTS:														
Purchased Water	290,628	369,075	397,915	707,848	443,533	238,674	523,977							
Electric Power	50,576	45,914	46,107	36,920	30,789	34,185	37,199							
Payroll	129,477	131,186	158,455	120,654	128,835	164,494	146,911							
Operations	124,600	65,554	75,148	120,650	55,060	78,411	82,001							
Employee Benefits	50,766	48,958	45,501	50,844	49,037	49,292	48,902							
Legal	-	19,701	5,839	11,058	4,094	5,869	5,728							
Materials	39,438	7,122	4,877	11,749	7,138	5,240	10,681							
Insurance	4,299	-	126,675	4,271	4,271	4,271	4,271							
Sales Taxes	19,501	12,246	9,766	29,181	12,611	7,672	18,658							
Refunds	69	265	1,316	60,000	1,307	853	1,629							
Rate Case	-	-	-	-	3,885	6,215	41,560							
Conservation	-	-	-	349	-	-	-							
Pilot	8,339	-	-	-	-	-	-							
Capital Expenditures (Other)	3,396	3,715	3,063	-	49,442	743	3,056							
2002 Infrastructure	2,185	117,176	-	2,650	1,400	205,438	5,932							
2003 Infrastructure	388,934	115,628	70,746	6,642	798	239,663	80							
2004 Infrastructure	11,060	5,400	3,046	5,875	14,780	29,825	1,215							
Mishnock Well/Storage/Trans.	-	18,894	-	-	10,411	-	-							
Frenchtown - Seitan Tanks	119,681	62,092	7,325	4,563	4,198	11,414	7,574							
Knotty Oak Road 20"	99,680	12,315	1,841	-	140,152	19,560	69,550							
Oaklawn Meter Pit	128,788	3,982	-	3,503	3,008	66,749	21,201							
Clinton Avenue Pump Station	28,548	14,419	5,401	6,210	608	-	-							
E. G. Well Upgrade	267	1,643	-	-	-	457	692							
GIS Development Mapping	10,360	12,030	-	44,419	25,823	60,540	38,635							
Blackrock Road - 24"	10,278	1,400,491	495,137	11,630	1,423,759	240	41,735							
Hydraulic Model	5,403	6,687	9,866	5,620	3,400	7,245	1,360							
Cohimowan Road - 8"	-	-	-	1,906	-	-	-							
Mishnock Well Color Evaluation	6,720	2,775	4,450	2,893	445	-	-							
Middle Road 16"	-	1,152	2,070	11,481	-	-	-							
Quaker Lane P. S. Roof	-	-	-	-	-	4,300	2,110					4,030		
Reed Schoolhouse Road	-	-	-	-	-	-	8,107					3,152		
Reed Schoolhouse Road Tank	-	-	-	-	-	-	-					-		
U. S. Bank - Debt Service (P. & L.)	13,826,892	-	3,526	-	-	-	905,372					-		
Water Protection	96,528	22,455	137,209	48,487	170,788	15,804	114,994					-		
TOTAL DISBURSEMENTS	15,456,413	2,500,875	1,615,279	1,317,598	2,593,872	1,263,071	2,140,095							
BALANCE END OF MONTH	39,522,032	38,314,669	38,070,078	38,590,286	37,639,123	37,828,292	37,098,541							
PRIOR YEAR	44,215,984	44,756,824	45,030,913	45,205,337	44,291,999	44,221,979	43,518,911							

EXHIBIT E

February 17, 2005

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Ken Pastore
55 Sturbridge Dr
Warwick, RI 02886-8614
Phone: 738-0706
Cell: 640-4224

Outstanding Service Recognition

January 23, 2005

Kent County Water Authority
ATTN: Tim Brown
P.O. Box 192
West Warwick, RI 02893-0192



Tim:

My wife (Donna Edgerley) & I woke on Sunday morning to not only one of the worst snow storms in history but to the ominous sound of running water. As I headed down to the kitchen I heard a noise which I nearly dismissed as the ice maker but decided to check for running toilets. After discovering water in the basement I realized the problem was far greater than I hoped for. I tore down some wallboard to get a better look and indication of the problem at hand. Peering out the window we noticed a sheet of ice and a natural spring coming from the ground. Not knowing we thought that the main water supply to the house had sprung a leak. I shut what I had thought was the master lever in the house & called KCWA for direction not knowing if it was a public or private problem and what to do with it knowing that no one would come out in a blizzard as I turned my back yard into a skating rink.

