### **Request for Proposal**

For

Design, Engineering and Construction Services

For

The

Cuyahoga River Low Head Dams Removal

And

**River Restoration Project** 

**Proposals** 

Accepted until February 28, 2012

Office of the City Engineer

2310 Second Street

Cuyahoga Falls, Ohio 44221

### REQUEST FOR PROPOSAL

For

### DESIGN, ENGINEERING & CONSTRUCTION SERVICES

### Cuyahoga River Low Head Dams Removal & River Restoration Project

### I. INTRODUCTION

The City of Cuyahoga Falls proposes to retain the services of a design-build team (Team) to perform the duties prescribed in connection with the removal of two (2) low head dams and the restoration of the Cuyahoga River as described below. The project will remove the Mill (or Sheraton) Dam and the Powerhouse (or LaFever) Dam. Both dams are located approximately one (1) mile upstream of the Gorge Dam, in Cuyahoga Falls, Ohio.

The dams are to removed as one project. The adjoining structures under the adjacent buildings next to the dams will need to be stabilized to prevent structural failure due to change in hydraulic properties associated with the dam removals.

Completion of this project will be in compliance with the Lower Cuyahoga River TMDL (2003), and the Ohio WQ and Biological Criteria. Post-construction QHEI and IBI scores are projected to be higher than current scores, as the flow alteration and habitat impairments caused by the low head dams and their hydromodification to the river will be removed.

### II. BASIC SCOPE OF SERVICES

The basic scope of services shall include, but not be limited to:

A. Coordinate all aspects of the design and construction of the project for the City of Cuyahoga Falls in accordance with the Ohio Water Pollution Control Loan Fund Water Resource Restoration Sponsor Program Project Nomination Form (copy attached), Sponsorship Agreement by and between the City of Cuyahoga Falls and the Northeast Ohio Regional Sewer District (copy attached), and the Cuyahoga Falls Dam Removal and Cuyahoga River Restoration WRRSP Preliminary Restoration Plan Outline (copy attached).

- B. Coordinate all work and consult with the City regarding all aspects of the Project.
- C. Administer the pre-construction meeting.
- D. Monitor all work progress and advise the City when the Project is not on schedule and provide recommended corrective actions.
- E. Provide full-time Project representation to coordinate construction work and contract administration, including attendance to all Project-related meetings, monitor of work to be in compliance with plans and specifications, and provide all other construction management functions for administration of the contract.
- F. Conduct regularly scheduled progress meetings, and provide the City with monthly progress reports regarding the progress of the work.
- G. Receive and process all shop drawings.
- H. Receive and forward to the City for processing, Contractor's payments.
- I. Provide Project inspection, coordination and testing to assure compliance with contract documents.
- J. Maintain reports of daily work and current record drawings, to be submitted to the City at the completion of the Project.
- K. Coordinate and process payment requests with the Project sponsor, Northeast Ohio Regional Sewer District.
- L. Preparation of a Storm Water Pollution Prevention Plan, and coordinate approval with Summit Soil & Water Conservation District.
- M. Coordinate with Army Corps of Engineers and Ohio Department of Natural Resources for applicable permitting. It is anticipated that nationwide permits will be utilized on this Project.
- N. After the City receives, reviews and approves 30% completion plans prepared by the Team, the Team will be authorized to begin construction activities. This will end the Pre-construction Design Services phase of the contract, and begin the General Conditions phase of the contract.

### III. OBJECTIVE

The objective is to request a Statement of Qualifications (SOQ's) to select a qualified design-build team to perform the duties prescribed in the attached documents in connection with the Cuyahoga River Low Head Dams Removal and River Restoration Project. Because the services include professional services, because qualified consulting engineering efforts could reduce the overall Project cost and because the quality of the public improvements depends on the qualifications of the design-build team, selection of the design-build team will be based upon a predetermined set of weighted criteria.

### IV. <u>EVALUATION CRITE</u>RIA

The following are the primary evaluation criteria the City plans to utilize to select the best-qualified Team. In addition to the evaluation criteria, the City will be looking at habitat scoring experience. Selection is very subjective in many areas and the decision of the City Administration will be final and not subject to re-evaluation by the Teams submitting a Statement of Qualifications.

- Responsibility and stability such considerations as length of time team members have been in business, length of time principals have been with firm, financial responsibility, professional liability coverage, etc.
- Experience such considerations as other similar projects completed by the team members, similar river restoration and Level 3 habitat scoring abilities, range of in-house capabilities etc.
- Location Such consideration as location of team members offices that will be responsible for project coordination, previous work in the general geographic area, key project personnel office location, etc. Lower project costs should result if limited travel expenses are required and better communication can be maintained which should result in a higher quality project.
- Quality of work Such considerations as adequateness of material supplied to permit evaluation, evaluation, quality of presentation, cooperation, concern, etc.
- Time schedule to complete the Project. Because of Bicentennial activities beginning on August 3, 2012, substantial completion of this Project shall be July 15, 2012.

The City will accept SOQ's and proposals until 12:00 noon, **Tuesday**, <u>February 28</u>, <u>2012</u>, at the Office of the City Engineer, 2310 Second Street, Cuyahoga Falls, Ohio 44221. There will be a pre-proposal submittal meeting on Thursday, February 16, 2012, at 2:00 p.m., in the Hopewell Room at the Natatorium, 2345 4th Street, Cuyahoga Falls. Anyone interested in submitting a proposal for this project is encouraged to attend.

Each team shall submit a total of three (3) copies of the SOQ's and proposal forms in a sealed envelope clearly marked on the outside "Statement of Qualifications and Proposal for the Cuyahoga River Low Head Dams Removal and River Restoration Project."

The City retains the option of rejecting or accepting any Statement of Qualifications and Proposal.

### V. STATEMENT OF QUALIFICATIONS

The specific format of the Statement of Qualifications (SOQ's) shall be per the responding team's judgment, however, shall include the following data:

- 1. Ten-page project summary narrative defining the team's interpretation of the scope of the Project and approach to river restoration.
- 2. Project personnel organization.
- 3. Team Profile.
- 4. Principal Profiles.
- 5. Technical Expertise Profiles.
- 6. General anticipated project schedule or time line.
- 7. Additional pertinent information

The City requests that, in addition to a general list of representative projects, responding teams select one or two of its completed projects of similar size and scope. The selected project shall be a project that has been completed for at least three years but no more than five years. A detailed description of services rendered, the name, mailing address and phone number of the client's project manager, and the name and mailing of the general contractor.

The responding teams are also requested to provide a listing of proposed project team members that will most likely work on this project. Members should include personnel from the partner down to the engineer-in-training level. Subprofessional: level employees not providing a significant role on the project do not need to be included.

A resume of each member of the team is needed and should detail relevant experience, length of service with the firm, educational background, and professional background. Sub-consultant's roles on the project should also be listed.

### VI. <u>INTERVIEWS</u>

The City reserves the right to conduct face-to-face interviews with any, all, or none of the responding Teams. In the event the City selection committee deems interviews necessary to select the best Team, the City will establish a meeting at a mutually acceptable time at City offices. The City selection committee will meet key members of the Team's proposed project team. It shall be the selection committee's sole decision on whether any interviews are held and with which firms interviews are held.

### VII. REFERENCE MATERIAL

In order to provide a location reference the following attachments are included:

- A. Ohio Water Pollution Control Loan Fund, Water Resource Restoration Sponsor Program, Program Year 2011 Project Nomination Form.
- B. Sponsorship Agreement by and between the City of Cuyahoga Falls and the Northeast Ohio Regional Sewer District.
- C. Cuyahoga Falls Dam Removal & Cuyahoga River Restoration WRRSP Preliminary Restoration Plan Outline.
- D. Ohio Historical Society concurrence with the Project.
- E. Mill/Sheraton Dam construction photographs.

VIII.	DESIGN-BUILD PROPOSAL FORM
	Pre-construction Design Services
	Lump Sum for all Pre-construction Design Services
	\$
(Price	e in written words)
	General Conditions
	Lump Sum price for all General Conditions Services:
	\$
	The General Conditions period covered by this lump sum is from:
	To
	Date Date
	Fee on Cost of Work:
	Fee expressed as a percentage of the total cost of work
11	
	nowledge the above stated pricing for said services includes all scope as orth in this SOQ, this Proposal, and the Attachments.
Repr	ature of authorized Design-Build Team Date esentative as noted in the cover letter e Proposal)

# ATTACHMENT A

WRRSP

Project Nomination Form

# OHIO WATER POLLUTION CONTROL LOAN FUND WATER RESOURCE RESTORATION SPONSOR PROGRAM

### PROGRAM YEAR 2011 PROJECT NOMINATION FORM

To be eligible for a loan from the WPCLF, each WRRSP project must be nominated and placed on the project priority list. To nominate a project, complete this form and submit it to the Ohio EPA, Division of Environmental and Financial Assistance. This is NOT an application for WRRSP funding, but requests specific information needed to prioritize each project. Incomplete forms will be returned for completion and the project will not be placed on the project priority list until such time as a complete nomination form has been submitted by the published deadline for submission of nominations. Please direct any questions to Theresa Gordon at (614) 644-2798.

WRRS Please i	SP IMPLEMENTER INFO provide the information below s	RMATION so we can contact vou co	oncen	nina vour proiect.	
	P Implementer/Steward				
С	ity Engineer, City of Cuyahoga F	alls			
Project	t/Resource Name		ahristosaji Vitrolikusta		
С	uyahoga Falls Dams Removal				
Implen	nenter/Steward Address				
Address	Engineering Department				
	2310 Second Street				
City	Cuyahoga Falls	OH 44	4221	Cuyahoga Falls	
Contac	t Person Name		HE IN		Telephone
To	ony DeMasi, P.E.				330-971-8180
Contac	t Person E-Mail Address	DemasiTV@cityofcf.com	1		
-3	energy limiting, region to graph from the register most to other performance from a performance of	The same place of the same of			A CONTRACTOR OF THE CONTRACTOR

### WRRSP SPONSOR INFORMATION

To receive WPCLF funding, each WRRSP project must be associated with a sponsoring community whose construction project is eligible for funding during Program Year 2011. For Program Year 2011, identifying a WRRSP Sponsor is optional at the time you submit this Nomination Form. If a Sponsor or Sponsors are already known, please provide the following information. Attach additional pages as needed.

Is there a W		
this WRRSP		

		No										
r	Х	Yes	(indicat	e Spons	or Com	ımunit	y and	Projec	t belo	ow)		
	Comm	unity:	Northea	st Ohio	Regiona	al Sew	er Dist	rict (N	EORS	D)		
	Project	t:	TBD									

### PROJECT LOCATION

To assure an accurate rating of your proposed project, provide the information that relates to the location of the WRRSP project you plan to implement. Fill in all information that applies to your project. Without the information requested below, your nomination cannot be processed.

Legislative District(s) County(ies) US(		USGS Hydrologic Unit Code Please use 14 digit HUC	Watershed Name(s)		
U.S.: 13th	The ACM NOTE SHOW A SECTION AND A SECTION ASSECTION ASSECTION ASSECTION ASSECTION ASSECTION ASSECTION ASSECTION ASSECTION ASSECT	04110002-030-010	Cuyahoga River		
State Senate: 27th	Summit				
State House: 42nd					
Indicate the type(s) of water resou	urce(s) which is(are) the	focus of this WRRSP project.			
Resource Type	Resource Name	Antidegradation T	ier Aquatic Life Use		
Stream/River	Cuyahoga River	General high quality	Warmwater Habitat (WWH)		
Stream/River					
Wetland(s)*					
Lake					
Other*					
Latitude/Longitude Centroid (in decimal degrees)	Lat – 41.134896 N Long – 81.48203 W	All WRRSP property	rty boundaries need to be submitted to Ohio		
Latitude:	41°08'05" N	EPA-DEFA as a shap	pefile (ArcMap-ESRI) in Ohio State Plane nate system), NAD 1983 (datum), with units		
Longitude:	81°28'55" W				

For current Antidegradation Tier information go to http://www.epa.ohio.gov/portals/35/rules/01-05\_eff030701.pdf For current Aquatic Life Use information go to http://www.epa.ohio.gov/dsw/rules/3745\_1.aspx \* Note: Please attach ORAM forms. All wetland scores are subject to Ohio EPA review.

