



GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE

-DIVISION OF-
WATER & WASTE SERVICES

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July 13, 2009

Mr. Brant Fisher
Environmental Engineer Specialist
Drinking Water and Environmental Health Section
Water Bureau
Michigan Department of Environmental Quality
P.O. Box 30273
Lansing, MI 48909-7773

Dear Mr. Fisher:

This letter is in response to the City of Detroit's letter of June 29, 2009, which transmits their comments regarding the water withdrawal permit application from the Genesee County Drain Commissioner's office. For ease of evaluation, the City of Detroit's comments are in italics and our response follows.

The City of Detroit and DWSD have a direct interest in MDEQ's decision on the permit application. We object to the issuance of this permit based on technical, financial and public policy concerns as set forth below. DWSD currently supplies water to GCDC and the communities that it proposes to serve with the water system it proposes to build. We strongly believe that GCDC's proposal violates the evaluation criteria in the Great Lakes Compact, that GCDC's proposal fails to address the availability and efficient use of existing water supply systems and that GCDC's proposed water system is not cost effective.

The City of Detroit's interest in our permit application is purely a financial interest. As one of the outer most customers of their system, we are charged additional fees for distance and elevation. These charges result in some of the highest rates on their system. With the loss of us as customers, DWSD will have to choose to either reduce their operation, maintenance, and debt service costs or increase charges to their municipal customers.

DWSD has contracts to supply water to Flint and the Greater Lapeer County Utilities Authority (GLCUA). Both are expired and continuing on a year-to-year basis. Flint in turn sells water to GCDC, which in turn sells water to several communities in Genesee County: Davison Township, Burton, Swartz Creek, Genesee Township, Mt. Morris Township, Vienna Township, Montrose Township, Flushing, Clayton Township, Gaines Township, Mundy Township, and Grand Blanc Township. GCDC proposes to continue selling water to these communities, as well as to Flint, GLCUA, and Sanilac County.

The Genesee County Drain Commissioner's office does not intend to recreate the buyer/seller arrangement. We have made application on behalf of the other communities and we will set-up an authority to supply raw water to each constituent community, who will, in turn, provide treatment and distribution to the local residents.



GCDC, Flint and GLCUA are served by DWSD's Port Huron Water Treatment Plant, which has a treatment capacity of 400 MGD. DWSD's water system has a current permitted capacity of 1,600 MGD. The intake for the Port Huron Water Plant has a capacity of over one billion gallons per day, although the plant has not yet been expanded to that level. DWSD's water system has more than enough capacity to serve the current and future needs of GCDC, Flint, GLCUA, and all of Southeast Michigan.

DWSD has always had intake capacity to serve our region but DWSD has neither the treatment nor distribution systems to meet either the peak day demands or the redundancy needed to ensure a safe and reliable water supply. DWSD states that we are served by the Port Huron facility, yet we are required to finance and support their other four plants and distribution systems.

The first negotiation session between DWSD, Flint and GCDC occurred on September 3, 2008 and was attended by Drain Commissioner, Jeff Wright, as well as members of his staff. Further meetings occurred on September 16, 2008 and March 10, 2009. Key attendees have included Commissioner Wright, Flint Utilities Director, Lyle Hippensteel, and Flint Finance Director, Suzanne Kayser.

The first negotiations began over 5 years ago in 2004 with the previous administration of DWSD. The current group has been involved in our negotiations for less than one year and is not aware of all of the discussions.

DWSD has addressed those concerns. In September 2007, based on requests from GCDC, Flint, and many other customers to expedite the provision of redundant supply to Flint/Genesee and to improve water pressure in other parts of its service area, DWSD announced its intention to construct the Flint Loop and the Northern Oakland Loop. These two water transmission main projects will extend a second water line from DWSD's system in Oakland County into Genesee County and Flint, where it will connect with the existing pipe, completing a loop in the system. The project has been designed to supply GCDC with its average day demand, should an emergency curtail service on the line from Port Huron. This should be sufficient to address GCDC's concerns about redundancy and emergency supply.