Bottom Line: Denis Fournier (sp) came out within the hour to assess the situation and was able to quickly analyze our problem, provide further information & direction as to how to pursue & rectify the problematic condition and at the same time comfort our concerns in a highly professional & friendly way. Too many people would not take the time or would take for granted that this is a service to be expected but my wife & I highly appreciate the timely, good natured & knowledgeable efforts that Denis put forth under such dire conditions.

Our hats are off to Denis in a most humble manner.
Thanks for a job more than well done.
Hopefully my letter could grace his personnel file as well.

Sincerely,

Kenneth E. Pastore
Ken Pastore

COPY SENT TO	
BOARD MEMBERS	1/25/05
CHAIRMAN	
LEGAL COUNSEL	

You cannot hope to build a better world without improving the individuals. To that end, each of us must work for our own improvement and, at the same time, share a general responsibility for all humanity, our particular duty being to aid those to whom we think we can be most useful.

~ Madame Marie Curie ~

EXHIBIT F

February 17, 2005

tables at just the right height al- patrons to linger over a glass of e, a locally-brewed beer or a of coffee and dessert baked day on the premises; and a ering space equipped with a i-definition television provides ster-paced, energetic environ-

at www.freshcity.com. For informa- tion regarding franchising, restau- rant locations and general informa- tion about Fresh City, please visit www.freshcity.com or contact Paul Hersek, director of sales and market- ing, or Joan Painter, director of fran- chising at (781) 453-0200.






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KCWA partners with URI to help businesses conserve water

Several years ago, the Kent County Water Authority (KCWA) introduced a system-wide water conservation program for residential customers. Many customers participated in this successful program. As part of its continuing efforts in water conservation, the Kent County Water Authority has introduced its Major Users Technical Assistance Program (MUTAP).

This program focuses on a select- ed number of KCWA's largest wa- ter users, including commercial, in- dustrial, government/institutional and multi-unit residential cus- tomers. The program's goal is to work with these customers to iden- tify opportunities to save water and help reduce operational costs.

KCWA has partnered with the University of Rhode Island's Center for Pollution Prevention to imple- ment this program. Since 1989, URI has been successfully assisting commercial and industrial busi- nesses in Rhode Island with the im- plementation of water conservation and pollution control technologies and practices.

KCWA and URI will visit the fa- cilities of participating customers to conduct water audits and provide recommendations for water use practice modifications. In addition, KCWA will estimate implementa- tion costs, along with annual opera- tional cost savings. These savings will be realized on the water bill, sewer bill, energy bills (for pump- ing and heating of water) and

chemical and waste treatment processes. In some instances, KCWA will provide a referral to other industry specialists. If a cus- tomer decides to accept KCWA's recommendations, technical assis- tance will also be provided during the implementation of the program.

The program is being offered as a free service to KCWA's large water users. KCWA will provide the wa- ter audit and recommendations with no obligation on the cus- tomer's part to proceed with the recommendations.

Participation is entirely volun- tary. However, KCWA encourages its customers to participate, since this program could result in a re- duction in their annual operating costs and help conserve water. By participating, organizations may al- so enhance their image within the community.

This program benefits the entire KCWA service community by help- ing to reduce stress on the water supply system during periods of high water use and by reducing the occurrences of water supply short- ages and associated water use re- strictions.