### **PROJECT TYPE**

Characterize your project using the following general categories. If proposing more than one project type (e.g., natural channel design and wetlands restoration), select each category that applies.

What type of activities will be involved in this project? Check all that apply and fill in the blanks.

	Wetlands Protection	acreage:		
	Wetlands Restoration	acreage:		
Х	Dam or Levee Removal or Modification	acreage:	0.3 (estimate)	
Χ	Stream/Riparian Protection	acreage:	0.5 (estimate)	Linear feet: 1000 – 2000 (estimate)
	In-Stream Habitat Restoration	acreage:		Linear feet:
X	Streambank Restoration	acreage:	0.5 (estimate)	Linear feet: 1000 – 2000 (estimate)
	Natural Channel Design	acreage:	99 450 14 7 10 14 7 10 15 7 10 16 7 10 17 10 18 10	Linear feet (before implementation):
	Other (specify):	acreage:	1 T	

The project will provide complete protection of aquatic habitat sufficient to maintain the designated uses of the benefited water resource as defined under Ohio Water Quality Standards.

This project will provide complete protection by itself

This project implements a Total Maximum Daily Load (TMDL) Plan or a Watershed Action Plan (WAP)

This project will provide complete protection in conjunction with other projects which are committed to be undertaken

Please attach information that describes: (a) the other projects, (b) the other funding sources identified for or committed to these projects, and (c) the time frame for implementation. If available, please also provide the name of the watershed plan in your attachment.

The project will provide complete restoration of aquatic habitat sufficient to meet the designated uses of the benefited water resource as defined under Ohio Water Quality Standards.

- X This project will provide complete restoration by itself
- X This project implements a Total Maximum Daily Load (TMDL) Plan or a Watershed Action Plan (WAP)

This project will provide complete restoration in conjunction with other projects which are committed to be undertaken

Please attach information that describes: (a) the other projects, (b) the other funding sources identified for or committed to these projects, and (c) the time frame for implementation. If available, please also provide the name of the watershed plan in your attachment.

### PROJECT SUMMARY

Provide a brief description/summary of the proposed project. Summary should be limited to no more than one or two paragraphs and include the "who, what, where, when and why" of the project. Please be brief – do not attach any additional pages.

This project involves the removal of two lowhead dams in the Cuyahoga River in Cuyahoga Falls. The Mill (or Sheraton) Dam and the Powerhouse (or Lafever) Dam are located approximately one mile upstream of the 61 foot high Gorge Dam located at approximately River Mile (RM) 45.1 (see attached map).

The dams are to be removed as one project. The adjoining structures under the adjacent buildings next to the dams will be stabilized to prevent structural failure due to the change in water pressures/velocities/levels associated with the dam removals. Cuyahoga Falls conducted a Hydraulic Engineering study in 2008 to verify the change in water levels will not have any adverse effects on riverfront properties.

Any sediments behind the dams will be allowed to migrate downstream to be trapped behind the Gorge Dam. USEPA will be conducting a sediment characterization study of the Gorge Dam sediments in 2011 in preparation for possible sediment removal/remediation prior to removal of the Gorge Dam.

Completion of this project directly addresses the impacts of flow alteration noted as a major cause of impairment in the Lower Cuyahoga River TMDL (2003). This will be the third and fourth dam removal to be completed in the Cuyahoga River upstream of the Gorge Dam, contributing to the restoration of riparian habitat and aquatic life communities in compliance with Ohio WQ and Biological Criteria.

For projects involving land acquisition funded with WRRSP funds, you must attach a windshield appraisal of property values to the nomination form.

### PROJECT SCHEDULE

So that the WPCLF can assure the necessary project reviews and documents can be completed in time for the WRRSP project to be funded with its sponsoring loan project, please indicate the <u>date</u> you will complete each task. Please follow the minimum time intervals between each scheduled task. Schedules with less than the minimum time intervals below may be rejected or returned for revisions. Loans are approved on the last Thursday of January through October, and the second Thursday of December.

NOTE: if any of the following tasks have already been completed, please indicate this with a "C" and include

the actual completion date.

Date
TBD by sponsor
TBD by sponsor
TBD - 90 days before sponsor's loan
TBD - 90 days before sponsors loan
TBD - 90 days before sponsors loan
TBD - 15 days before sponsors loan
TBD by sponsor

### After Loan Award

8. If land and/or property rights are being acquired with WRRSP funds, date of closing on acquisition	Not Applicable
9. If land and/or property rights are being acquired with WRRSP funds, date of covenant recording	3 mos. after award
10. (Restoration Projects Only) Date final detailed plans submitted	4 mos. after award
11. (Restoration Projects Only) Initiation of construction	6 mos. after award
12. Completion of sponsoring municipal wastewater treatment system project	TBD
13. Completion of WRRSP project implementation (must be completed within one year after task 12)	1 year after sponsor project completion
14. Expected achievement of project goals	12 – 18 mos. after award
15. Submit first annual report (Jan 15 starting one year after recording of covenant)	1/15/12
WPCLE WRRSP Program Year 2011	Page 3 of

TOTAL PROJECT COST AND REQUESTED WRRSP AMOUNT

Please identify the estimated total project costs by Project Type. Please identify the total project cost, regardless of whether you are requesting a WPCLF loan for the total amount. NOTE: The costs for appraisals are NOT reimbursable.

	Requested WRRSP Amount	Total Project Implementation Cost
Stream/Riparian Protection	\$50,000	\$50,000
Wetlands Protection		
Dam or Levee Removal or Modification	\$650,000	\$650,000
In-Stream Habitat Restoration		
Streambank Restoration	\$100,000	\$100,000
Natural Channel Design		
Wetlands Restoration		
Other (specify): Planning/education costs	\$200,000	\$200,000
Totals	\$ 1,000,000.00	\$ \$1,000,000.0

### PROJECT SCORING INFORMATION

The details used to determine a priority score for your project are requested on pages 4 through 11 of this Nomination Form. Failure to complete these additional pages as instructed means that your Project Nomination is incomplete. Incomplete forms will be returned and the project will not be placed on the project priority list until such time as a complete nomination form has been submitted. A complete Nomination Form must be submitted by the published deadline.

### SUBMITTAL AUTHORIZATION

I hereby certify that I am authorized by my elected or appointed position to submit this nomination on behalf of the applicant identified above, the information is complete and accurate to the best of my knowledge and represents the information to be used to determine the priority of this project for funding.

I also acknowledge that WRRSP projects are subject to the placement of an environmental covenant on all acquisitions and on the areas where restoration was funded. I have read the covenant and have the legal authority to execute this covenant.

Tony V	Domoni	DE
TONV V.	Demasi,	P.E.

Name (please print)

City Engineer

Title

1/4/11

Signature

Date

# PLEASE COMPLETE AND SEND WITH ALL ATTACHMENTS TO: Ohio Environmental Protection Agency

Olly

Division of Environmental and Financial Assistance PO Box 1049

Columbus, Ohio 43216-1049

ATTN.: Dave Reiff FAX (614) 644-3687

DEFAMAIL@epa.state.oh.us

WPCLF Ohio Water Pollution Control Loan Fund

WPCLF WRRSP Program Year 2011

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# WPCLF PROGRAM YEAR 2011 WRRSP PROJECT SCORING INFORMATION

Do <u>not</u> attach a Watershed Action Plan (WAP), Total Maximum Daily Load (TMDL) report, Remedial Action Plan (RAP) report, or other report or plan as a substitute for completing these descriptions. Please limit each description to the length requested for each. Do not attach additional pages unless instructed.

### STATUS OF WATER RESOURCES

WPCLF WRRSP Program Year 2011

Provide and append the following metrics (if available) as they apply to the water resource(s) in your project area. If the data is not available, indicate "not available" – do not leave blank

Resource Name	Metric	Existing Value	Value After WRRSP Implementation
	HHEI (Headwater Habitat Evaluation Index)		
Cuyahoga River at Waterworks Park, just UST of the	QHEI (Qualitative Habitat Evaluation Index)	46.5 (1996)	> 60
Cuyahoga Falls dams	LCI (Lake Condition Index)		
	ORAM (Ohio Rapid Assessment Method)		
	HHEI (Headwater Habitat Evaluation Index)		
	QHEI (Qualitative Habitat Evaluation Index)		
	LCI (Lake Condition Index)		
	ORAM (Ohio Rapid Assessment Method)		
	HHEI (Headwater Habitat Evaluation Index)		
	QHEI (Qualitative Habitat Evaluation Index)		
	LCI (Lake Condition Index)		
	ORAM (Ohio Rapid Assessment Method)		

Indicate the sources and causes of impairments, if any, to the water resource(s) which are the focus of the project by filling in the tables below.

	Existing Source Check as many sources as apply.	Sources Addressed by the WRRSP Check as many sources as apply. Indicate C for sources completely addressed or P for those sources partially addressed.
Sources of Impairment		those sources partially addressed.
Agriculture / Silviculture		
Construction Activity	X	
Contaminated Sediments		
Dam / Impoundment	X	С
Drainage / Wetland Filling	X	
Land disposal	X	
Marina(s)		
Mining		
Point Sources (Municipal or Industrial)	X	
Stream Habitat Modification	X	
Urban Runoff/Development	X	

Causes of Impairment	Existing Cause Check as many sources as apply.	Causes Addressed by the WRRSP Check as many sources as apply. Indicate C for sources completely addressed or P for those sources partially addressed
Bacteria / Pathogens	X	
DO / Organic enrichment / un-ionized ammonia/ nutrients.	Х	
Filling and Draining	X	
Hydromodification	X	С
Inorganic Pollutants		
Invasive Species	X	
Organic Pollutants	X	
Siltation / Sediment	X	
Thermal Modification		

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Using the information and indicies provided on the previous page, relate the sources/causes of impairment/threats to water resources, including both point and nonpoint sources, to the attainment/non-attainment of the aquatic life use designation(s) in the project area.

Please provide a brief narrative description. Limit the description to the space provided.

Hydromodification due to the presence of the lowhead dams in this area is the primary cause of impairment to aquatic life resources. As part of a larger dam removal strategy on the Cuyahoga River by Ohio EPA, removal of these dams is the next step in achieving a free-flowing river between Lake Rockwell and the mouth of the Cuyahoga River in Cleveland. The bypassing of the Kent Dam in 2004 and the removal of the Munroe Falls dam in 2005 resulted in significant improvement in aquatic life communities. A 2008 study of the Cuyahoga River in 2008 determined the last segment of the river downstream of the Gorge Dam that remains in non-attainment of aquatic life uses is the dam pool above the State Route 82 (Brecksville) Dam.

With planning efforts currently underway to remove or modify the Gorge and Brecksville Dams in the next several years, removal of the two Cuyahoga Falls Dams is critical to the continued restoration of the Cuyahoga River watershed. Once all of the planned dam removals are completed, the lower 59 miles (approximately 2/3 of the river length) will be free-flowing.

### PROJECT AREA

Please provide a brief narrative description of each of the following features for the project area.

