STATE OF IOWA
FLOOD MITIGATION PROGRAM
PROGRESS REPORT

PERIOD COVERED BY THIS REPORT	1/1/2014 to 10/31/2014
LOCAL CONTACT NAME:	Steven Rackis, Housing Administrator
GOVERNMENTAL ENTITY:	City of Iowa City, IA
ADDRESS:	410 E. Washington St.
	Iowa City, IA 52240-1826
TELEPHONE NUMBER:	319-887-6065
PROJECT TITLE:	Iowa City Wastewater Treatment Plant Relocation Project
AGREEMENT NUMBER:	2013-0
ACTIVITY COMPLETION TIMEFRAME:	12/4/2013 to 12/31/2016

	FEDERAL	LOCAL	STATE	TOTAL
TOTAL FUNDS APPROVED:	$ 35,011,800	$ 19,933,200	$ 8,497,249	$ 63,442,249
TOTAL FUNDS EXPENDED TO DATE:	$ 35,011,800	$ 16,489,156	$ 158,187	$ 51,659,143
PROJECT OVERRUN/ (UNDERRUN):	**$ -**	**$ 3,444,044**	**$ 8,339,062**	**$ 11,783,106**
The percentage of actual work that has been completed at the end of the reporting period (not a % of funds expended)				**75%**
The estimated cost of the project at completion (which may even exceed the awarded amount)			**$**	**63,442,249**

Type of Expense & Funding Source		Budget (from Application)	Federal/ Local/State	Total Expended to Date	Remaining Balance
Engineering/Contractual Services:		$ 6,204,399			
South Plant	EDA, CDBG, I-Jobs, LOST, WO		Federal/Local	$ 5,958,000	
North Plant	Sales Tax Increment		State	$ 111,458	
				$ -	
	TOTAL			$ 6,069,458	$ 134,941
Env. & Historic Preservation Reviews		$ 70,000			
South Plant	EDA, CDBG, I-Jobs, LOST, WO		Federal/Local	$ 70,000	
				$ -	
				$ -	
	TOTAL			$ 70,000	$ -
Construction:		$ 56,079,679			
South Plant	EDA, CDBG, I-Jobs, LOST, WO		Federal/Local	$ 44,672,956	
North Plant	Sales Tax Increment		State	$ -	
North Plant	Interest Expenses		State	$ 41,649	
				$ -	
	TOTAL			$ 44,714,605	$ 11,365,074
Management Costs		$ 1,088,171			
South Plant	EDA, CDBG, I-Jobs, LOST, WO		Federal/Local	$ 800,000	
North Plant	Sales Tax Increment		State	$ 5,080	
				$ -	
	TOTAL			$ 805,080	$ 283,091
		$ -			
				$ -	
				$ -	
	TOTAL			$ -	$ -
		$ -			
				$ -	
				$ -	

TOTAL			$ -	$ -
Total Project Budget Summary	**$ 63,442,249**		**$ 51,659,143**	**$ 11,783,106**

FUNDING SOURCE:	FEDERAL (from Application)	LOCAL (from Application)	STATE (from Application)	**Total Expended to Date**
Economic Development Authority	$ 22,000,000			$ 22,000,000.00
CDBG Supplemental Disaster	$ 13,011,800			$ 13,011,800.00
I-Jobs		$ 6,345,293		$ 6,345,293.00
Local Option Sales Tax		$ 8,610,000		$ 8,610,000.00
Wastewater Operations		$ 4,977,907		$ 1,533,863.00
Sales Tax Increment			$ 8,497,249	$ 158,187.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
Total Project Funding Source	**$ 35,011,800**	**$ 19,933,200**	**$ 8,497,249**	**$ 51,659,143.00**

Indebtedness Incurred (Bonds, etc.)	Rate of Interest	Length of Term (start & end)	Costs of Issuance	Net Proceeds
North Wastewater Plant Demolition	2.78%	7/1/2014 - 6/30/2014	$ -	$ 6,000,000
	0.00%		$ -	$ -
	0.00%		$ -	$ -

NON-PUBLIC INVESTMENT - Entity	Total to Date
	$ -
	$ -
	$ -
Total Non-Public Investment	**$ -**

Project Status- entire project (Check One)			Description of significant activities this **semi-annual term.** Include comparison of actual accomplishments to the objectives identified in your application. Attach pictures and a narrative. Status changes or delays, please explain reason.
	X	On Schedule	The South Wastewater Plant Relocation is 98% complete. Repair of a damaged roof will complete the project. All grant funds were expended effective 12/31/2013. The North Wastewater Plant Demolition is still in the Engineering & Design phase. The work schedule was updated to show the Wetland Development & Ralston Creek Improvements will occur simultaneously. Also attached is a memo from Tetra Tech recommending the 5-acre site be restored by utilizing a variety of wetland & upland areas rather than just wetland areas alone. The engineer & design will continue to advance the concept plan in a manner that replicates historic configurations & maximizes water quality treatment opportunities using green infrastructure.
		Delayed	
		Canceled	
		Completed	
		Suspended	