KCWA estimates this to be a five- year program, involving approxi- mately 60 customers. KCWA has prioritized this group based on an- nual water usage. Eligible partici- pants will be contacted by KCWA. If you are interested in learning more about the program, call (401) 821-9300.

Sick Of Going To

To advertise



ROBERT DE GREGORIO



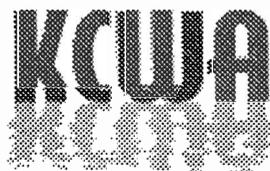
• Chamber Wo

EXHIBIT G

February 17, 2005

KENT COUNTY WATER AUTHORITY

WATER CONSERVATION ACTION PLAN



DECEMBER 2004

*1072 Main Street
P.O. Box 192
West Warwick , Rhode Island 02893*

KCWA Water Conservation Action Plan

1.0 Introduction

This action plan is intended to outline the steps that KCWA will take to develop a comprehensive water conservation program and to reduce the inefficient use of water throughout our system. The intent is to utilize existing techniques and technologies that are cost effective and readily available for public implementation. A second element of the plan is an aggressive public awareness program that will educate and encourage wise use of water within each community and also incorporate support from the cities and towns we serve.

Several potential conservation programs are presented in this plan. Some of them are designed to encourage conservation on a year round basis while others focus on the high demand period (summer). KCWA will conduct some initial research in order to better define the overall water conservation goals and to select and implement those programs that would best allow KCWA to meet these goals.

2.0 Goals

As water is a limited natural resource, KCWA aims to encourage conservation. Additionally, KCWA must develop quantifiable goals for this program (i.e. water use reduction). These goals will be based on the research and analyses tasks described below. One of the primary areas of focus will be the reduction of outdoor water use to reduce overall demand during the high water use season (summer months). This is particularly important as demand is projected to increase significantly.

3.0 Water-Use Profile

A water use profile will be developed by analyzing water use by customer category (residential, commercial/industrial, government). Based on water billing records approximately 69% of water use is residential, 26.5% is commercial/industrial, and 3.5% is governmental.

From KCWA seasonal production records, it is evident that outdoor water usage is a considerable component of demand. A preliminary examination of seasonal demands over the past several years indicates that an estimated 3-5 Million Gallons per Day (MGD) is used for outdoor water use on a typical summer day. On days of maximum demand, the estimated outdoor water use increases to 6-9 MGD. Therefore, it is clear that a program(s) that results in outdoor water use reduction would reduce maximum day demands.

A closer examination of the above along with research activities discussed in the following section will allow us to develop realistic water conservation goals for both indoor and outdoor water use.

4.0 Research

KCWA will review conservation programs that other water suppliers have implemented for examples of successful and unsuccessful programs. This research will allow us to learn from others and focus our efforts in areas that have the greatest potential for success. This will also aid in setting realistic goals for the program. We will also examine the water conservation policies of local and regional water suppliers to aid us in developing programs that are consistent with industry practices. It is anticipated that the research would include phone inquiries, meetings and document research.

5.0 Existing Conservation Programs

KCWA currently has several water conservation programs, including ongoing leak detection, a residential retrofit program, and a year round odd/even outdoor water use policy. These programs will be reviewed as part of this action plan. We will assess their effectiveness and determine whether the programs should continue, be modified, or be replaced with other programs.

Leak Detection – Conservation program must address continuous leak detection efforts in the KCWA system. Currently KCWA conducts leak detection on one quarter of the system annually using in-house forces. We will review what KCWA has done historically and the successes that can be quantified. Based on these efforts and a review of unaccounted-for water use, we will develop a plan for future efforts.

Residential Retrofit Program – Complete system mailing of conservation kits was done in 1999. Review this program and make an assessment as to the number of customers that have already installed the water conservation devices included in KCWA kit (low flow shower head, low flow faucet aerators and toilet dam) and to the extent possible quantify the success of this program (i.e. water use reduction in those that participated). This will allow us to estimate any additional conservation that could be achieved in this area and determine whether or not another complete system mailing would be beneficial. Another mailing would provide customers an opportunity to replace existing fixtures with the latest technology. The kits would include a response card that we could use as a method to assess program.