Describe the current physical characteristics and features of the project watershed and/or subwatersheds. Include size, general soil types, unique features, land cover and land uses and trends with particular emphasis on those that may be influencing water quality. Limit the description to the space provided.

The Cuyahoga River basin drains 813 square miles and includes 1,220 stream miles spanning parts of Geauga, Medina, Portage, Summit and Cuyahoga counties, emptying into Lake Erie at Cleveland. The basin contains parts of three major physiographic provinces: the glaciated Allegheny Plateau, the till plains, and the lake plains. Most of the basin occurs in the glaciated Allegheny Plateau, and owes it topographic and hydrologic features to a complex glacial history. A small portion of the basin in southwest Cuyahoga County lies within the till plains, a relatively flat area more characteristic of north central and northwestern Ohio. The Cuyahoga river basin also cuts through the narrow border of the nearly level lake plains that surround Lake Erie and represents the ancient bottom of the predecessors to Lake Erie.

The Cuyahoga basin is situated within the Erie/Ontario Lake Plain (EOLP) ecoregion, a glacial plain that lies between the unglaciated Western Allegheny Plateau (WAP) ecoregion to the southeast and the relatively flat Eastern Corn Belt Plains (ECBP) ecoregion to the west and southwest. The EOLP ecoregion is characterized by glacial formations that can have a significant relief of up to 300 feet and exhibits a mosaic of cropland, pasture, woodland, and urban areas. Soils are mainly derived from glacial till and lacustrine deposits and tend to be light colored, acidic, and moderately to highly erodible. Many glacial features characteristic of the EOLP ecoregion are found in the Cuyahoga River basin. The northern and eastern boundaries of this V-shaped watershed are largely defined by the terminal moraines left by two fingers of glacial ice. The retreating glaciers then buried the ancient river valleys with glacial outwash. The headwaters originate in northeastern Geauga county and flow southwest to Akron through relatively hilly knob and kettle topography. The river generally follows the course of the buried valleys, but does traverse a ridge of erosion resistant sandstone, resulting in the falls and cascades of Cuyahoga Falls. The river turns sharply to the northwest at the confluence with the Little Cuyahoga river in north Akron, then winds through outwash terraces, till plains and till ridges before reaching the flat lake plain of the Cleveland area.

Land cover information from the 2003 Lower Cuyahoga TMDL report shows that approximately 36% of the watershed is covered by deciduous forest. 28% of the watershed is residential, 16% is pasture/hay/rowcrop agriculture, 11% is industrial/commercial/transportation, and 2 % urban/recreational grasses. Slightly over 3% is determined to be woody or emergent herbaceous wetlands.

Land use patterns vary greatly from the upper basin that is primarily agricultural, to the lower basin which is among the most densely populated and industrialized urban area in the state. Agriculture is the predominant land use in the upper basin, and while less prevalent in the middle basin, the soils are highly erodible and can result in significant sedimentation and nutrient loadings. Resource extraction and hydromodification are localized throughout the basin. The waters of the heavily populated areas of the idle and lower basin are influenced by urban and construction site runoff, combined/sanitary sewer overflows, and land disposal.

Part of the upper Cuyahoga River is a designated State Scenic River and several stream segments within the basin have been designated as State Resource Waters. The Cuyahoga River, from the First Energy Gorge Dam Pool to the mouth and the nearshore area two miles west to ten miles east of the mouth has been identified as an Area of Concern by the international Joint Commission. Twenty-two miles of the lower Cuyahoga River flow through the Cuyahoga Valley National Park; additionally, both the Cleveland Metro Parks and MetroParks Serving Summit County have waterways contained in their respective holdings. The Cuyahoga River was designated an American Heritage River in 1998.

Describe the current status of property ownership. Specify whether the current owner(s) is (are) a public or private entity(ies).  Please provide a brief narrative description. Limit the description to the space provided. Indicate if options (or other preliminary purchase)
Please provide a brief narrative description. Limit the description to the space provided. Indicate if options (or other preliminary purchase agreements) have been secured on proposed acquisitions.
The City of Cuyahoga Falls owns the two dams that are proposed to be removed, as well as a majority of the streambank property on the west side of the river in the project area. Segments of the west river bank at eh northern and southern ends of the project area are owned by private interests. The east river bank is adjacent to State Route 8 and is owned by the Ohio Department of Transportation.
A project area map indicates the property ownerships will be provided by Cuyahoga Falls if needed.
Provide a detailed description of the project implementation site(s).  Include a description of site-specific physical and environmental conditions. Limit the description to the space provided. Also attach photographs and a copy of the applicable portion(s) of a USGS quadrangle map with the specific project location(s) indicated. Corridor projects must indicate geographic boundaries and targeted parcels. (In general, for corridor projects the parcels targeted should not cost more than 3 times the WRRSP dollars requested).
The Mill (or Sheraton) Dam is located at approximately 175 feet downstream from the centerline of the Borad Boulevard Bridge over the Cuyaohga River and is immediately upstream of the Sheraton hotel in Cuyahoga Falls. Approximately 1400 feet upstream, the Powerhouse (or Lafever) Dam is located approximately 300 feet upstream from the centerline of the Portage Trail Bridge over the Cuyahoga River.
Within the northern limits of the City of Cuyahoga Falls, the Cuyahoga River is generally a gentle flowing river with a variety of bank conditions. Grassy and oftentimes wooded banks are found on both sides of the river within the project area. Bedrock outcrops, typically sandstone, often interrupt the grassy banks. These bedrock outcrops are generally covered with grass and weedy vegetation and/or small trees. The river bed generally consists of river sediments with a few locations that appear to be bedrock.
A total of seven bridge structures exist over the river near the project area. Most of these bridges, with the exception of a single pedestrian bridge, have piers located within the existing extents of the water surface. In the vicinity of the bridge carrying state Route 8 over the Cuyahoga River, a concrete block wall exists along the west bank upstream of the bridge and on the east bank downstream of the bridge. Below the Mill (or Sheraton) Dam, the river channel changes to bedrock on the banks and base. The elevation of the channel also begins to drop at a much faster rate downstream of the Mill Dam until the impounded reservoir behind the Gorge Dam is encountered where the river once again slows in velocity and widens considerably.
Photos of the Powerhouse/Lafever Dam, the Mill/Sheraton Dam, and project area are attached.
USGS topo maps of the immediate project area and of the dams locations in relation to the Gorge Dam are attached.

NOTE: Funded WRRSP projects will be required to submit property restoration boundaries in an ArcMap ESRI shape file or an ArcMap ESRI compatible electronic file.

If known, list any plants or animals of interest that will benefit from this project (e.g. rare, threatened, endangered, and special interest species, declining populations, special ecological communities, etc.).

Please provide a brief narrative description. Limit the description to no longer than one paragraph

There has been significant improvement in Cuyahoga River fish communities from 1967 (zero fish species present in some locations) to 2008 (over 70 species of fish in the Cuyahoga River watershed). A 2008 fish community survey found that fish communities in the main stem areas below the Gorge Dam downstream of the two Cuyahoga Falls Dams now meet Ohio Water Quality standards.

A relatively recent example of habitat and fish community response to a dam removal project is the Kent Dam bypassing that occurred in 2004. Pre-construction QHEI score was 51; post-construction QHEI score was 28; postconstruction IBI score is 44.

In 1996 the IBI scores of fish communities in the project area ranged from 24 to 28, a rating of Poor to Fair. In 2000 areas upstream of the project area were found to be in partial attainment with Aquatic Life Use Standards. Downstream of the Gorge Dam, fish communities were found to be in full attainment of Ohio Water Quality Biocriteria in 2008. Removal of the two Cuyahoga Falls dams is expected to restore fish communities and habitat quality with scores that meet Ohio Water Quality Standards.

Provide a narrative description of any information on the project or project area not otherwise requested which

would facilitate a better understanding of the proposed project.

As applicable, include information regarding the history of the area or past modifications, and benefits of the project that go beyond water quality (e.g., "This area is the largest patch of contiguous Beech-Maple Forest in NE Ohio..."). Limit the description to no longer than one paragraph.

Immediately downstream of the two Cuyahoga Falls dams is the Gorge Dam, which was previously used to provide cooling water from the dam pool to a coal-fired electric generating plant. This facility was closed in 1991 and demolition of the plant was completed in 2009. Ohio EPA is working with First Energy and MetroParks Serving Summit County to investigate the possibility of removing and remediating the sediment trapped behind this 61 foot high dam in preparation for the possible removal of the dam structure. USEPA GLNPO is currently undertaking a characterization study of the dam pool sediments, with additional sampling to be conducted in early 2011. Funding for the sediment characterization and dam removal feasibility study will come from the USEPA Great Lakes Legacy Act.

Additionally, Ohio EPA is working with the National Park Service to develop an Environmental Impact Statement for the potential modification or removal of the Brecksville Dam at River Mile 20. Completion of all of these dam removal projects will result in unrestricted fish passage in the lower 59 miles or two thirds of the Cuyahoga River. Restoration of the habitat and hydrology of the Cuyahoga is critical to the continued restoration of the river.

### PROJECT DESCRIPTION, PURPOSE, AND GOALS

Please provide a brief narrative description of each of the following items to help quantify the anticipated benefits from the proposed project

Provide a Problem/Issue Statement which specifies the need for the project, specifically focusing on habitat integrity within the project area and taking into account the information provided under "Status of Water Resources" and "Project Area."

Please limit the problem/issue statement to no longer than one paragraph.

Dams negatively impact river systems by serving as barriers to fish migration as well as sediment traps. In addition, they reduce fish habitat and modify water quality, flow regime and food web. QHEI and IBI data indicate that these conditions exist in the project area due to the presence of the two dams. The Lower Cuyahoga TMDL lists flow alteration such as that caused by these dams as a major cause of impairment. Removal of the two Cuyahoga Falls dams will result in improved aquatic life communities and riparian habitat, allowing this segment to meet Ohio Water Quality Standards.

State the Project Goal, specifically focusing on habitat integrity within the project area.

Goals must focus on restoration or preservation of high quality aquatic habitat as opposed to storm water controls, agricultural BMPs, or recreational or upland conservation activities. Projects should focus on one continuous stream segment, water body, wetland or wetland complex. Goals must include measurable indicators, with appropriate indicators of success. Relate the goal to sources of impairment/threats to attainment on the waterbody in question, and how full restoration will be achieved by the proposed project when these are also taken into account.

The goal of this project is to remove the two Cuyahoga Falls dams to restore this segment of the Cuyahoga River so that it meets Ohio Water Quality Standards for aquatic life and habitat. Riparian areas uncovered by the dam removals will be stabilized and restored by vegetation plantings if needed, and protected through conservation easements that will be owned by the City of Cuyahoga Falls and covenants with Ohio EPA.

Provide Objectives to Support the Goal.

Objectives should contain technical solutions. Relate the objectives to sources of impairment/threats to attainment on the waterbody in question, and how full restoration or protection will be achieved by the proposed project when these are also taken into account.

Prepare detail plans of the dam removal project

- Obtain documentation on historical significance of dams and design any needed mitigation
- Prepare detail plans for any streambank stabilization that may be needed

Obtain needed permits from USACE Conduct public meetings with City Council to review plans

Hire contractor to conduct dam removal

- Conduct removal of the two Cuyahoga Falls dams
- Conduct stabilization of the two building structures adjacent to the dams on the west bank
- Conduct stabilization and restoration of exposed streambank through vegetative plantings
- Provide protection of the streambank in the project area by obtaining conservation easements and/or covenants with OEPA
- Prepare and disseminate educational materials on project benefits and public involvement opportunities

Identify any special condition which would restrict or improve potential restoration, protection, or enhancement efforts on the proposed project site(s).

