

July 10, 2018

Memorandum

To: Deirdre Henry, Treasury Manager

Great Lakes Water Authority

From: Brian Quinn, Managing Director

PFM Asset Management LLC

Re: Review of the Great Lakes Water Authority's Investment Policy Statement

PFM Asset Management LLC ("PFM") appreciates this opportunity to review the investment policy of the Great Lakes Water Authority (the "Authority" or "GLWA"). Our objective in presenting this memorandum to the Authority is to identify significant changes that the Authority can undertake to enhance its investment policy and its portfolio management strategy. The comments below are based on a comparison of your investment policy to current state investing regulations (Michigan Public Act 20 of 1943 Investment of Surplus Funds of Political Subdivisions, as amended) and our experience with similar governmental investment policies throughout the state of Michigan and throughout the country.

Based upon our review, PFM feels that the Authority's investment policy is consistent with the governing Michigan regulations but has a few areas for improvement. Below is an outline of the material revisions that PFM feels that the Great Lakes Water Authority can make to enhance its investment policy and investment management program:

Subject Matter	Description of PFM's Suggestion
Money Manager	The Authority could add a stipulation to the investment policy that contains
	added language that specifically states that GLWA can hire a qualified outside
	investment advisor as a money manager provided that said advisor meets
	standard industry qualifications and is registered with the SEC under the
	Investment Advisers Act of 1940.
Selling of Securities	The investment policy could incorporate language from GFOA standards
	that allows for the sale of investments for specific purposes within the overall
	investment strategy.
Bankers' Acceptances	The investment policy could state that bankers' acceptances carry a top tier
	short-term rating (A-1/P-1 or better) and mature not more than 180 days
	after the date of purchase.
Safety Guidelines	To enhance its safety, the Authority could possibly formally stipulate in its
	investment policy that the purchase of certificates of deposit, commercial
	paper, bankers' acceptances, repurchase agreements, and municipal bonds be
	restricted to its own or its qualified investment advisor's approved issuer list
	in which there is an establishment of a formal credit review process when
	purchasing these particular types of investments.



Subject Matter	Description of PFM's Suggestion
Asset Allocation	We recommend that the Authority place an overall limit on certificates of
	deposit, commercial paper, bankers' acceptances, municipal bonds, and repo
	and limit the percentage of the portfolio to be invested in these types of
	securities to say a maximum of 50% for each security type.
Issuer Limitations	To strengthen diversification, the Authority should incorporate a limit to the
	amount of exposure to any one certificate of deposit, municipal bond,
	bankers' acceptance, commercial paper, and repurchase agreement issuer to
	5% of the overall portfolio as this would further enhance the risk
	management for these types of investments.

While the above changes will help to improve the overall internal controls with regards to the Great Lakes Water Authority's investments, please note that no undue risk is being taken.

As a national investment advisor to governmental entities, we benefit from being exposed to numerous investment policies. It is our opinion that the best policies are simple, not too restrictive, and are congruent with the prevailing regulatory guidelines. Further, good policy is meant to withstand the test of time (with the exception of changes in regulations) and does not unduly restrict the investment manager from making sound investment decisions.