Odd/Even Outdoor Water Use Program – To the extent possible review water use patterns before and after this program was implemented to determine if there was any impact on water usage. Some research has shown that odd/even policies employed by other water suppliers without enforcement elements have not been effective in conserving water, but do help with equalizing peak demands. Consider modifying with more effective program if required.

6.0 Proposed Water Conservation Programs

Several water conservation programs will be considered in this plan. The programs are designed to reduce both indoor water usage (year round) and outdoor water usage (high demand season). Some programs may have the potential for greater water use reduction than others. In addition, the time to implement each program varies. Public participation is a key element to any successful program.

Primary Water Conservation Programs

1. *Water Conserving Plumbing Devices* – Encourage KCWA customers to make plumbing retrofits, in accordance with the current building code requirements. Essentially, KCWA would be encouraging customers to make the same type of improvements that were part of the Residential Retrofit Program. These retrofits include:

- a) Low-flow Shower Heads
- b) Low-flow Toilets
- c) Low-flow Faucet Aerators
- d) Pressure Reducers for High Pressure Areas-KCWA to identify target group and send letter suggesting installation of device. Also, suggest as part of new developments.

2. *Outdoor Water User Restriction Program* – As discussed above, the effectiveness of the current Odd/Even program will be assessed. We will also review other outdoor water use restriction programs to determine if there is one that may be more effective. For example, other water suppliers have implemented programs that allow for watering every 4 or 5 days. Other communities limit outdoor water usage to certain times of day (i.e. before 9 a.m. and after 5 p.m.). Once a program is selected, it will be promoted through the KCWA newsletter, press releases, and

information printed on bills. An enforcement strategy must be developed as a part of this program.

3. *Outdoor Water Use Devices* – Some devices exist that have been shown to reduce outdoor water use considerably. KCWA will review these devices and encourage/require their use. Some of these devices include:
 - a) Automatic shutoff nozzle on hand-held hose
 - b) Shutoff device activated by rainfall on automatic irrigation systems – *Already required on new irrigation systems.*
 - c) Soil moisture probes and sensors used to adjust irrigation schedules on automatic irrigation systems – *Already required on new irrigation systems.*
 - d) Rain Gauge

4. *Major Appliances* – Encourage KCWA customers to install state-of-the-art water conserving & energy wise appliances (i.e. clothes washer, dishwasher, water heaters). KCWA will provide some general guidance regarding available technologies through KCWA newsletters. We will also review any incentive programs that may be available from Narragansett Electric and inform customers of these programs if applicable.

5. *Rainwater Harvesting* – KCWA will review the viability of a Rain Barrel & Directional Down Spout Program to reduce reliance on public water supply for outdoor water use by encouraging natural rainfall reuse & storage. It is envisioned that, at a minimum, KCWA would provide information in the KCWA newsletter regarding the use of Rain Barrels and retail stores or web sites where the barrels could be purchased. If funding was available we could consider a more complete program.

6. *Landscaping/Plants* – KCWA to promote the use of drought tolerant native low water-use plantings. In addition, encourage customers to restrict turf areas,

enhance soil, and replace with landscaping that does not require as much water (i.e. Xeriscape, native plantings). As turf requires more water than most other plant materials it is the most obvious and important target for water conservation landscape efforts.

These changes represent a departure from current landscaping practice and thus a change in philosophy. Therefore, it is anticipated that change in this area will be slow and that city/town ordinances and/or plumbing/zoning requirements would be a significant factor in the program's ultimate success. Assistance from educational institutions will also be sought (student projects, etc.)