Please provide information that will be helpful in predicting the success of the project. For example, does this action build upon previous restoration efforts or is this an isolated project downstream from a proposed shopping mall? Is the project area adjacent to existing preserved land? Does the project represent one step or phase in a series of actions that need to happen to complete a protection/restoration effort? This is also the place to indicate any urgency to acquire property due to impending development impacts.

As part of a larger dam removal strategy on the Cuyahoga River by Ohio EPA, removal of these dams is the next step in achieving a free-flowing river between Lake Rockwell and the mouth of the Cuyahoga River in Cleveland. The bypassing of the Kent Dam in 2004 and the removal of the Munroe Falls dam in 2005 resulted in significant improvement in aquatic life communities. A 2008 study of the Cuyahoga River in 2008 determined the last segment of the river downstream of the Gorge Dam that remains in non-attainment of aquatic life uses is the dam pool above the State Route 82 (Brecksville) Dam.

With planning efforts currently underway to remove or modify the Gorge and Brecksville Dams in the next several years, removal of the two Cuyahoga Falls Dams is critical to the continued restoration of the Cuyahoga River watershed. Once all of the planned dam removals are completed, the lower 59 miles (approximately 2/3 of the river length) will be free-flowing.

Provide a brief description of the project-specific educational and outreach effort that you will implement to insure the general

public is aware of the project and the benefits that will result.
The description should be limited to two or three paragraphs and include specific efforts and activities, such as publications, project signs, canoe floats, volunteer events, etc. that will be completed to support project specific education and outreach. The WRRSP Program will only pay for an educational sign that at a minimum explains the water quality benefits of the project, and the funding source.

Last year, during the ribbon cutting ceremony of the new High Bridge Glens Park overlooking the Cuyahoga River just downstream of the Sheraton Dam, Cuyahoga Falls Mayor Don Robart indicated that the city is anticipating the removal of the two dams and the restoration of a free flowing river. As part of the City's effort to inform the public of this project, public meetings of City Council will be held with presentations made to illustrate the need and purpose of the dam removals. This will be an opportunity for the public to review plans and ask pertinent questions relative to the project.

Cuyahoga Falls has and will continue to participate in River Day. Volunteers from the community gather to learn more about this resource and to help in its continued cleanup. The City will use various media sources, such as radio and newspapers, to promote this event and to inform the public of our efforts to improve the quality of the water through the removal of the dams.

Publications, project signs, and advertisements will also be used by the City to increase awareness and encourage participation in the dam removal processes. Many volunteers will be needed to restore the stream banks and prevent erosion, and the City will encourage the help of the community in this phase of the project.

Please provide a brief narrative summary of the methods and resources that will be used to conduct post project monitoring to ensure that the project goals and restoration efforts are being maintained in perpetuity. The summary should include information relating to general management of the property, the frequency of monitoring, the qualifications of staff that will be involved, how invasive species will be controlled, and the mechanism of enforcing use restrictions.

Ohio EPA staff conducts monitoring to determine the health of aquatic resources and aquatic life communities within the Cuyahoga River watershed and throughout the state. It is expected that Ohio EPA will conduct fish and aquatic macroinvertebrate community monitoring at this site as part of their future monitoring efforts. New data will be compared to historical records to measure the success of this dam removal project as well as its impact on fish communities and aquatic macroinvertebrate species. Trained Ohio EPA staff will also conduct regular QHEI evaluations on the completed project to confirm that restoration objectives are being met and maintained.

The City of Cuyahoga Falls already owns the majority of the streambank property in the project area. They will maintain the property uncovered by the decrease in water level due to the dam removal through conservation easement/OhioEPA convenant restrictions. It is expected that future city volunteer and community service programs will maintain the streambank areas as needed through invasive species removal and cleanup projects.

Please provide information about your organization's qualifications and experience in conducting and maintaining restoration and/or protection projects.

Please provide a bnef narrative description in the space provided and append information if necessary.

The City of Cuyahoga Falls, Ohio has a long record of managing construction projects of all types and sizes. Their annual programs include paving of several miles of roadway, replacing thousands of feet of sidewalk, and providing permanent patches over water main repairs. In addition, the Engineering Department designs, bids, and oversees several public works projects every year, including waterline and sewer line construction, new subdivisions, and building construction. The City has been very successful in ODOT's LPA program, where local agencies are allowed to directly manage federally funded projects. In 2010, the Engineering Department will manage over \$4,000,000 in public works construction.

### PROJECT READINESS

This question is intended to provide information which will show how soon this project could be implemented if it is selected for funding.

# Indicate any studies and/or preliminary tasks which should be completed prior to full implementation of this

Are there studies or associated projects which must be completed before the actual protection, restoration, or mitigation project can be initiated? If so, please list these and estimate the time required for each one.

- Prepare detail plans of the dam removal project
- Obtain documentation on historical significance of dams and design any needed mitigation Prepare detail plans for any streambank stabilization that may be needed
- Obtain needed permits from USACE

Attach justification as needed on separate pages.

WPCLF WRRSP Program Year 2011

Conduct public meetings with City Council to review and approve project plans

value of a business and estimates of lost income, food, lobbying, and travel are <u>ALL INELIGIB</u> Project Component	Cost
Property Cost	
Fee Simple Land Costs NOTE: will require full narrative appraisals	
Easement Land Costs NOTE: will require summary appraisals	
Appraisal NOTE: must be selected from list of ODNR prequalified appraisers The list is available at: http://www.epa.ohio.gov/defa/09wrrsp.aspx	
Closing Costs	
Title Search	
Environmental Assessments	
Other *	
Acquisition Expenses Subtotal	\$ (
Planning and Design	
Protection/Restoration Plan Preparation	\$70,000
Design Preparation	\$100,000
Other Eligible Costs *	
Planning and Implementation Subtotal	\$ 170,000.0
Habitat Restoration (list with estimated costs and link to outcome)	
Construction/Removal of Dams	\$650,000
Vegetative plantings, outfall erosion control to stabilize exposed streambanks	\$150,000
Habitat Restoration Costs Subtotal	\$ 800,000.0
Other Miscellaneous Project Costs	φ 800,000.0
Permits, legal services, required surveys	\$50.000
Materials, equipment and supplies *	φου,σου
Boundary markers	\$2000
Sign indicating WPCLF/WRRSP funding with an educational component	\$3000
Other Project Costs Subtotal	\$ 30,000.0
Project Costs Ineligible for WRRSP participation	Ţ 00,000.0
Total Estimated Project Cost	\$ 1,000,000.0

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Please provide a brief narrative description. Limit the description to no longer than one paragraph.

The City of Cuyahoga Falls, Ohio has a long record of managing construction projects of all types and sizes. The City Engineering Department designs, bids, and oversees several public works projects every year, including waterline and sewer line construction, new subdivisions, and building construction. Initial estimates were obtained from professional contractors for the removal of the two dams, cost estimates for building and streambank stabilization are based on best professional judgement and input from Ohio EPA along with information gained from the previous two dam removal projects upstream of Cuyahoga Falls.

### Are funds potentially available for implementation of this project from other sources?

Is any portion of the project likely to be funded from some other source besides Ohio EPA? If so, indicate the possible funding source(s) such as Clean Ohio Fund, ODNR, NRCS, private organizations, foundations, etc. Indicate if you are planning to use any portion of this project as a mitigation bank (in which case no WRRSP restoration funds should be requested.) Please provide a brief narrative description. Limit the description to no longer than one paragraph.

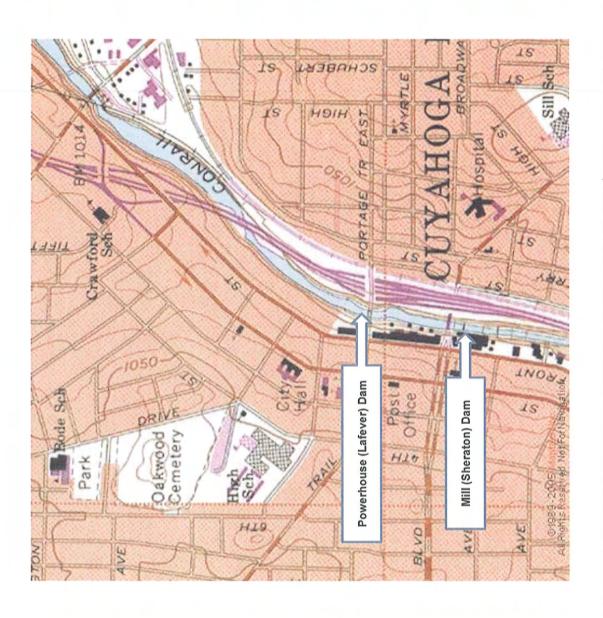
This project qualifies as a Supplemental Environmental Project (SEP) which may receive funding as part of a settlement of future enforcement cases by Ohio EPA. Additionally, it may be eligible for funding by ODOT to offset the environmental impact of transportation projects. However, there are no known pending cases/projects that could be expected to provide such funding in the near future. Although other sources of funding may be available (US Fish and Wildlife Service, US Army Corps of Engineers, Natural Resources Conservation Service, etc.), local monetary match requirements preclude this project from consideration. USEPA Great Lakes Legacy Act (GLLA) funding will be utilized for the future sediment removal/remediation project above the Gorge Dam downstream of the project area. Funding for the Gorge Dam removal is expected to come from a variety of sources, including GLLA and WRRSP.