DWSD contradicts itself. The pipeline design contracts were awarded in the early spring of 2008. City Council even questions the projects moving forward without a long-term contract with Flint/Genesee, then Director, Victor Mercado, said that these lines are required regardless of Flint/Genesee. DWSD identified the true purpose of the two waterlines to serve their customer base in Oakland and Macomb Counties.

These two projects would also improve water pressure in Macomb and Oakland Counties and allow Lake Huron water to supply the entire DWSD system in case of an emergency that shuts down DWSD's four other water plants. This would be a substantial benefit to the entire region of Southeast Michigan.

The DWSD pipeline is designed to flow south out of Genesee to Oakland and Macomb. In an emergency situation, they can reverse the flow and provide us with only ADF. To provide us a true redundant supply, they must also construct the eastern Macomb loop from the Port Huron plant.

DWSD has not commented upon the probable cost of these other major improvements and the rate implications these improvements will have on all DWSD customers.

DWSD has completed the design of both projects, with considerable input and interface from GCDC. The total cost of the design has been \$28.6 million. The plans and specifications are complete and can be put out for bids as soon as Flint and GCDC sign new contracts with DWSD.

The projects were designed and authorized by the Detroit City Council prior to the current DWSD administration taking office. At the time of approval, then DWSD administration stated these pipelines needed to be constructed with or without Genesee/Flint.

On September 16, 2008, DWSD's Assistant Director of Engineering and its Project Manager presented the design, in detail, to Mr. David Jansen of GCDC. At the conclusion of the meeting, he indicated his belief that the loops would provide GCDC with adequate service in case of an emergency. The comments below are taken verbatim from meeting minutes which were not refuted, or objected to by Mr. Jansen:

All participants agreed that the meeting had been valuable, and Mr. Jansen said that DWSD had answered his technical questions about redundancy. He indicated that based on the information provided (given that a more detailed design would provide more comfort) gave him assurance that Genesee/Flint would receive adequate water supply in an emergency. With that in mind, there was a comfort level in the group (DWSD/Genesee) to continue the contract negotiations process.

The staff of DWSD did answer Mr. Jansen's questions and informed him that until the Macomb loop is constructed, we will not have a full redundant system. This was a technical meeting and did not answer any of the contractual concerns over the Master Agreement or the financial issues.

Using the completed DWSD design, GCDC constructs the northerly portion of the Flint Loop.

DWSD omitted that the reduction of 40% rates will require the Flint/Genesee group to expend \$268 million and be responsible for long-term operation and maintenance costs of the proposed pump station, which is to be located in Grand Blanc Township.

Although DWSD has continued to provide GCDC with information in response to questions about this offer, DWSD has received no response from GCDC. It should also be noted that GCDC filed an application for a withdrawal permit in February 2009, a fact it did not communicate to DWSD at the March 10, 2009 meeting.

Again, this administration is under the impression that negotiations began with them. The County has been working with DWSD over the last 5 years as we developed Phase I and II of our report. This administration became involved during Phase III. The County has always been open with DWSD and they knew we were going to compare our alternative against their best offer. To that end, the County decided that a withdrawal permit needs to be obtained prior to the establishment of the Karegnondi Water Authority.

And as DWSD states, these are negotiations and in negotiations, you need to keep both alternatives moving forward.

DWSD's 2003 Comprehensive Water Master Plan addresses providing enhanced redundancy in the water supply for Flint, GCDC and GLCUA. DWSD has completed the design work and is ready to start construction. The proposed new withdrawal is not, therefore, necessary to address the redundancy concern. Indeed, DWSD's system is the only system capable of ensuring a redundant system. Even if GCDC constructs its new system, it would still need to purchase water from DWSD's system in order to maintain the second source of water it needs for redundancy.