Some or all of the following may be incorporated into this program as practical and/or as appropriate:

- a) Promotion tools – There are a number of ways to promote this type of landscaping so that it becomes a more accepted way of landscaping.
 - i. Demonstration Garden – designed through contests, contracts or other means
 - ii. Education Demonstration Garden – located at public place (i.e. city halls, schools, libraries, parks)
 - iii. Real-Life Gardens – in residential, commercial or park landscapes
 - iv. Model Home – could require developers to install one xeriscape model home in each new development
 - v. Government should lead by example – Use Xeriscape where turf does not provide essential service to public (i.e. parks, ball fields)

- b) Workshops – Workshops could be held with general public and the green industry (landscape architects, contractors, maintenance people, nurseries, horticulturists, irrigation experts, sod/seed producers, government and university experts).

- c) Buyers Guides – Prepare buyers guides with information on native low maintenance plants that are suitable for this geographic region. This information is already available through the Master Gardeners Association at URI cooperative extension and would be included with KCWA public information materials. We will continue to introduce new plants with each newsletter.

 - d) New developments – one way to implement conservation is to have requirements for new developments regarding irrigation systems, maintenance/water schedules, plant list that must be followed, model xeriscape home required for each development. As discussed above city/town requirements that support our efforts are a key element in this type of initiative.

 - e) Resources – URI has a Cooperative Extension that could serve as a resource for us in this program. Working through them is the Master Gardener Association. They have a speaker’s bureau, newsletters and bulletins. In addition, they have a booklet with a sustainable plant list for this area, as mentioned above.
7. *Customer Self Audit* – KCWA to promote a self water audit once or twice each year. Program components to include:
- a) Meter Check – Customer to check meter to determine if there may be a household leak.
 - b) Leak Detection – Provide simple approach for customers to check toilets for leaks (i.e. toilet leak tablets).
 - c) Audit List – KCWA to develop an audit “checklist” and distribute to customers for their use.

8. *Water Rates* – Implementation of conservation water rates is a measure that is used to promote more efficient use of water. We will review rate structures being used in other utilities to determine if KCWA could potentially reduce water demand by switching to another rate structure. In addition, we will review the cost and possible major operational issues related to making a switch.

A summary of the proposed water conservation programs under consideration is presented in the table below. A preliminary assessment of the conservation potential has been made. In addition, the time to implement each program has been classified as either short-term (1 to 3 years) or long-term (greater than 3 years).

Conservation Programs to be Reviewed

Program	Conservation Potential	Target Conservation Period	Time to Implement and Realize Benefits
Water Conserving Plumbing Devices	Major	Year Round	Short-term
Outdoor Water Restrictions	Major	High Demand Season	Short-term
Outdoor Water Use Devices	Major	High Demand Season	Short-term
Major Appliance Replacement	Difficult to quantify	Year Round	Long-term
Rainwater Harvesting	Minor	High Demand Season	Short-term
Landscaping/Plants	Major	High Demand Season	Long-term (exist homes)/Short-term (new developments)
Customer Self Audit	Minor	Year round	Short-term
Water Rate Structure Change	Major	High Demand Season	Long-Term

Program Support Elements

The above conservation programs will benefit significantly from the following support programs:

- Public Education/Awareness
- Revision of KCWA Regulations
- City/Town Involvement
- State/Legislative Action

Public Education/Awareness – The success of water conservation is largely dependent on customers understanding the need and value of water conservation. Therefore, it is imperative that public education/awareness efforts be included in any water conservation efforts. These efforts will include some or all of the following:

- Web Page – Keep KCWA web page maintained and up-to-date and provide water conservation tips (must bring in house).
- School System – promote water conservation through school programs, reactivate education program.
- Brochure – develop our own water conservation pamphlet(s).
- Demonstration – review value of demonstrations garden(s) in cooperation with communities to demonstrate planting using soil preparation, Xeriscape and drip irrigation techniques.
- Newsletters – KCWA newsletter can be used to educate
- Speaker’s Bureau – Representatives of KCWA and potentially other volunteers could speak at public events, neighborhood groups, etc.