WPCLF WRRSP Program Year 2011

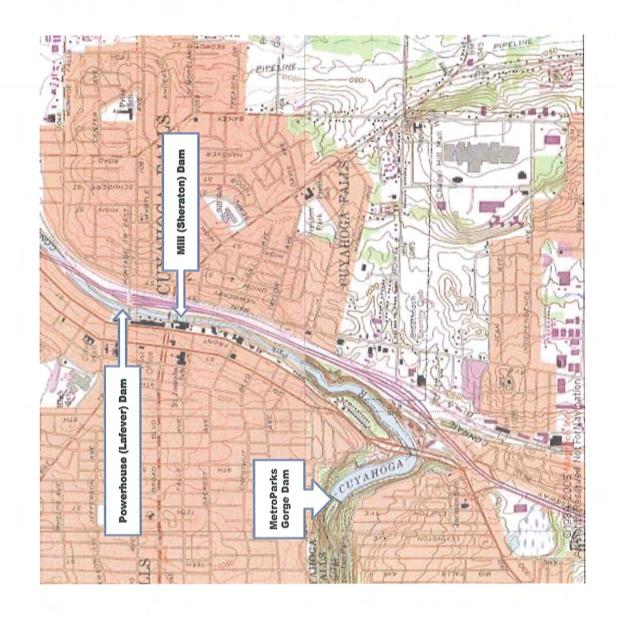
Page 12 of 12

# Cuyahoga Falls Dams Removal Project

**Dam Location Map** 



# Cuyahoga Falls Dams Removal Project Dam Locations in Relation to Gorge Dam



# **Cuyahoga Falls Dams Pictures**

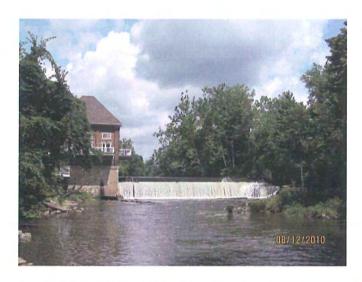


Photo 1. Powerhouse (Lafever) Dam

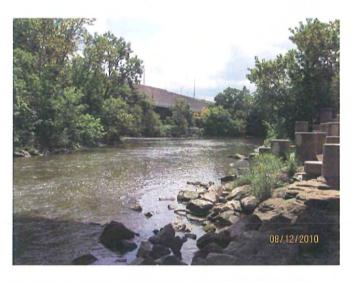


Photo 2. Downstream of Powerhouse (Lafever) Dam



Photo 3. Upstream of Mill (Sheraton) Dam

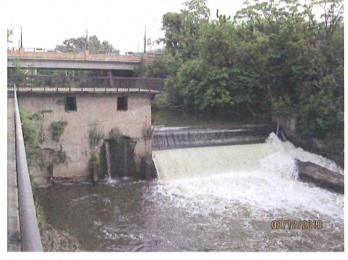


Photo 4. Mill (Sheraton) Dam

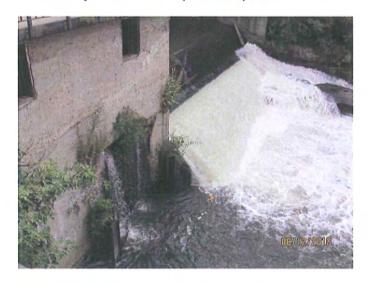


Photo 5. Mill (Sheraton) Dam

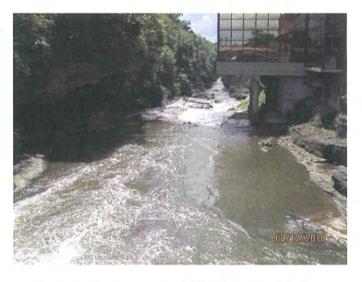


Photo 6. Downstream of Mill (Sheraton) Dam

# **Cuyahoga Falls Dams Pictures**

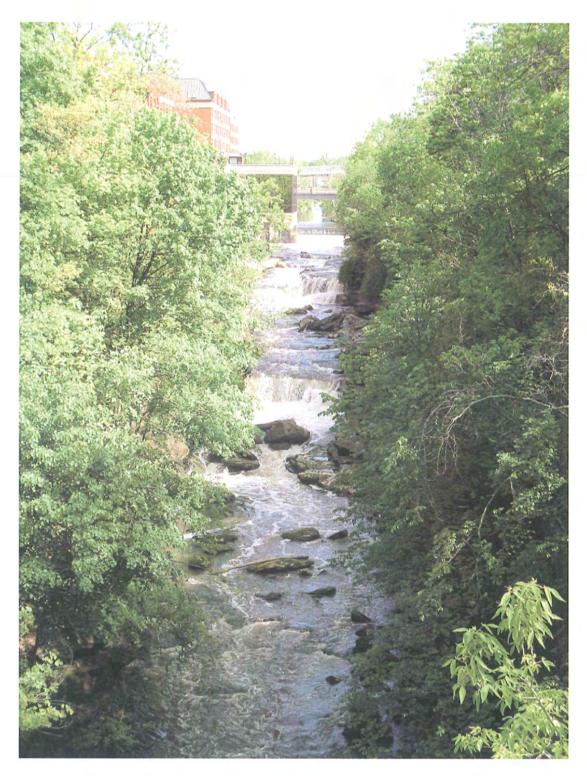


Photo 7. Cuyahoga River looking upstream at Sheraton Dam

## ATTACHMENT B

Sponsorship Agreement Between

City of Cuyahoga Falls & Northeast Ohio Regional Sewer District



# OHIO WATER POLLUTION CONTROL LOAN FUND WATER RESOURCE RESTORATION SPONSOR PROGRAM SPONSORSHIP AGREEMENT by and between the

CITY OF CUYAHOGA FALLS (implementer)
and the

NORTHEAST OHIO REGIONAL SEWER DISTRICT (sponsor)
for the
CUYAHOGA FALLS DAMS REMOVAL PROJECT WR390296-0004

WHEREAS, the State of Ohio has created the Water Pollution Control Loan Fund ("WPCLF") pursuant to O.R.C. 6111.036 to provide financial assistance for water resource protection and improvement actions; and

WHEREAS, the Ohio Environmental Protection Agency ("Ohio EPA") has created the Water Resource Restoration Sponsor Program ("WRRSP") within the WPCLF for the effective perpetual protection and maintenance of Ohio's high quality aquatic ecosystem resources; and

WHEREAS, an applicant applying to the WPCLF for financing of a water quality improvement project may also sponsor a qualifying WRRSP project to be undertaken by itself, or by an entity with the ability to implement the WRRSP project; and

WHEREAS, the Northeast Ohio Regional Sewer District ("Sponsor") has applied for funding from the WPCLF for project number CS391430-0106 and has also requested to sponsor the Cuyahoga Falls Dams Removal WRRSP project WR390296-0004 ("Project") as part of that WPCLF loan; and

WHEREAS, the City of Cuyahoga Falls ("Implementer") has agreed to undertake the implementation of the WRRSP Project which is further described in the Ohio EPA-approved final Restoration and Protection Plan ("Plan");

WHEREAS, the Sponsor and the Implementer have the common purpose of completing the WRRSP Project in accordance with the Plan to protect and improve water resources within the State of Ohio; and

WHEREAS, the Implementer will be a party to the environmental covenant ("Covenant") to be developed under O.R.C. Sections 5301.80 – 5301.92 to document the activity and use limitations imposed upon the property associated with the WRRSP Project as a condition of WPCLF assistance.

THEREFORE, the Sponsor and the Implementer agree to be bound by the terms and conditions of this WRRSP Sponsorship Agreement.

### SECTION I. GENERAL PROVISIONS

- A. Pursuant to the intent of the WRRSP, the Sponsor and the Implementer agree that the essence of this agreement is for the parties to carry out their respective responsibilities in perpetuity for the planning, implementation, management, preservation, and maintenance of the WRRSP Project and its associated water resources in accordance with the Plan and the Covenant.
- B. The parties acknowledge that a failure to implement the terms of this Agreement, the Plan, or the Covenant may be determined by the Ohio EPA to be an instance of default by the Sponsor on its WPCLF Loan Agreement. The Sponsor and the Implementer further acknowledge that remedies provided under the WPCLF Loan Agreement may be invoked by the Ohio EPA against the Sponsor for unresolved instances of default. The Implementer acknowledges that the Ohio EPA shall seek to resolve any failure to conform to the provisions of the Covenant or failure to implement the Plan first by seeking remedy directly from the Implementer before taking action against the Sponsor.
- C. The parties acknowledge that, if the Ohio EPA determines that the Implementer has failed to conform to the provisions of the Covenant or to implement the Plan it may declare such failure an event of default and shall provide the Implementer and Sponsor with written notice of such event of default. If the Implementer fails to cure such default in a timely manner, the Sponsor shall have the right to take all steps necessary to cure the default in order to avoid the Ohio EPA's invoking remedies against the Sponsor for unresolved instances of default under the WPCLF Loan Agreement.

### SECTION II. WRRSP PAYMENT REQUESTS AND DISBURSEMENTS

All requests for disbursement of funds for eligible expenses to implement the WRRSP Project shall be submitted on the Water Pollution Control Loan Fund WRRSP Disbursement Request form provided by the Ohio EPA. The Implementer and the Sponsor agree to review all disbursement requests to ensure that they are appropriate expenses within the scope of the WRRSP Project.

Disbursement requests shall first be reviewed and approved by the Implementer, which shall then submit them to the Sponsor. The Sponsor shall review and approve the disbursement requests and submit them to the Ohio EPA, Division of Environmental and Financial Assistance, with a completed copy of the accompanying disbursement request form. The Ohio EPA will review and approve disbursement requests for eligibility and reasonableness, based on conformance with the items identified in Exhibit 1A of the WPCLF Loan Agreement between the Sponsor and the Ohio EPA, which is attached to and made part of this Agreement as Exhibit 1A. Upon Ohio EPA's approval of the disbursement requests, the Ohio Water Development Authority is authorized

Water Resource Restoration Sponsor Program Project WR390296-0004 Sponsorship Agreement between Northeast Ohio Regional Sewer District and City of Cuyahoga Falls Page 3 of 6

disburse funds directly to the Implementer or an escrow agent designated by the Sponsor.

### SECTION III. WRRSP PROJECT SCHEDULE

The Implementer agrees that it shall not begin implementation of the WRRSP Project prior to the completion of all necessary approvals by the Ohio EPA and the execution of the WPCLF Loan Agreement by all parties, or alternatively, prior to the receipt of approval from the Ohio EPA to do so. All actions to implement the WRRSP Project that are called for under the loan agreement or in the Plan shall be completed by the Performance Certification Date identified on Exhibit 1 of the Sponsor's WPCLF Loan Agreement.

### SECTION IV. OBLIGATION TO PROTECT AND MAINTAIN THE WRRSP PROJECT

The Sponsor and Implementer recognize the value of the area associated with the WRRSP Project as an aquatic ecosystem resource, as well as its value as a scenic, natural, and aesthetic resource. Upon completion, the WRRSP Project will contribute to the physical, biological, and chemical integrity of the water quality of the Cuyahoga River watershed. These and other conservation values associated with the WRRSP Project have been documented in the Plan as approved by the Ohio EPA, and included in the Covenant.

The parties agree that the Plan and the Covenant constitute the basis for subsequent actions by the Implementer under this Agreement, and are incorporated herein by reference. Without limitation, the Plan is intended to serve as an objective information baseline for monitoring perpetual conformance with the Covenant. The Sponsor and the Implementer agree that the perpetual protection and maintenance of the WRRSP Project shall be carried out in accordance with the responsibilities identified in the Plan and the Covenant.

### SECTION V. INDEPENDENCE OF PARTIES

The Sponsor and the Implementer are independent parties and neither of the parties shall be considered an agent for the other party.

### SECTION VI. TERMINATION

A. The Sponsor and the Implementer shall work together under this Agreement to complete the WRRSP Project in accordance with the Plan. However, the Sponsor and the Implementer specifically retain the right to terminate this Agreement for

Water Resource Restoration Sponsor Program Project WR390296-0004 Sponsorship Agreement between Northeast Ohio Regional Sewer District and City of Cuyahoga Falls Page 4 of 6

any reason with written notice to the other party not less than five (5) days prior to the date that the Sponsor enters into the WPCLF Loan Agreement.

B. If the Ohio EPA does not award WPCLF assistance for the WRRSP Project, either the Sponsor or the Implementer may terminate this Agreement.

### SECTION VII. DEFAULT

In the event of default by any party under this Agreement, the non-defaulting party will have all remedies available to it at law or in equity, including right of termination, injunctive relief and the right to specific performance. No party shall be deemed to be in default of this Agreement unless and until the other party has provided written notice to the defaulting party specifying the default and (a) in the case of a monetary default, the defaulting party fails to cure the default within fifteen (15) days of notice; or (b) in the case of any other type of default, the defaulting party fails to cure the default within thirty (30) days of notice, or fails to commence and diligently prosecute such cure to completion if such cure cannot, with reasonable diligence, be completed with such thirty-day (30) period.

### SECTION VIII. NOTICE

Any document or communication required by this Agreement shall be submitted to:

Sponsor
Mr. Julius Ciaccia
Executive Director
Northeast Ohio Regional Sewer District
3900 Euclid Avenue
Cleveland, Ohio 44115

Implementer
Mr. Tony Demasi, P.E.
City Engineer
City of Cuyahoga Falls
(ADDRESS)

Ohio EPA Chief Ohio EPA DEFA P.O. Box 1049 Columbus, Ohio 43216-1049 Water Resource Restoration Sponsor Program Project WR390296-0004 Sponsorship Agreement between Northeast Ohio Regional Sewer District and City of Cuyahoga Falls Page 5 of 6

### SECTION IX. COMPLIANCE WITH LAWS

In performing their obligations hereunder, the parties hereto will comply with all applicable federal, state, and municipal laws.

