#### April 15, 2013

Karengondi Water Authority 4160 Beecher Rd. Flint, Michigan 48532-2617

Ed Kurtz, Emergency Manager City of Flint 1101 South Saginaw Street Flint, Michigan

#### Gentlemen:

Over the last several months, governed by a process laid out by the State of Michigan, the Detroit Water and Sewerage Department (DWSD) has proposed a number of alternatives for long term water supply to the City of Flint. Each alternative was offered in the spirit of working in earnest to address the needs, priorities and concerns of the City of Flint and each provided an immediate cost reduction when compared to the current costs of water purchased from DWSD. In the final analysis conducted by Flint, these proposals did not overcome the desire for the Flint/Genesee region to be served by the same system and to have a voice in the future decisions governing the provision of water to this region.

Many of the proposals DWSD has made to Flint during this period are applicable to Flint/Genesee County or KWA with adjustments to demand and use requirements and would provide similar overall benefit. These options remain available for further discussion should the parties' desire. These prior proposals are included in summary form in Attachment 1 as an expanded table 6-1 from the February 2013 State of Michigan Contract No. 271N3200089, City of Flint Water Supply Assessment, submitted by Tucker, Young, Jackson, Tull, Inc. For comparison purposes only, DWSD's new proposal (Flint's 30% allocated share) is inserted.

The proposal scenarios outlined today offer a public/public partnership with options tailored to Flint/Genesee County or KWAs interests. For ease of writing, the remainder of this memo will present this proposal to KWA. Two basic scenarios are presented for consideration, both of which contemplate that KWA would enter a multi-year contract. Service commitments and usage definitions would be negotiated in the same manner as employed that have resulted in new contracts for other customers.

In brief, the proposal provides a unique opportunity to reserve capacity at DWSD's Lake Huron Water Treatment Plant and to participate in decision making for facility operation and capital investment through a joint operating committee. The proposal envisions that KWA would enter into a 30-year contract to purchase treated water directly onsite at DWSD's Lake Huron Water Treatment Plant.

In Scenario 1 the purchased water can either be pressurized or unpressurized. This first scenario results in a "supply only" rate schedule, with a "standby delivery" component to provide for emergency service at the existing Baxter / Potter connection. This scenario provides KWA the ability to construct new transmission owned and operated by KWA.

Scenario 2 maintains the public/public partnership concept and extends it to transmission facilities through which the Lake Huron Water Treatment Plant provides water. This scenario results in a "full service" rate schedule. The standby delivery component is eliminated, since the rate structure to KWA includes costs associated with the transmission system between the Lake Huron Water Plant and the Baxter / Potter connection.

DWSD proposes a modified rate schedule for the customers currently served through the contract with the City of Flint, which includes Flint and Genesee County. This modified schedule is intended to facilitate negotiations for a new water service agreement with the Karegnondi Water Authority (KWA). The scenarios presented herein represent the innovative thinking that DWSD and its new leadership are bringing to the table. Our goal is to provide the lowest cost water solution for the KWA service area.

The potential rate structures are introduced in summary form herein, with preliminary calculations using the proposed rate structures with FY 2013-14 as a baseline. These calculations and the accompanying discussion are based on the assumptions regarding contract terms that approximate recent discussions amongst the parties.

The proposal introduces the concepts, but does not definitively present all of the specifics, appreciating that such specifics are best addressed through negotiations designed to produce a new contractual agreement satisfactory to all parties.

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# Scenario 1 - Lake Huron Direct Supply Purchase:

- KWA enters into a long term partnering arrangement with DWSD to purchase all of its primary water supply directly at the DWSD Lake Huron water treatment plant.
- Supply rate schedule is designed to recover only water treatment revenue requirements. This rate schedule does not contain any delivery costs (pumping, transmission, storage, etc.).
- Supply rate schedule is computed based on specific costs associated with the Lake Huron Plant. No other DWSD revenue requirements, including those associated with other DWSD water plants, are included in the rate to KWA.
- Revenue requirements are separated into capital recovery and operation and maintenance
  expense elements. Baseline revenue requirement data (including operating budget, rate of
  return, depreciation assumptions, etc.) are identical to those developed for all other
  wholesale customers.
- KWA is allocated Lake Huron Plant <u>capital</u> revenue requirements based on the proportion of their contracted max day demand (assumed in these calculations at 40.6 mgd) relative to the total capacity at the Lake Huron Plant (400 mgd). The resulting revenue requirements are recovered through a fixed monthly charge.
- KWA is allocated Lake Huron Plant <u>operating</u> revenue requirements based on the proportion of their contracted average daily usage (assumed in these calculations at 24 mgd) relative to the total average daily usage at the Lake Huron Plant (assumed at 125 mgd in these calculations).
- Calculations are conducted for two alternatives. Purchase of *pressurized* water (after high lift pumping) and *unpressurized* water (KWA takes directly from clearwell.)
- Contract includes an arrangement for emergency service at the existing Baxter / Potter connection, and computes a standby charge related to such service.
- The standby charge is computed in the manner set for the by the American Water Works Association (AWWA) in its Manual of Water Supply Practices M1 "Principles of Water Rates, Fees, and Charges" Manual M1.
  - o KWA is allocated one day's worth of transmission related capital revenue requirements.