Revision of KCWA Regulations – Elements of KCWA’s Rules & Regulations will need to be reviewed and revised to address the following:

- Permit Outdoor Water Use – KCWA’s current rules and regulations require that all new irrigation systems be approved by KCWA prior to installation (Rule 2.7). KCWA to review need and approach for approval of all (including existing) in-ground sprinkler systems. It is anticipated that existing systems may need to be retrofitted with shutoff device and soil moisture probes. In addition, additional

education will need to be provided on programming sprinkler systems, as well as appropriate amounts of watering required to maintain a healthy lawn/garden. In order for this program to be effective Kent County Water Authority would also need to work closely with local authorities to incorporate KCWA requirements into plumbing permit.

- Moratorium Protocol – There may be times when KCWA will need to prohibit outdoor water use because of drought conditions, high demands or a system emergency. The moratorium must be implemented smoothly and effectively. KCWA to develop an enforcement program to fit policy.

City/Town Involvement – Coordinate with Town Councils and/or Town Planning Boards to obtain recognition and support of KCWA regulations regarding outdoor water use. Engage assistance as needed on other programs. Support from key community officials will be important. KCWA will meet with representatives of each city or town in our service area and discuss potential ways the communities can lend support to our programs.

State/Legislative Action – Review need for new or amended legislation. The objective would be to have certain water conservation programs required on a statewide basis. It is anticipated that requirements at the State level would help in the acceptance of conservation measures.

KCWA could lead by example and use our program as a statewide model. Alternatively, we may want to contact all of the major water suppliers (i.e. 10 largest) in the State and form a water conservation committee. This committee, under KCWA's leadership, could develop a policy to be brought to the State for consideration.

7.0 Analyze Benefits & Costs

To the extent possible, estimate the short-term and long-term water savings that can be achieved by each program function under consideration. Estimate conservation benefits, as well as program costs such as administration, marketing, education, revenue reductions, etc.

8.0 Prioritize Conservation Programs

Prioritize the various water conservation programs. Identify programs that are anticipated to be more beneficial in helping us reach our goals. Identify programs that may be prohibitive. Consider the time to implement programs and their ranked priority. Identify any legal issues that must be addressed prior to implementing a particular measure. We know that our primary goal is to reduce demand during the summer season. Therefore, programs that effectively reduce outdoor water use will help to reduce seasonal peaks and therefore, will likely be higher priority.

9.0 Develop a Program Schedule

Develop a Program schedule for implementation.

10.0 Funding

Identify potential funding sources for this program. Funding may be needed for brochures, demonstration gardens, educational materials, conservation kits, mailing, etc.

11.0 Create Partnerships

KCWA should explore the possibility of developing partnerships in our efforts. This could include organizations such as Rhode Island Water Resources Board, U.S. EPA,

University of Rhode Island (or other schools), community organizations, New England Water Works Association, Master Gardener Association, and others.

These partnerships could help us in promoting our programs and demonstrating the impacts of conservation, as well as showing that KCWA policies are consistent with and/or supported by others in the State and the industry.

12.0 Enforcement

Enforcement is a significant issue related to outdoor water use restrictions. KCWA will need to be creative in this area, given our relatively small staff. We do not have crews available to be dedicated to enforcement efforts. KCWA should explore ways to involve the public, cities/towns, and local police in these efforts. Consider imposing penalties for violation of outdoor water use policies. Penalties could increase with each occurrence.

13.0 Revenues/Rates

Reduction in water use due to conservation efforts may reduce revenues. KCWA will need to assess lost revenue with added customer base. This issue can only be reviewed when it occurs as rate setting does not rely on potential unknown rate effects.