Genesee/Flint requested DWSD to consider providing the new pipeline with redundancy off the existing pipeline. Both the past and current administration said that they would not support our separation from the system. Therefore, the Phase III plan includes full redundant systems without reliance on the DWSD system. We have estimated a 120 million dollar reduction in cost if we could reach a mutual aid agreement with DWSD, but it is their position not to consider an interconnection.

Section 2(xi) of the Genesee supplemental data elaborates on the contention that the DWSD system is deficient by stating that an interruption of service has already had dramatic consequences. That section fails to point out that the interruption was associated with the massive power failure that occurred throughout the northeastern part of the United States in August 2003, which is not attributable to DWSD's system.

The buyer communities funded generators and secondary power sources for the system. These were not available or not working during the blackout. This statement only reinforces our contention that the DWSD water system does not provide adequate redundancy. Redundancy must include all critical aspects of a water supply. Power is a critical aspect.

Section 2 (viii) of GCDC's permit application estimates that the proposed service area will experience an approximately 34% growth in water demand over a 25 year planning period (2014 - 2039). DWSD's Comprehensive Water Master Plan projected only an approximately 13% increase in population in the combined Genesee and Lapeer Counties during the period 2010 - 2040. Based on the significant population declines in Michigan since the Comprehensive Water Master Plan was finalized, which have been well documented, and the anticipated impact of the recent economic downturn, Genesee's forecast of growth in demand appears to be unrealistic. Even if Genesee's projections are accurate, DWSD would have all the capacity necessary to meet that demand.

DWSD is correct, their Master Plan (CS-1278) only predicts a 13% increase in their service area. But their own report predicts a 53% growth for the service area covered by the Flint system. We have reduced this and increased our service area.

b. If the Proposal is for an increase Withdrawal or Consumptive use, whether efficient use is made of existing water supplies;

DWSD implies that we are seeking an increased withdrawal permit. The County is seeking a new withdrawal, therefore, Section 4.b does not apply. Furthermore, as stated in our application, the water loss from the proposed system at most will only be 25% of the water loss experienced by the current DWSD system.

Genesee's application fails to properly address the option of utilizing DWSD's existing water supply system, which it is required to do by Sec. 5.b of the Compact. GCDC fails to note that the DWSD water supply system is fully capable of meeting all of its needs and that DWSD has spent millions of dollars to address its request for a backup supply line. As such, the new withdrawal request is an unnecessary duplication of existing resources. Clearly, the proposed new withdrawal is inefficient with respect to the use of existing water supplies and water systems.

To avoid requesting a withdrawal permit, Genesee requested purchase of untreated Lake Huron water from DWSD. DWSD said no. Now DWSD reiterates that our application is for an increased withdrawal. If DWSD believes that we have ownership of a portion of the withdrawal capacity on their system, we are willing to pull our application for a new withdrawal and will submit an application for a relocation of the withdrawal. You cannot work both sides of the issue. Our permit is a new withdrawal.

Section 2(xi) of the application states that DWSD's system is not acceptable, using the following language:

"The Lake Huron water supply currently in place does not meet the requirements for reliability to the region. In the event of a failure on the single water supply pipeline that is servicing the region, several hundred thousand customers will be without a potable water supply. Such an interruption of service has already happened and resulted in closing of businesses, cancellation of surgical procedures, compromise of home dialysis, and issuance of boil water notices."

This statement is remarkable for what it leaves out. In recent years, DWSD has held a number of meetings with GCDC and Flint officials in an effort to develop a plan for providing additional reliability to them. The result of this effort has been DWSD's commitment to build a new water main from its Orion Pump Station in Oakland County to serve Flint and GCDC. This new water main will provide full reliability to GCDC. DWSD does not understand why GCDC failed to mention this in its application.