## Scenario 2 - "Full Service" Lake Huron System

- Same as the "pressurized" option in Scenario 1, except that concept is extended to the pumping, storage, and transmission facilities directly served by the Lake Huron Plant
- Transmission rate schedule is computed based on specific costs associated with these facilities. No other DWSD revenue requirements, including those associated with other DWSD transmission mains, etc, are included in the rate to KWA.
- Revenue requirements are separated into capital recovery and operation and maintenance
  expense elements. Baseline revenue requirement data (including operating budget, rate of
  return, depreciation assumptions, etc.) are identical to those developed for all other
  wholesale customers.
- KWA is allocated Lake Huron "transmission system" <u>capital</u> revenue requirements based on the proportion of their contracted max day demand (assumed in these calculations at 40.6 mgd) relative to the total capacity at the Lake Huron Plant (400 mgd). The resulting revenue requirements are recovered through a fixed monthly charge.

- KWA is allocated Lake Huron "transmission system" operating revenue requirements based on the proportion of their contracted average daily usage (assumed in these calculations at 24 mgd) relative to the total average daily usage at the Lake Huron Plant (assumed at 125 mgd in these calculations).
- Standby charge is eliminated.

The resulting potential proposed rate structures under both Scenarios are summarized below.

# Potential Proposed DWSD Water Rate to KWA Lake Huron Direct Scenario

	1 - Supply Rate @ LH Plant		2 - Full Service
	<u>Unpressurized</u>	Pressurized	Wholesale Rate
Supply Rate			
Fixed Monthly Capital Charge - \$	219,900	316,600	503,200
Commodity Rate - \$/Mcf	2.60	4.16	5.31
Average Unit Cost - \$/Mcf	4.85	7.40	10.46
Monthly Standby Charge	167,500	110,300	0
Total Monthly Charge	387,400	426,900	503,200
Total Average Unit Cost - \$/Mcf	6.57	8.53	10.46

The direct comparison over the period 2013-2042 is demonstrated in Attachment 2.

As KWA considers this proposal, I offer the following observations for consideration:

- The Public Partnership requires the least near term capital investment and preserves the economy of scale associated with operation of a large regional system resulting in an <u>immediate reduction</u> in the cost of water supply for Flint/Genesee, making the identified and necessary near term investment in local water infrastructure more feasible.
- The Public Partnership provides the opportunity to optimize service level and efficiency through collaborative asset management decision making.
- The Public Partnership provides representation for critical decision making consistent with DWSD newly demonstrated interest in engaging our customers in critical decisions impacting them. This formalizes that interest in contractual terms.
- The Public Partnership reduces the risks identified with a 'go alone' solution, including further declines in use/sales (see graph), project cost overruns or schedule delays and other unforeseen costs inherent in starting a new venture. See Attachment 3
- The DWSD Board of Commissioners has previously approved sale of raw water from the Lake Huron facilities for raw water end use. We remain open to further discussion about the raw water capacity needs and stand ready to provide an affordable commodity option.



DWSD is an organization in transformation. In April of 2011, a new Board of Commissioners was seated with additional autonomy and more direct customer representation. In the past year we have demonstrated the ability to reduce costs, resolve long standing compliance issues and have gained support for establishing a new legal and operational model for DWSD that could enable broadened representation for Flint/Genesee on the Governing Board.

I remain available to discuss this proposal to assure that each of the issues critical to Flint/Genesee are addressed.

Best regards,

Sue McCormick, Director

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Detroit Water and Sewerage Department

Cc: Andy Dillon, State Treasurer

Dayne Walling, Mayor - City of Flint

Kevyn Orr, City of Detroit Emergency Financial Manager

Jeff Wright, Genesee County Drain Commissioner

James Fausone, Chair – Detroit Board of Water Commissioners

## **DWSD Water Supply Costs Estimates to Flint**

Wate	r
Suppl	у
	Ranking
Costs (	(\$) by
<u>throug</u>	<u>th</u>
<u>Option</u> <u>2042</u>	<u>Cost</u>
DWSD 4/15/2013 Scenario 2 587,990,	,650 1
DWSD 8 MGD Max Day @ Imlay 634,795,	488 2
KWA (10/31/12 No Overruns, As Provided) * 649,775,	,166 3
DWSD 8 MGD Max Day @ Baxter / Potter 672,671,	705 4
KWA-1 (10/31/12 No Overruns with Financing	
Costs) 707,279,	,715 5
DWSD 12 MGD Max Day @ Imlay 725,576,	803 6
DWSD 12 MGD Max Day @ Baxter / Potter 762,110,	308 7
KWA-2 (Treasury Estimate) 766,784,	313 8
DWSD 12 mgd Twin Line Proposal / No	
blending 818,092,	150 9
DWSD 18 MGD Max Day @ Baxter / Potter 821,226,	268 10

# Italicized Options as presented in TYJT Report

# DWSD Water Supply Costs Estimates to Flint / GCDC \$ millions

	All Water		
		Ranking	
	Costs (\$)	by	
	<u>through</u>	·	
<u>Option</u>	<u>2042</u>	<u>Cost</u>	
DWSD 4/15/2013 Scenario 2	3,282.00	1	
Estimate of KWA	4,090.06	2	



# ${\tt SUMMARY\ OF\ \underline{TOTAL}\ PROJECTED\ WATER\ COSTS\ TO\ FLINT/GCDC\ -\ SCENARIO\ COMPARISON\ \textit{(\$\ millions)}}$