EXHIBIT H

February 17, 2005

KCWA Water Conservation Plan - Spring/Summer 2005

Primary Focus – Strive to reduce outdoor water usage for Summer 2005 through education. The goal will be to encourage customers to water less outdoors, as well as reduce turf areas and plant drought-tolerant plantings. It is proposed that we do the following:

- Place articles in KCWA newsletter
- Prepare op-ed piece(s) to appear in local newspapers
- Send brochure(s) to all customers
- Include message(s) in water bill
- Send letter to all customers (cost may be prohibitive ± \$9,000.00)
- Prepare press releases for local newspapers with tips for watering wisely, bi-weekly

Moratorium Protocol – Develop all aspects of moratorium protocol for implementation if needed:

- Newsletter article on possible implementation, why it is used and the need to be implemented. This would be a preventative type article.
- Develop Op-Ed piece on restraint of water use in the summer months to avoid moratorium.
- Develop press releases for implementation.
- Develop door hanging notices for implementation and action.
- Develop policy strategy for enforcement.
- Develop notification contact list.
- Develop sample press conference announcement when implemented.
- Develop penalty scenario and possible tariff filing for violation of moratorium.

It is intended to stay focused on reducing outdoor water use as maximum day demand is of greatest concern to KCWA.

Other – Implement if available to us and time allows:

Partnership with URI – KCWA held an initial meeting with representatives from URI's Cooperative Extension. URI has conducted education and outreach in North Kingstown as part of a grant-funded program. They are interested in working with KCWA. They will decide by the end of February if they will submit proposal for grant funding. If yes, we will discuss details of potential program. It is anticipated that it would include a combination of research and education/outreach. If proposal is accepted, funding would be available in September 2005.

URI Coastal Fellows Program – This program is for undergraduate students in Environmental Sciences. Program matches student with mentoring organization (i.e. KCWA) to work on a summer project. Students work either 20 or 40 hrs. per week. Pay is \$8.65/hr. A 20-hr/wk. position would cost KCWA \$2800.00 for summer. KCWA has several potential conservation-related projects that would be beneficial. We must submit a description of project(s) before March 1, 2005 if we are interested. We can also seek a student on our own to provide these services by posting at URI and other colleges.

**KCWA WATER CONSERVATION PROGRAM
POTENTIAL OPPORTUNITIES FOR STUDENT INVOLVEMENT**

Research – Review water conservation programs that other water suppliers have implemented. Review to include local, regional and national suppliers.

Demonstration Garden – Design a demonstration or example garden for homeowner use.

Development of Brochures(s) – Design and produce a brochure(s) to promote various aspects of water conservation.

KCWA Web Page – Update web page to include water conservation section.

Research – Compile list and develop database of local contacts in the green industry (landscape architects, contractors, maintenance people, nurseries, horticulturists, irrigation experts, sod/seed producers, government and university experts).

PowerPoint Presentation(s) – Develop water conservation PowerPoint presentation(s) that could be used for presentations at schools and/or public meetings, etc.

School Education Program – Revise existing Kent County Water Authority education programs and curriculum outline and acquire material needed.

EXHIBIT I

February 17, 2005

CHANGE ORDER

OWNER FIELD
ENGINEER OTHER
CONTRACTOR

PROJECT: KCWA - TEMPORARY MODIFIED SERVICE
(name, address) AREA & PUMPING FACILITIES & SCADA

CHANGE ORDER NUMBER: 1
DATE: FEBRUARY 11, 2005

TO CONTRACTOR: C. B. UTILITY CO., INC.
(name, address) 99 TUPELO ST.
BRISTOL, RI 02809

ENGINEER'S PROJECT NO.: 02-012
CONTRACT FOR: KCWA - TEMPORARY MODIFIED
SERVICE AREA & PUMPING
FACILITIES & SCADA

The Contract is changed as follows:

EXTENSION OF TIME (AT NO ADDITIONAL COST TO KENT COUNTY WATER AUTHORITY). WORK TO BE FULLY COMPLETED BY APRIL 1, 2005 WITH THE EXCEPTION OF FINAL PAVEMENT. FINAL PAVEMENT SHALL BE COMPLETED BY MAY 27, 2005.