Since the construction of the existing pipeline in 1965, the City of Flint, Genesee County, the then MDPH, and MDEQ have been requesting a second pipeline or redundant supply to this region. DWSD has planned and promised to construct this line over the last 30 years. Their most recent plan stated it would be built in the 2040 decade. Only when Genesee became serious about an alternate supply did DWSD move forward with design of the pipeline with construction to begin in September 2008. Obviously, they have missed this date. As the State knows, a plan does not mitigate deficiencies. Genesee/Flint are tired of the promises and DWSD has not been willing to address the financial concerns of Genesee/Flint.

GCDC acknowledges, throughout its application, that the population its withdrawal would serve is already being served by DWSD. It argues, however, that an entirely new withdrawal, transmission and treatment system is the only way to address what Genesee characterizes as deficiencies in the DWSD system. The application fails, however, to provide statistical data regarding these alleged deficiencies. Obviously, this data should include dates, time, impacts, and suspected causes. This data should also identify the role of Flint's and/or GCDC's distribution systems in either causing or contributing to any alleged deficiencies. The application also fails to acknowledge that DWSD has a plan to address those alleged deficiencies, that DWSD has already designed those improvements and outlined a proposal that would implement those improvements and provide a rate reduction to Flint and GCDC.

Again, DWSD has been promising a redundant supply for 30 years. The State has deemed the County's water supply deficient because we do not have a reliable redundant supply. This water withdrawal and our subsequent system will address our redundancy issue.

Under GCDC's proposed plan, each of the three communities, GCDC, Flint, and GLCUA would be required to construct a new water treatment plant, duplicating the water treatment capacity that already exists in DWSD's system. GCDC's application does not mention this very costly element of its plan for a new water system. Clearly, the proposed new withdrawal is inefficient with respect to the use of DWSD's existing water system.

The proposed plan and costs includes new treatment facilities and redundant distribution system for the region. Treatment of Lake Huron water is significantly less costly than treatment of Flint River water or even Detroit River water, as DWSD well knows. The majority of costs for the project are in the pipeline and intake pipe. The water treatment costs is less than 25% of the capital cost.

GCDC claims that it needs to build a new water system in order to supply redundancy that would provide water in an emergency. However, in order to have that redundancy, GCDC would have to maintain a connection to DWSD's water system and continue to purchase a significant amount of water from DWSD.

Again, DWSD refused to consider an interconnect with their system. Our proposed plan and cost include a redundant system.

GCDC cannot simply close the connection to DWSD's system at the county line and open it in an emergency. In order to maintain water quality in the line, GCDC and Flint would have to continue to take some water from DWSD to maintain the connection. At the March 10, 2009 meeting, GCDC advised DWSD that it would have to continue to purchase a substantial amount of water from DWSD on a daily basis in order to achieve the level of redundancy it needs. If GCDC and Flint would have to continue to take a significant amount of water from a system that can provide all of their redundancy needs, building a new water system is not an efficient use of existing water supplies. That would be a violation of Sec. 4.11 of the Compact, which requires rejection of the application. Furthermore, the GCDC application does not offer any detail on how much water it would continue to purchase from DWSD in order to maintain redundancy after it completes its new system. This is a significant deficiency that should be addressed before MDEQ makes a decision on the application.

Once again, DWSD refused to consider an interconnect. We, again on March 10, 2009, asked if this was possible because it would reduce our construction cost. DWSD would not consider this option. An interconnection is not contemplated in our region's water supply system.

GCDC's application fails to mention the efforts DWSD has made to address its concerns, fails to disclose the need to build expensive new water plants, fails to fully disclose the cost and impact of its plans, and fails to disclose its own role in planning the Flint Loop Project. It also fails to fully address the fact that even after it builds its new system, it will still have to purchase a substantial amount of water from DWSD to maintain redundancy. This is disturbing, to put it mildly. GCDC is giving MDEQ a less than complete picture of the situation. Its failure to adequately address these issues violates the mandatory decision-making standards quoted above. This requires denial of the application.

DWSD allowed Genesee to participate in the route of the water line but not in the sizing or operational layout of the system. The purpose was to obtain construction and right-of-way permits not negotiations. Again, our plan does not include an interconnect with DWSD.