IT IS SO AGREED:

(Remainder of page intentionally blank)

### NORTHEAST OHIO REGIONAL SEWER DISTRICT (Sponsor)

Ву:
Name: Julius Ciaccia /
Title: Executive Director
Date: Slulu
Approved as to Form
181-
Ass. D.e. Or Low
CITY OF CUYAHOGA FALLS (Implementer)
By: Lay Deu
Name: Tony Demasi, P.E.
Title: City Engineer
Date: 8/3///
Approved as to Form
A and a comment

### NORTHEAST OHIO REGIONAL SEWER DISTRICT RESOLUTION NO. 94-11

Authorizing the Executive Director to enter into sponsorship agreements with various entities, and to authorize the District to apply for the Ohio Environmental Protection Agency's 2011 Water Resource Restoration Sponsor Program (WRRSP) financial assistance for watershed restoration and preservation improvements.

WHEREAS, the Ohio Environmental Protection Agency's Water Resource Restoration Sponsor Program (WRRSP) provides financial assistance to program participants of the Ohio Water Pollution Control Loan Fund for watershed restoration projects that will further the agency's program for water quality improvements; and

WHEREAS, the District desires to enter into sponsorship agreements with various entities to authorize the District to apply for 2011 WRRSP financial assistance for watershed restoration and preservation improvements;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT:

Section 1. That this Board finds that for the reasons stated in the preamble hereof, the District desires to enter into agreements with the below listed entities to authorize the District to apply for WRRSP financial assistance for watershed restoration and preservation improvements.

Section 2. That this Board hereby authorizes the Executive Director to enter into agreements to authorize the District to apply for 2011 WRRSP financial assistance for watershed restoration and preservation improvements as follows:

En	itities	Project	Amount
·Poi	rtage Park District	Franklin Bog Protection Project Preservation Category	\$270,000
Cit	y of Streetsboro	Highbush Fen Protection Project Preservation Category	\$1,116,500
Me	edina Township	Medina Marsh Protection Project Preservation Category	\$1,160,000
Cit	y of Aurora/TPL	Aurora Audubon Sanctuary Expansion Restoration Category	\$4,100,000
Ge	auga Park District/TPL	Bass Lake II Project Preservation Category	\$1,750,000

Portage Park District	The Howitt Preserve Project Preservation Category	\$1,800,000
Euclid Creek Watershed Partnership	Euclid Creek Mayfair Headwaters Restoration Category	\$915,600
City of Cuyahoga Falls	Cuyahoga Falls Dam Removals Restoration Category	\$1,000,000
The Nature Conservancy	Snow Lake Wetland Preservation Preservation Category	\$1,930,000

Section 3. That this Board authorizes the Executive Director to execute all documents and do all things necessary to effect the terms and conditions of the sponsorship agreements under the Water Resource Restoration Sponsor Program.

Section 4. That this Board declares that all formal actions of the Board concerning and relating to the adoption of this resolution and that all deliberations of the Board and any of its committees that resulted in said formal action were conducted in meetings open to the public and in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

On motion of Mayor DePiero, seconded by Mayor Bacci, the foregoing resolution was unanimously adopted on April 21, 2011.

Dean E. DePierø, Secretary

Board of Trustees

Northeast Ohio Regional Sewer District



## CONTRACT NO. 3589

### NORTHEAST OHIO REGIONAL SEWER DISTRICT

WITH

### **CITY OF CUYAHOGA FALLS**

Ohio EPA 2011 Water Resource Restoration

TO

Sponsor Program (WRRSP).	
The Approximate cost is	\$ <u>1,000,000.00</u>
	\$
	\$
Total	\$ <u>1,000,000.00</u>
The legal form and correctness of are hereby approved.	of the within contract
Marline Si	· M
DIRECTOR C	)F LAW
9-9-	, 2011

### **CERTIFICATION**

It is hereby certified that the amount required to meet the contract, agreement, obligation, payment or expenditure, for the above, has been lawfully appropriated or authorized or directed for such purpose and is in the Treasury or in process of collection to the credit of the fund free from any obligation or certification now outstanding.

DIRECTOR OF FINANCE

Date

# ATTACHMENT C

WRRSP Preliminary Restoration

Plan Outline

# Cuyahoga Falls Dam Removal and Cuyahoga River Restoration WRRSP Preliminary Restoration Plan Outline

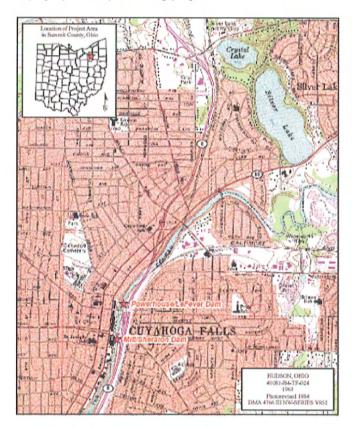
### I. Plan Summary

A. Synopsis of the contents of the plan, focusing on the selected alternative and the implementation section of the plan.

This plan outlines proposed restoration methods to be implemented during the process of restoring the physical and biological health of the Cuyahoga River between river miles 46.21 and 46.47. Past experience and success with dam removal as a restoration tool have been demonstrated upstream on the Cuyahoga River main stem (Ohio EPA 2008), and a tributary to the Cuyahoga River: Plum Creek. This success allows for greater confidence in predicting outcomes with this project.

### II. Description of Water Resources to be Restored

- A. Identification and Location of water resources
  - HUC 12 Identification Number 04110002-03-05
  - 2. Location map in Ohio
  - 3. Topographic map detailing project area



#### B. Overview of Water Resources

 Identify assigned beneficial uses from Ohio Water Quality Standards. For wetlands, give ORAM score(s), wetland regulatory category, and acreage.

The Cuyahoga River has an aquatic life use designation of Warmwater Habitat in the project area. For purposes of antidegradation the stream is classified as general high quality water. Its recreational use designation is Class A Primary Contact Recreation. It is also designated as an Industrial and Agricultural Water Supply.

2. Identify the current status of the water resources relative to meeting designated aquatic life uses or Category 3 wetlands

The impounded section of the Cuyahoga River above the Lefever Dam is currently not meeting its designated aquatic life use. Most recently sampled in the dam pool (RM 48) in 1996 the site had an IBI of 24 and an MIwb of 6.7, both significant departures from the biological standards of 40 and 8.7 respectively. The ICI score was 44, exceeding the biological standard of 34. Depressed fish communities are common in impounded sections of streams.

# C. Biological Features of the Water Resource

Rare, threatened, or endangered plant and animal species

There are no species listed as rare, threatened, or endangered in this section of the river.

2. Invasive, non-native species and their potential impacts

There are several non-native species in this section of the river. For fish communities the carp is most troublesome. Due to the impounded nature of the stream, carp have an ideal habitat to become dominant and disruptive to native fish communities. Feeding activities of carp help to maintain a turbid environment while plant consumption prevents establishment of aquatic plant communities, along with their benefits of sediment stabilization and providing habitat.

Current habitat quality of the resource

The current section of Cuyahoga River was last surveyed by Ohio EPA in 2007. It was found to be in nonattainment of biological criteria. Habitat impairment was listed as a cause of this impairment. A QHEI score of 58.5 was calculated for the river at Waterworks Park (RM 48.7) in 2007 and a score of 56 was calculated in 1996, the park is at the upper end of the Lefever dam pool. A QHEI score of 46.5 was calculated in 1996 at RM 48, which is within the impounded area of the Lefever dam pool.

Other important/unique environmental features or resources

The most unique feature of this section of the Cuyahoga River is its geologic setting. Upon entering the Lefever dam pool the river began to descend into a narrow bedrock gorge characterized by steep walls and rapid water flow over natural bedrock waterfalls. The construction of dams in this valley obscured the falls by essentially burying them under water. Examples of the historic and scenic river are still existent below the Sheraton Dam. The river flows in its natural pattern until it disappears into the Ohio Edison Gorge Dam impounded area. Businesses and the City of Cuyahoga Falls have constructed structures to gain a better view of the natural river sections.

# III. Description of Surrounding Land Use

- A. Land cover description
  - 1. Percentages of categories of land use in the HUC 12, and in the project area.

HUC12 (04110002-03-05)			
Fish Creek-Cuyahoga River			
Developed, Low Intensity (22)	31.75%		
Developed, Open Space (21)	26.72%		
Deciduous Forest (41)	15.93%		
Developed, Medium Intensity (23)	9.52%		
Pasture/Hay (81)	3.87%		
Developed, High Intensity (24)	3.65%		
Open Water (11)	2.37%		
Grassland/Herbaceous (71)	2.34%		
Cultivated Crops (82)	1.62%		
Woody Wetlands (90)	1.55%		
Scrub/Shrub (52)	0.24%		
Evergreen Forest (42)	0.22%		
Barren Land (31)	0.15%		
Emergent Herbaceous Wetlands (95)	0.06%		

2. Identify currently protected lands within the HUC 12 and project area.

There are no protected lands in the immediate project area.

3. Describe land use status and trends and their potential effect on water quality and aquatic habitat.

The surrounding land in this area is generally completely developed. The dams are located within the City of Cuyahoga Falls and are bordered by commercial development and a highway. As the land is developed currently there are no expected future impacts to water quality from surrounding land use. As the city continues with implementation of Phase II storm water requirements, immediate impacts within the project area may be decreased.

- IV. Identification of Key Issues Related to Support of Aquatic Life Uses or Wetland Category 3Making reference to QHEI, HHEI, or ORAM, provide a narrative description of past habitat modifications or other problems relating to habitat either threatening or preventing attainment of aquatic life use, or for wetlands, attainment of Category 3.
  - A. Describe the origins of impairments or threats, including both point and nonpoint sources, relating these to what is known about the current status and trends of the water resource in question.

The 2003 US EPA approved TMDL for the lower Cuyahoga River lists the following sources of impairments for the HUC: Combined Sewer Overflow (H), Urban Runoff/Storm Sewers (M), Upstream Impoundment (M). Industrial Point Sources (S), Municipal Point Sources (S), Spills (S). The 2010 Ohio EPA 305b reports lists the following sources of impairments in the HUC: channelization – development, combined sewer overflows, dam construction – development, major municipal point source, natural, onsite wastewater systems (septic tanks), sewer line construction, urban runoff/storm sewers (NPS).

In the immediate area and upstream dam construction is the dominant source of impairment along with NPS runoff. Work on removal of impoundments in Munroe Falls and Kent has shown that WWTP effluent is not exerting a negative impact within the study area as demonstrated by biological improvements following restoration of a free-flowing system. Nonpoint impacts are still seen throughout the area as noted in observed sediment bedload and habitat impacts associated with higher stream energy following runoff events. The immediate project area is located in a bedrock channel, which attenuates bank destabilization associated with runoff events.

The threats to water quality improvement in the project area continue to be dominated by dams and their impoundments.

B. Identify and describe the history of previous water quality improvement efforts in the watershed.

The Cuyahoga River has a long history associated with water quality improvements. Since the infamous fire of June 22, 1969, and the passage of the Clean Water Act in 1972, the river has been at the leading front of restoration. As one of the most studied rivers in the world a large volume of data has documented the recovery of a severely impaired river as recently as the mid-1980's to a stream who's lower reaches are now attaining goals for fish and macroinvertebrate communities.

The middle section of the Cuyahoga River, upstream of the project area, saw Ohio's first TMDL project. Identification of dams and their impoundments as a dominant source of impairment led to modification of the Kent Dam and removal of the Munroe Falls Dam for water quality improvement. Successful completion of these projects has shown an improvement in biological water quality, habitat, and elimination of depressed dissolved oxygen concentrations in the dam pools.

