



## Legislation Details (With Text)

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**Title:** Resolution Regarding Acceptance and Filing of Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project, FY 2019 State Revolving Fund (SRF) Project Plan

**Sponsors:** Nicolette Bateson

**Indexes:** Finance

**Code sections:**

**Attachments:** 1. Resolution -SRF Project Plan Approval- Ferric Chloride, 2. Handout- GLWA PS-1 Ferric Chloride System Rehab and Struvite Removal 061318

Date	Ver.	Action By	Action	Result
6/20/2018	1	Board of Directors	Approved	Pass

### Resolution Regarding Acceptance and Filing of Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project, FY 2019 State Revolving Fund (SRF) Project Plan

Agenda of: June 20, 2018  
Item No.: **2018-785**  
Amount: \$10,297,181

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Sue F. McCormick  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** June 13, 2018

**RE: Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project, FY 2019 State Revolving Fund (SRF) Project Plan**

#### MOTION

Upon recommendation of Nicolette Bateson, Chief Financial Officer/Treasurer, and Suzanne Coffey, Chief Planning Officer and Interim Chief Operating Officer (COO) for the Water Resource Recovery Facility (WRRF), The Board of Directors (Board) of the Great Lakes Water Authority (GLWA), **execute a resolution pertaining to securing low interest loan assistance through SRF for Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project as detailed in this Project Plan;** and authorizes the CEO to take such other action as may

be necessary to accomplish the intent of this vote.

### **BACKGROUND**

GLWA is required to remove phosphorus from wastewater flows to reach limits as specified by the NPDES permit. Phosphorus has been shown to be a contributor to algae buildup in the Great Lakes. The primary method for removing phosphorous at the GLWA WRRF is by adding iron salts (ferric or ferrous chloride) to the wastewater stream at each of the two (2) pump stations (PS-1 and PS-2) and then precipitating it out in the primary clarifiers. The ferric chloride feed system at PS-2 has been recently rehabilitated, but the system at PS-1 needs rehabilitation. Rehabilitating the ferric chloride feed system at PS-1 will be critical for the WRRF to continue to remove phosphorus to the limits required in the NPDES permit.

GLWA has prepared a project plan for the Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project. The Public Hearing on the FY 19 Pump Station No. 1 (PS-1) Ferric Chloride System Rehabilitation and Struvite Removal Project is on June 13, 2018 at 1:00 P.M. The Resolution is scheduled for action after the Public Hearing. The Resolution must be approved and signed the same day to ensure that the finalized Project Plan is assembled, printed, and submitted to the Michigan Department of Environmental Quality (MDEQ) by July 1, 2018.

### **JUSTIFICATION**

The primary purpose of the project is to provide efficient and reliable operations at the Water Resource Recovery Facility (WRRF) by implementing necessary improvements to the Pump Station No. 1 Ferric Chloride System and Waste Activated Sludge (WAS) Transfer Pipeline.

Currently, WAS is thickened at the WRRF Complex B Gravity Thickeners. There is a single line that transports WAS to Complex A where the thickened WAS is blended with thickened Primary Sludge. The blended sludge is then pumped on for dewatering and then ultimate disposal. Recent investigations have indicated significant buildup of struvite in the pipe that transports thickened WAS to Complex A. Addressing the issues associated with the struvite buildup in the WAS transport line will allow the WRRF to continue to thicken, dewater and ultimately dispose of biosolids that are removed during the treatment process.

GLWA wishes to utilize a low interest loan under the State of Michigan State Revolving Fund (SRF) for this project and a public hearing on the project plan was scheduled for 1:00 p.m. on June 13, 2018. The attached Resolution accepts the project, directs GLWA staff to address all public comments, prepare the responsiveness summary, and publish the final Project Plan, and authorizes GLWA's CEO to transmit the final FY 2019 SRF Project Plan to the Michigan Department of Environmental Quality and to secure an SRF loan for the project.

### **BUDGET IMPACT**

Debt service is anticipated to begin in FY 2020 for this project and will be included as part of the FY 2020 financial plan.

### **COMMITTEE REVIEW**

This matter was reviewed by the GLWA Audit Committee at its meeting on May 22, 2018. The Audit Committee unanimously recommended that the GLWA Board adopt the Resolution as presented.

### **SHARED SERVICES IMPACT**

This item does not impact the shared services agreement between GLWA and DWSD.