Application Work Schedule (Milestones)			**Milestone Status**
#	Description:	Completion Date:	Actual Completion Date:
1	City Council Resolution	2/1/2014	12/17/2013
2	Bid and Award Engineering and Design	4/1/2014	5/6/2014
3	Engineering and Design	11/1/2014	
4	Bid and Award Demolition	2/1/2015	
5	North WWTF Demolition	6/1/2015	
6	Bid and Award Site Grading	6/1/2015	
7	Site Grading	9/1/2015	
8	Bid and Award Wetland Development & Ralston Creek Improvements	9/1/2015	

9	Wetland Development & Ralston Creek Improvements	12/1/2015	
10	Project Closeout Activities	12/31/2016	
11			
12			
13			
14			

Person Completing this Report: Steven J. Rackis

Date: 12/9/2014

I, the undersigned, hereby certify that the above information is accurate and true, and in accordance with the approved project plan and state and federal regulations and policies governing this award.

, FINANCE DIRECTOR

Signature of Authorized Representative or Governmental Entity

Instructions to complete this form

Areas shaded [ ] are to be completed by State HSEMD Personnel.

Areas shaded [ ] are to be completed by the governmental entity or authorized administrator.

TETRA TECH

MEMO

To:	Karen Howard, City of Iowa City
Cc:	
From:	Russ Dudley, Tetra Tech
Date:	November 3, 2014
Subject:	Restoration approach for Ralston Creek and the decommissioned wastewater treatment plant

The construction of the North Wastewater Treatment Plant and Highway 6 in Iowa City several decades ago, along with the need to protect this critical infrastructure from flood events, resulted in the straightening and hardening of Ralston Creek and created a disconnection of the Ralston Creek and Iowa River floodplains. With the removal of the buildings and equipment, this site has the opportunity to transition back to its historic, natural condition. Iowa City has agreed to restore a 5-acre portion of this site to a wetland condition as part of the terms of a federal grant. After further analysis, I feel the site is better suited to 5 acres of floodplain restoration involving wetland and upland zones, rather than 5 acres of wetlands alone.

Tetra Tech is providing support through a technical assistance award from the U.S. Environmental Protection Agency to to produce a concept plan for the restoration of Ralston Creek that improves flow and habitat conditions and maximizes treatment of stormwater overflows in constructed wetlands within the 5-acre portion of the reclaimed floodplain. The approach to the conceptual design of this restoration site was to re-create the historic floodplain conditions and establish an off-channel wetland to maximize water quality treatment at frequent storm events. This approach requires the establishment of multiple elevations that replicate the functionality of typical floodplain systems in this region but also stabilizes entry and exit points for flows from both Ralston Creek and the Iowa River. Ultimately, the functionality of the flood flow and water quality components of the site should seamlessly integrate with the other proposed modifications and amenities of the park site to encourage public interaction and environmental education in all portions of the reclaimed treatment facility site.

Multiple zones located at different elevations are typical of forested floodplains within Iowa,. Randall and Herring (2012) noted that “flooding can both enhance and stress a riparian ecosystem.” They note three main floodplain site types, shown in the figure below, as point bars, first bottoms, and second bottoms. The design of the restored Ralston Creek and reclaimed floodplain follows these types, with the point bar established by adding curvature to the Ralston Creek pattern, the constructed wetland simulating an oxbow feature within the first bottom, and the remnant treatment facility site elevation serving as the high terrace or second bottom.

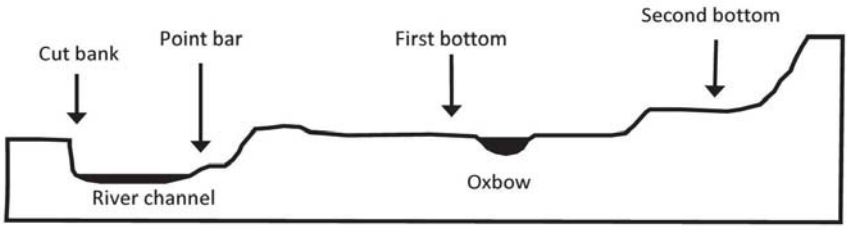

Figure. Floodplain Site Types (Randall and Herring 2012)

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Replicating these multiple elevation zones typically found in natural floodplains of this region helps to maintain intentional flow pathways maintaining overall stability and functionality of the site. These multiple elevation zones will be able to better support a diversity of native vegetation that will be adaptable for a variety of hydrologic conditions. And multiple zones will produce variability of viewsheds and habitat, and will readily tie into other park components located on the site, to create a more robust setting for local residents and users.

Alternatively, a 5-acre wetland site would have more undefined flow paths and could result in locally unstable areas and headcuts into the wetland. Vegetation that would survive in the wetland area would not be able to withstand drastic changes in hydrology, and no native upland vegetation would be available to recolonize impacted areas, potentially opening the door to invasive species. Finally, large marsh areas adjacent to streams are not representative of the oxbow configuration typically found throughout this region.

For these reasons, I recommend the 5-acre site is restored by utilizing a variety of wetland and upland areas rather than just wetland areas alone. Tetra Tech will continue to work with Iowa City, USEPA, and the park planner to advance the concept plan in a manner that replicates historic configurations and maximizes water quality treatment opportunities using green infrastructure.

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