Flint is DWSD's largest customer. According to DWSD estimates, if Flint, GLCUA and GCDC were to leave DWSD's system, it would create an immediate 6% rate increase for all the rest of DWSD's 85 wholesale customers, as well as the residents of the City of Detroit. That is because the fixed costs of DWSD's water supply system would have to be distributed to a smaller customer base. The cost increase would occur at a time when the entire region is experiencing a widespread, significant economic downturn due to the loss of manufacturing jobs and reductions in automobile production. The cumulative effect of the loss of customer base on top of the already severe financial situation is a significant concern to DWSD and its customers.

This statement by DWSD identifies the failure of their rate model. If it were a true cost of service model, each community would be paying their cost of service. Loss of a customer should not impact another community's rate. Second, this is a decision by DWSD instead of reducing costs for reduced services, they would just pass the lost cost on to the remaining customers.

GCDC's application also fails to describe the economic burden that the construction of a new water intake, transmission pipeline and three new water treatment plants will place upon the residents of Flint, Genesee County, and Lapeer County. GCDC has stated that the estimated cost of GCDC's project is \$600 million.² That is the estimated cost for the intake, the pipe, three new water plants, pump stations and a reservoir. That figure does not, to our knowledge, include the cost of maintaining a connection to DWSD's system, which will be necessary if GCDC is to have the redundancy it needs. GCDC's failure to include and discuss the total cost of its project in its application is a significant deficiency that should be addressed before a decision is made on the application.

DWSD says it will build the pipeline. Genesee/Flint says it will build a pipeline. There will be an economic burden placed on the region regardless of who builds the pipeline. The point is moot. Again, DWSD has refused to consider an interconnect, which would reduce our overall construction costs.

Based on studies conducted by other DWSD customers that have considered constructing separate water supply systems, DWSD believes that the construction and operation of an entirely new, duplicative system would result in significant rate increases for the customers that GCDC proposes to serve. During the construction period, GCDC's customers will be paying for DWSD water in addition to paying the construction costs of the new system. That means a significant rate increase for the customers of GCDC, Flint and GLCUA. After the GCDC system becomes operational, it will continue to pay part of the cost of the DWSD system in order to maintain the redundancy it needs. We believe this will result in residents of Flint, Genesee County, and Lapeer County paying higher water rates than they currently pay.

Separate studies of different systems have no bearing on our application for new withdrawal. Genesee/Flint are looking for a long-term solution to our water reliability. Yes during the construction period, the region would have to purchase water from DWSD but over the 25 year study period, the region would be saving substantial sums of money versus a new contract with DWSD. The rates used in our study for DWSD were confirmed by DWSD.

Subsection 5.3. of the Compact establishes criteria relating to "the probable degree and duration of any adverse impacts caused or expected be caused by the proposed Withdrawal and use under foreseeable conditions, to other lawful consumptive or non-consumptive uses of water...". The permit application filed by GCDC addresses this criteria from the standpoint of impacts to the Basin and the natural resources, but does not consider the social and economic impacts. As noted above, residents of Detroit, DWSD's other customers, plus Flint, GLCUA and GCDC's customers would be adversely impacted by the proposed withdrawal, in the form of higher water rates. Clearly, GCDC's permit application is deficient with respect to this factor, as it does not provide a rate forecast based on expected service costs.

This is a bold statement. DWSD remaining customers will have a negative impact solely by the decisions made by the City of Detroit. Our region will see a positive impact in reduced costs and a reliable water system.

Beyond the criteria cited above from the Great Lakes Compact Decision Making Standard, there are other compelling issues. As indicated above, significant questions as to whether the proposed new intake, treatment plants and distribution system would be a cost effective way to serve the area. DWSD's cost estimates indicate that its existing water distribution system can furnish water to the area at much lower expense. Cost effectiveness will be an important factor in the state's decision whether to provide low interest loan assistance from the DWRF program. We would note that MDEQ has already rejected loan applications in similar situations where the proposed project would have withdrawn customers from an existing service area where the infrastructure was built and paid for with tax dollars. Specifically, MDEQ refused to finance a proposal from the City of Mt. Clemens to expand its wastewater treatment plant so that existing DWSD customers could withdraw from Detroit's system.