The original (Contract Sum) (Guaranteed Maximum Price) was	\$	481,075.00
Net change by previously authorized Change Orders	\$	0.00
The (Contract Sum) (Guaranteed Maximum Price) prior to this Change Order was	\$	481,075.00
The (Contract Sum) (Guaranteed Maximum Price) will be (increased) (decreased) (unchanged) by this Change Order in the TOTAL LUMP SUM PRICE amount of	\$	0.00
The new (Contract Sum) (Guaranteed Maximum Price) including this Change Order will be	\$	481,075.00

The Contract Time will be (~~increased~~) (~~decreased~~) (unchanged) by (0) days.
The date of Substantial Completion as of the date of this Change Order therefore is APRIL 1, 2005

JAMES J. GEREMIA & ASSOCIATES, INC.
ENGINEER

C. B. UTILITY CO., INC.
CONTRACTOR

KENT COUNTY WATER AUTHORITY
OWNER

272 WEST EXCHANGE ST., SUITE 201
Address

99 TUPELO ST.
Address

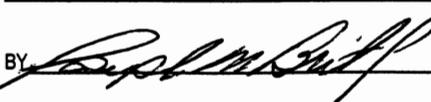
P.O. BOX 192
Address

PROVIDENCE, RI 02903-1025

BRISTOL, RI 02809

WEST WARWICK, RI 02893-0192

BY 
James J. Geremia, P.E., Principal

BY 

BY _____

DATE 11 Feb 05

DATE 2/11/05

DATE _____

EXHIBIT J

February 17, 2005

PLANNING DOCUMENT \$25,000/YEAR ALLOCATION

PROJECT	STATUS
Water Supply System Management Plan WSSMP	Approved & completed 5 year update due 2007
Clean Water Infrastructure Plan	Approval June 13, 2003. 5 year update due 2008
Vulnerability Assessment Bio-Terrorism Bill	Submitted December 19, 2003
Revised Emergency Response Plan	By June 19, 2004
Simplified EFP Topic Sheets/Employee distribution	December 2004

UPDATED CIP PROJECTS BOND FUNDING

PROJECT	STATUS
Mishnock Well Field (new wells) CIP - 1A	Project closed out.
Mishnock Transmission Mains CIP - 1B	Project closed out.
Mishnock Treatment Plant CIP - 1C	Project closed out.
R-CIP 19 Tiogue Avenue Main	Project closed out.
East Greenwich Well Treatment Plant - CIP-2	Temporary Sequestering Online. Questionnaire January 2005
Blackrock Road Transmission Main - CIP-4	Construction on-going. Concern on Construction Services.
Clinton Avenue Pump Station Rehabilitation CIP - 7A	Bid to be set.
Mishnock 4 Well Installation	On hold. RFP 4 & 5 plus control facility / T.P.

IFR FUNDED PROJECTS

PROJECT	STATUS
IFR 2003	Construction complete except Pulaski Street Paving.
IFR 2004	Design ongoing. Contract to be Divided/Add Cleaning & Lining
Geographic Information System Base Map	Completed.
Geographic Information System Second Phase	Mapping ongoing/winter shutdown
Tiogue Tank Modified Service Area	Station set. Hook-up on-going/C.O. for extension
Knotty Oak Road. Old CIP 5	Construction completed.
Setian Lane new pumping station and Frenchtown vault rehabilitation.	Recommend legal action. Liquidated Damages.
Setian Lane Tank painting	Completed.
Oaklawn Meter Replacement IFR	On-line, Construction Close Out
PWSB 78" / Johnson Blvd. P.S. Modification	Project to be delayed due to Setian Lane P.S.
Rehabilitation Mishnock #3	Redevelopment completed.
Revised Hydraulic Model	No additional task orders.
Color Study Mishnock Wells	On hold. Board authorization needed.
PROJECT	STATUS
Web site preparation	Up and running.
Strategic Plan	Sub-committee to develop plan.
Newsletter	Preparation for next issue.
CCR 2003	Mailed.
Colvintown Road	Pipe installed - Services to be installed. Spring 2005.