Billions of dollars have also been spent on improvements to wastewater treatment plants in the watershed. The lower Cuyahoga River is an effluent dominated stream, often with over 80% of the stream flow comprised of treated effluent. Through improvement of treatment plants and ongoing efforts to address combined sewer overflows the river is continuing to improve.

Restoration efforts in the river have received funding from Section 319 grants for projects (Munroe Falls habitat restoration, Hudson High School stream restoration/ land lab), federal ARRA funding (Plum Creek dam removal and stream restoration, Laurel Creek

dam removal and stream restoration, Bear Creek restoration), as well as WRRSP funding (Kent and Munroe Falls dam projects).

There are also a number of citizen-based groups working to improve water quality such as the Friends of the Crooked River, Friends of Yellow Creek and Tinkers Creek Watershed Partners to name a few.

Multiple stakeholders have come together in an effort to promote and designate the river as a water trail. The river currently supports diverse water recreational opportunities from canoeing in the upper Cuyahoga to a recently established kayak run by Kent State University on the middle Cuyahoga. Many people also enjoy canoeing on the lower Cuyahoga River although high bacteria levels at times do no currently permit the Cuyahoga Valley National Park to promote this. American Whitewater has an active chapter in the middle Cuyahoga which uses the free flowing section of river below the Sheraton dam as a Class 5 run. They are very supportive of the dam removal project as it will expand this whitewater kayaking recreational activity in addition to improving water quality.

C. Identify and describe current efforts that are occurring in the watershed which will help meet water quality standards, especially aquatic life designated uses or, in the case of wetlands, category 3. If an Ohio EPA-approved TMDL or WAP exists for the area, relate the current efforts to the implementation recommendations of the report.

As has been mentioned previously, a US EPA approved TMDL is currently in place for this section of the river. One of the implementation measures in the TMDL recommends evaluation and removal of all dams in the lower Cuyahoga River watershed. A WAP is currently being prepared for the middle Cuyahoga River and a preliminary draft is currently in review. Completion of this proposed dam removal project is consistent with TMDL recommendations for addressing water quality impairment.

D. Develop a problem/issue statement regarding habitat integrity, related to attainment or maintenance of aquatic life use or wetland category 3, which takes into account A-D above and surrounding land uses.

Habitat in a free-flowing stream is drastically altered by impoundment. Elimination of riffles and aquatic life dependent on them is just one of the impacts associated with dams. Dams interrupt normal patterns of sediment transport, bedload that would normally progress downstream is settled out above a dam and erosion increases downstream from a dam to reclaim the bedload. The Ohio EPA QHEI target score for warm water habitat attainment (>60) is seldom met in an impoundment. Common impacts include loss of riffles and homogenization of substrate. Restoration of a free flowing stream will allow for natural sediment processing to become reestablished and will result in QHEI scores exceeding the target of 60.

## V. Restoration/Protection Objective

Based on the problem/issue statement regarding habitat integrity, describe the habitat restoration/protection objectives for the WRRSP project. If the project is in a TMDL or endorsed WAP area, indicate whether the restoration/protection objective regarding habitat integrity is consistent with this project.

The habitat restoration goal of this project is a minimum QHEI score of 60 throughout the project area. This goal is consistent with the goals in the approved lower Cuyahoga River TMDL.

# VI. Alternatives to Achieve Restoration/Protection Objective

Describe alternatives to meet the identified habitat needs which will achieve the stated restoration/protection objective. The alternatives should address the following items.

1. For projects involving habitat restoration and protection, different feasible alternative methods of restoring habitat should be considered.

There were three alternatives considered during the project planning process. They are: 1) total removal of dams, 2) partial removal of dams, and 3) no action.

Due to the nature of dams and the impounded areas behind them the third option of no action was eliminated, as it would not result in habitat improvements.

Partial removal, the second option, was also not considered further. The dams in Cuyahoga Falls are located in a section of the Cuyahoga River that has a fairly drastic elevation change over a short length of river. Any remnant of the dam left in place would still result in an impounded stream, which would not achieve habitat improvement.

Option one, total removal, was determined to be the preferred option for habitat restoration. Removal of the structures would restore a free-flowing river allowing natural sediment processing mechanisms to become reestablished. As a result, QHEI scores would improve through improvements in the riffle substrate quality scores, decreases in embeddedness, and overall improvements by increasing instream habitat heterogeneity. A target QHEI score of 60 is expected within six months following the dam removals and restoration of more natural flow regime.

Develop preliminary cost estimates for all identified alternatives.

### Alternative 1. Total Removal of dams

Planning and Design Protection/Restoration Plan Preparation Design Preparation	\$ 70,000 \$100,000
Planning and Design Subtotal	\$170,000
Habitat Restoration	
Construction/Removal of Dams	\$650,000
Vegetative plantings, outfall erosion control to stabilize exposed streambanks	\$150,000
Habitat Restoration Costs Subtotal	\$800,000
Other Miscellaneous Project Costs	
Permits, legal services, required surveys	\$25,000
Boundary markers	\$ 2,000
Sign indicating WPCLF/WRRSP funding with an	
educational component	\$ 3,000
Other Project Costs Subtotal	\$30,000

\$1,000,000

**Total Estimated Project Cost** 

## Alternative 2. Partial Removal of dams

Planning and Design Protection/Restoration Plan Preparation \$ 70,000 **Design Preparation** \$100,000 Planning and Design Subtotal \$170,000 Habitat Restoration Construction/Removal of Dams \$475,000 Vegetative plantings, outfall erosion control to stabilize exposed streambanks \$120,000 Habitat Restoration Costs Subtotal \$595,000 Other Miscellaneous Project Costs Permits, legal services, required surveys \$25,000 Boundary markers \$ 2,000 Sign indicating WPCLF/WRRSP funding with an educational component \$ 3,000 Other Project Costs Subtotal \$30,000

\$795,000

Alternative 3. No Action Estimate is \$0.

 Identify, for all alternatives, the different parties that would be responsible for their implementation, indicating what the relationship would be between the parties relative to ownership of property rights and management responsibilities.

The parties responsible for implementing this project include:

**Total Estimated Project Cost** 

- a. Sponsor: Northeast Ohio Regional Sewer District (NEORSD)
   b. Property Owners: City of Cuyahoga Falls, Ohio
   c. Restoration Entity: City of Cuyahoga Falls, Ohio
   d. Perpetual Property Management: City of Cuyahoga Falls, Ohio
- If the project is located in a watershed with an Ohio EPA-approved TMDL or WAP, confirm alternatives are included in the recommended measures for implementation.

There are two broad alternatives available to address the two dams in the City of Cuyahoga Falls; no action and removal/modification of the structures. It is well established in the research literature that dams cause a number of negative impacts to streams including decreasing habitat diversity, in Ohio measured by use of the QHEI.

The US EPA approved TMDL for the lower Cuyahoga River discusses dam removal as a restoration tool in Section 6.1.1.2 Implementation Actions, Time Line, and Reasonable Assurances (page 87) and recommends evaluation of all dams for removal.

#### VII. Selected Alternative and Basis for Selection

A. Based on a comparison of costs and effectiveness, select the alternative which best achieves the objective at a reasonable cost.

Based on a comparison of costs and effectiveness, the selected alternative is Alternate #1, Total Removal of Dams. This alternative best achieves the objective at a reasonable cost.

B. If the project is located in a watershed with a TMDL or WAP, confirm the selected alternative is included in the recommended measures for implementation.

The US EPA approved TMDL for the lower Cuyahoga River discusses dam removal as a restoration tool in Section 6.1.1.2 Implementation Actions, Time Line, and Reasonable Assurances (page 87) and recommends evaluation of all dams for removal. This proposed project is consistent with the TMDL.

#### VIII. Implementation Plan for Selected Alternative

1. Identify the parties responsible for implementing the project. This should include the: 1) sponsor(s), 2) owner(s) of the property(ies), 3) entity(ies) responsible for restoration of the property(ies), 4) and the entity(ies) responsible for the perpetual management of the property(ies).

The parties responsible for implementing this project include:

a. Sponsor: Northeast Ohio Regional Sewer District (NEORSD)

b. Property Owners: City of Cuyahoga Falls, Ohio

c. Restoration Entity: City of Cuyahoga Falls, Ohio

d. Perpetual Property Management: City of Cuyahoga Falls, Ohio

2. The qualifications of the parties responsible for restoration work and perpetual management of properties should be identified.

The City of Cuyahoga Falls, Ohio has a long record of managing construction projects of all types and sizes. Their annual programs include paving of several miles of roadway, replacing thousands of feet of sidewalk, and providing permanent patches over water main repairs. In addition, the Engineering Department designs, bids, and oversees several public works projects every year, including waterline and sewer line construction, new subdivisions, and building construction. The City has been very successful in ODOT's LPA program, where local agencies are allowed to directly manage federally funded projects. In 2011, the Engineering Department will manage over \$8,000,000 in public works construction.

3. Identify the agreements that will be put in place between the different responsible parties. These would typically include: the sponsorship agreement, and the environmental covenant agreement or conservation easements.

A Sponsorship Agreement between the project Sponsor (NEORSD), and the project Implementer (City of Cuyahoga Falls, Ohio) was executed in August 2011.

A detailed description of the tasks that will be performed to complete the project.

This project involves the removal of two lowhead dams in the Cuyahoga River in Cuyahoga Falls. The Engineering Department will prepare detail plans of the dam removal project, obtain documentation on historical significance of dams and design any needed mitigation, and prepare detail plans for any streambank stabilization that may be needed. Needed permits will be obtained from USACE. Public meetings will be conducted with City Council to review and approve project plans.

The dams are to be removed as one project. The adjoining structures under the adjacent buildings next to the dams will be stabilized to prevent structural failure due to the change in water pressures/velocities/levels associated with the dam removals. Cuyahoga Falls conducted a Hydraulic Engineering study in 2008 to verify the change in water levels will not have any adverse effects on riverfront properties.

Any sediment behind the dams will be allowed to migrate downstream to be trapped behind the Gorge Dam. USEPA will continue to conduct a sediment characterization study of the Gorge Dam sediment in preparation for possible sediment removal/remediation prior to removal of the Gorge Dam.

A description of the bidding process.

Contract documents, including plans, specifications, contract forms, and bid tabs, are prepared and sold in the Engineering Department. A legal notice will be prepared and advertised in the local newspaper for two consecutive weekends. After the second advertisement, a pre-bid conference will be held where the project specifics are discussed, and the contractors have an opportunity to ask questions regarding the project. Approximately 8 days after the pre-bid conference, sealed bids are opened. The bids are evaluated for responsiveness and accuracy, and a recommendation is made to the Board of Control to award a contract to the lowest and best bid, subject to approval of City Council.

6. A detailed, line item budget for the project must be provided. The budget should specifically identify the costs for: land acquisition, restoration activities, and administration costs such as legal and appraisal expenses. Within these categories, the budget should break out the following costs: personnel, non-personnel, contractors and consultants, materials, equipment and labor. A format for the budget is provided in Appendix A to this outline.

## See Appendix A

7. A schedule for completion of the identified tasks, indicating by month the estimated time necessary for completing each task, as well as the entire project. This schedule should fit within the generally estimated time frame for construction and the one year operation/certification period for the wastewater treatment facilities loan being used to sponsor the WRRSP project.

## Project Schedule:

- a. Record Covenant
- b. Submit Final Restoration Plans
- c. Initiate Construction
- d. Complete project implementation
- 3 mos. after loan award
- 4 mos. after award
- 6 mos. after award
- 1 year after sponsor completed project

8. A plan for perpetual management of the properties. This plan should identify: a) who will be responsible for property management and the qualifications of their staff to undertake such work; b) the standards and management techniques that will be used to manage the properties to ensure that habitat quality is permanently maintained; and c) how property management will be funded.