The County has applied for a withdrawal permit. We have not applied for a loan from the DWRF program. This has nothing to do with our request.

In addition, Genesee fails to demonstrate it financial capacity to undertake such a costly project. In the 2008 Comprehensive Financial Audit Report of the GCDC, the audit firm,

Plante Moran, identified significant deficiencies in Genesee's management of Bond Premiums and Discounts, as well as Bond Covenants. Plante Moran implies that Genesee has not been levying rates required to prevent violation of its bond covenants. Given the fact that its auditor cited GCDC for issues regarding its bond covenants, DWSD questions whether the appropriate risk analysis has been done regarding GCDC's financial strength and its ability to carry out its plans.

The County does admit to deficiencies in our 2007 CFAR. This issue was resolved within two weeks of the problem being identified. Our auditors interpreted an old bond covenant to apply to all outstanding bonds. Our bond attorney clarified the matter and we have submitted our 2008 CFAR without that deficiency. This, again, has nothing to do with our request for withdrawal.

Lastly, from a public policy perspective, we note that infrastructure investments need to be carefully considered given the limited capital resources available to finance new facilities. We believe that Michigan cannot afford to undertake construction of unneeded, redundant water supply facilities at a time when other infrastructure needs are going unmet. In our judgment, it is inappropriate to approve GCDC's water withdrawal application in this context.

DWSD does not believe Michigan can build a pipeline. In fact, DWSD does not believe we should build the pipeline but we should sign a 30 year contract and let them build a pipeline. The fact is a new redundant pipeline will be built! By us or DWSD. DWSD would like the State of Michigan to force Genesee/Flint to remain a customer of DWSD.

Under State law, the State cannot force a community to purchase water from another community. MCL 325.1004, Section 4(b)

(b) The department includes in the approval conditions related to depth, pumping capacity, rate of flow, and ultimate use that ensure that the environmental impact of the withdrawal is balanced by the public benefit of the withdrawal related to public health, safety, and welfare. This subdivision does not confer upon the department any authority to require a person to connect or to remain connected to an existing drinking water supply system owned by a political subdivision.

We would like to reiterate the following points:

1. Genesee County is requesting a new withdrawal.
2. DWSD has refused consideration of an interconnection and refused to consider selling us raw water from their intake.
3. The proposed system includes redundancy without use of the DWSD system.
4. Design and construction plans for the system will be prepared and submitted to the State after approval of the withdrawal permit.
5. Financing of the project will be developed after the approval of the withdrawal permit but prior to construction.

6. Flint/Genesee are open to discussion with DWSD for an interconnection or Mutual Aid Agreement. Flint/Genesee are willing to entertain any offers from DWSD that will make staying with DWSD more economically attractive as long as it provides a redundant service.

We believe our application for a new withdrawal is complete and is approvable by the State of Michigan.

Sincerely,



John F. O'Brien, P.E., Director
Division of Water and Waste Services

CC: Jeff Wright, Genesee County Drain Commissioner
Ted Henry, Genesee County, Chairman, Board of Commissioners
Honorable Dave Bing, Mayor, City of Detroit
Pamela Turner, Interim Director, DWSD
Mr. S. Chester, MDEQ
Mr. F. Ruswick, MDEQ
Mr. J. Cleland, MDEQ
Mr. W. Creal, MDEQ
Mr. J. Bredin, MDEQ
Mr. R. Walter, Law Department
Mr. M. Jacobs, Dykema Gossett
Mr. B. Foster, The Foster Group
Mr. C. Hersey, SEMCOG
Mr. R. Hinshon, Hinshon Environmental Consulting
Honorable Michael Brown, Mayor, City of Flint
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