The City of Cuyahoga Falls, Ohio will conduct the perpetual management of the affected properties. The management will be conducted through the Engineering Department, with support from various other departments, including Storm Sewer Department, Water Department, Parks and Recreation Department, and Buildings and Grounds Department.

The City of Cuyahoga Falls, Ohio has a long record of managing construction projects of all types and sizes. Their annual programs include paving of several miles of roadway, replacing thousands of feet of sidewalk, and providing permanent patches over water main repairs. In addition, the Engineering Department designs, bids, and oversees several public works projects every year, including waterline and sewer line construction, new subdivisions, and building construction. The City has been very successful in ODOT's LPA program, where local agencies are allowed to directly manage federally funded projects. In 2011, the Engineering Department will manage over \$8,000,000 in public works construction.

9. A plan for monitoring properties. Follow-up monitoring should provide information on the success of restoration work, as well as the habitat quality of restored areas, addressing the following elements: a) the amount of acreage finally restored, including acreages of the various habitat types; b) for streams, the resulting QHEI value for the restored or protected habitats; c) for wetlands, the ORAM score for the restored or protected habitats; and d) if available, the aquatic life use of the restored or protected water resources. The plan should provide for annual reporting on the progress of restoration work and on protection of habitats.

Ohio EPA staff will continue to conduct monitoring to determine the health of aquatic resources and aquatic life communities within the Cuyahoga River watershed. It is expected that Ohio EPA will conduct fish and aquatic macroinvertebrate community monitoring at this site as part of their future monitoring efforts. New data will be compared to historical records to measure the success of this dam removal project as well as its impact on fish communities and aquatic macroinvertebrate species. Trained Ohio EPA staff will also conduct regular QHEI evaluations on the completed project to confirm that restoration objectives are being met and maintained.

The City of Cuyahoga Falls already owns the majority of the streambank property in the project area. They will maintain the property uncovered by the decrease in water level due to the dam removal through conservation easement/OhioEPA covenant restrictions. It is expected that future city volunteer and community service programs will maintain the streambank areas, as needed through invasive species removal and cleanup projects.

# Appendix A

## WRRSP Project Budget Outline

- A. Implementer/Personnel (brief description of each and cost/item)
  - 1. Salaries/Wages (indicate how the amount is calculated)
    - a. The wages in the Engineering Department currently vary from \$25.5658/hour for secretary, \$27.6858 to \$27.8610/hour for Engineering Aides, and \$40.9183 to \$48.0561/hour for management.
  - 2. Benefits (should be a percentage of salaries/wages)
    - a. The benefits for the Engineering Department vary from 29.25% to 42.63%, as a percentage of salaries. These vary depending on whether the employee has Family or Single medical and dental coverage.
- B. Implementer/Non-Personnel (brief description of each and cost/item)

1.	Materials (e.g. trees, plants, grass seed, riprap)	\$0
2.	Equipment (e.g. bulldozer/backhoe rental)	\$0
3.	Administrative/Legal Fees (e.g. title searches, closing costs)	\$0
4.	Property (number of parcels and estimated cost/parcel)	\$0

- C. Implementer Contracted Services (brief description of each and cost/contract)
  - 1. Consultants (cost/task)
    - a. Prepare final design drawings for dam removals and restoration \$170,000
  - Restoration Work (cost/task)
     a. Removal of Dams \$650,000

    - b. Habitat Restoration \$150,000
  - Other (Cost/task)

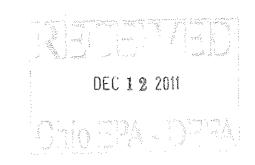
a.	Permits, legal services, surveys	\$25,000
b.	Boundary markers	\$ 2,000
C.	Signage	\$ 3,000

# ATTACHMENT D

Correspondence by

The Ohio Historical Society





December 6, 2011

Dan Halterman Ohio EPA-DEFA P.O. Box 1049 Columbus, OH 43216-1049

Dear Mr. Halterman:

RE: Cuyahoga Falls Dams Removal: Powerhouse/LeFever Dam & Mill/Sheraton Dam

This is in response to correspondence received November 8, 2011, regarding the above referenced project. My comments are made pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated regulations at 36 CFR Part 800.

The City of Cuyahoga Falls proposes to demolish the Powerhouse/LeFever Dam and Mill/Sheraton Dam through the Water Resource Restoration Sponsor Program, administered by the Ohio Environmental Protection Agency under authority of the U.S. Environmental Protection Agency. You have requested the comments of the Ohio Historic Preservation Office regarding the effects of this project on historic properties.

I concur with your finding that the proposed demolition of the Powerhouse/LeFever Dam and Mill/Sheraton Dam will not have an adverse effect on historic properties based on the information submitted. Please note, however, that any future plans involving Gorge Dam or the related coal burning power house, alluded to in your submission, should be presented to this office for review under 36 CFR Part 800. This 1912 dam and associated power house, built by the Northern Ohio Power and Light Company, appear to have local historic significance. Similarly, any proposals to conduct sediment removal/remediation at Gorge Dam should be reviewed by this office for potential effects on archeological resources.

No further coordination with this office is necessary unless there is a change in the project. If you have any questions, please contact me by phone at (614) 298-2000 or by email at <u>jbertram@ohiohistory.org</u>. Thank you.

Sincerely, Buthan

Jamie Bertram, Project Reviews Manager

Resource Protection and Review

# ATTACHMENT E

Mill/Sheraton Dam Construction Photographs



Figure 17. Construction photograph of Mill/Sheraton Dam, ca. 1914, looking south

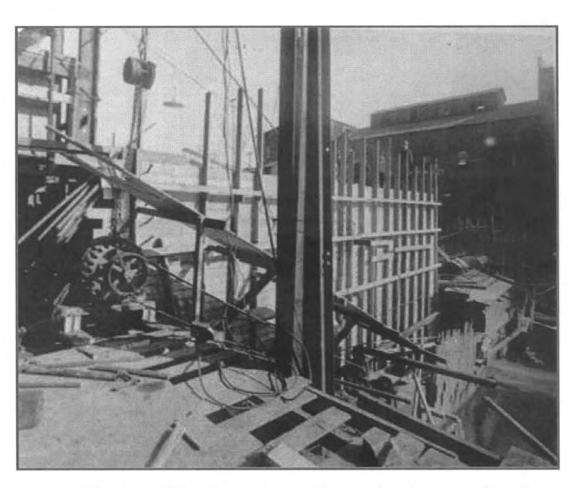


Figure 18. Construction photograph of Mill/Sheraton Dam, ca. 1914

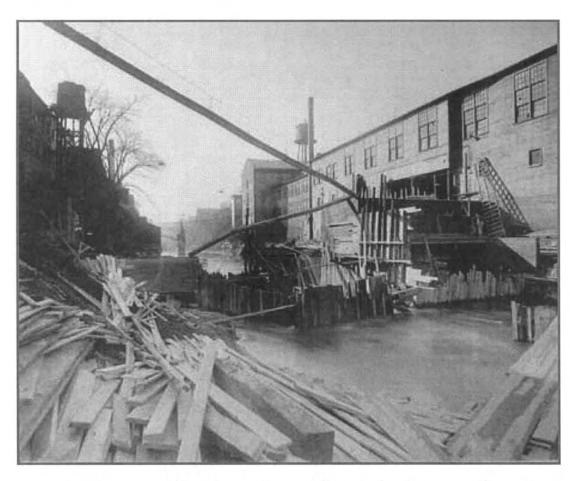


Figure 19. Construction photograph of Mill/Sheraton Dam, ca. 1914, looking south

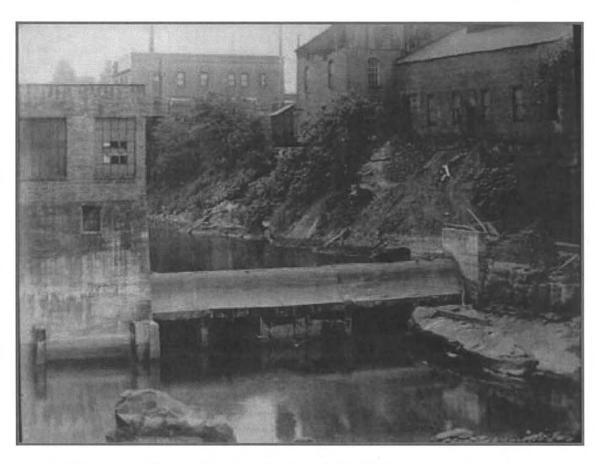


Figure 20. Completed Mill/Sheraton Dam, ca. 1918, looking north

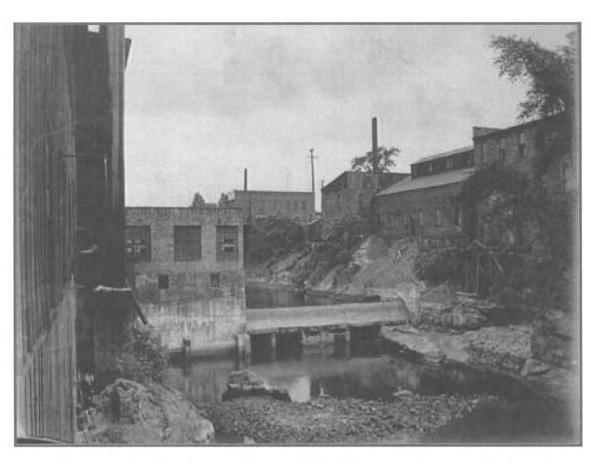


Figure 21. Completed Mill/Sheraton Dam, post 1918, looking north

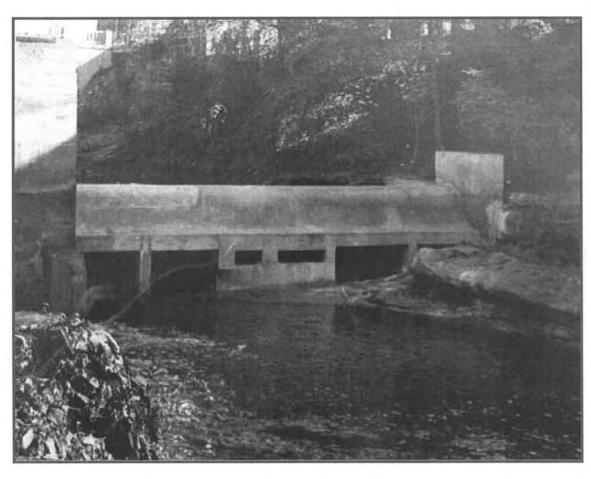


Figure 22. Completed Mill/Sheraton Dam, ca. 1918. close-up view, looking north

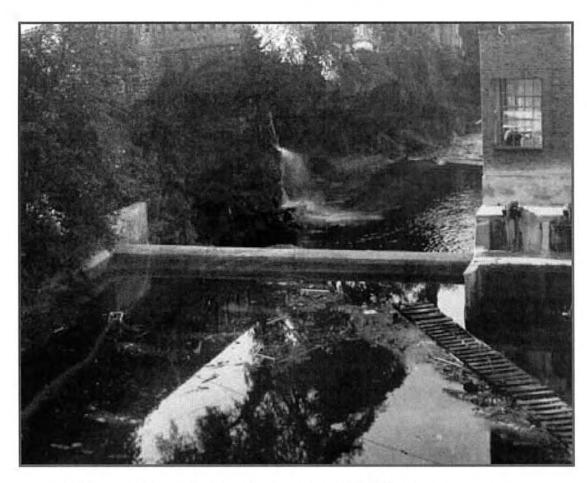


Figure 23. Completed Mill/Sheraton Dam, close-up view. ca. 1918. looking south