



# United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Ohio-Kentucky-Indiana Water Science Center

OHIO  
6460 Busch Boulevard, Suite 100  
Columbus, Ohio 43229-1737

KENTUCKY  
9818 Bluegrass Parkway  
Louisville, Kentucky 40299-1906

INDIANA  
5957 Lakeside Boulevard  
Indianapolis, Indiana 46278-1996

June 12, 2018

Mr. Matthew Steele  
City of Columbus, Dept. of Public Utilities  
910 Dublin Road  
Columbus, Ohio 43215

Dear Mr. Steele:

Enclosed are two signed originals of our standard joint-funding agreement 19EMNF0000201 for the investigation of water resources in the Scioto River and tributaries in the vicinity of Columbus and Pickaway County well field, as well as Hellbranch Run water discharge, suspended sediment discharge, and concentration of selected water quality parameters, during the period October 1, 2018 through September 30, 2019 in the amount of \$340,894 from your agency. U.S. Geological Survey contributions for this agreement are \$71,795 for a combined total of \$412,689. Please sign and return one fully-executed original to Damon Williams at the Indianapolis address above.

Federal law requires that we have a signed agreement before we start or continue work. Please return the signed agreement by **October 1, 2018**. If, for any reason, the agreement cannot be signed and returned by the date shown above, please contact David Straub by phone number (614) 430-7744 or email [destraub@usgs.gov](mailto:destraub@usgs.gov) to make alternative arrangements.

This is a fixed cost agreement to be billed quarterly via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Damon Williams at phone number (317) 209-3333 or email at [dwilliams@usgs.gov](mailto:dwilliams@usgs.gov).

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. The U.S. Geological Survey appreciates the opportunity to work with the City of Columbus and looks forward to continuing the relationship in future fiscal years.

Sincerely,

Michael Griffin  
Director

Enclosure  
19EMNF0000201 (2)

U.S. Department of the Interior  
U.S. Geological Survey  
Joint Funding Agreement  
FOR  
Water Resource Investigations

Fixed Cost Agreement YES[ X ] NO[ ]

THIS AGREEMENT is entered into as of the October 1, 2018, by the U.S. GEOLOGICAL SURVEY, OKI Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the City of Columbus, OH party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation the investigation of water resources in the Scioto River and tributaries in the vicinity of Columbus and Pickaway County well field, as well as Hellbranch Run water discharge, suspended sediment discharge, and concentration of selected water quality parameters (per attachment), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

- (a) \$71,795 by the party of the first part during the period October 1, 2018 to September 30, 2019
- (b) \$340,894 by the party of the second part during the period October 1, 2018 to September 30, 2019
- (c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program: N/A

- (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.
- (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (<https://www2.usgs.gov/fsp/>).

U.S. Department of the Interior  
U.S. Geological Survey  
Joint Funding Agreement  
FOR

Customer #: 600000249  
Agreement #: 19EMNF0000201  
Project #: NF00GWR  
TIN #: 31-6400223

Water Resource Investigations

9. Billing for this agreement will be rendered **quarterly**. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

**USGS Technical Point of Contact**

Name: David Straub  
Supervisory Hydrologist (Engineer)  
Address: 6460 Busch Boulevard  
Columbus, OH 43229-1753  
Telephone: (614) 430-7744  
Fax: (614) 430-7777  
Email: destraub@usgs.gov

**Customer Technical Point of Contact**

Name: Matthew Steele  
Address: 910 Dublin Road  
Columbus, Ohio 43215  
Telephone: (614) 645-7020  
Fax:  
Email: mksteele@columbus.gov

**USGS Billing Point of Contact**

Name: Damon Williams  
Address: 5957 Lakeside Blvd.  
Indianapolis, IN 46278  
Telephone: (317) 209-3333  
Fax:  
Email: dlwilliams@usgs.gov

**Customer Billing Point of Contact**

Name: Matthew Steele  
Address: 910 Dublin Road  
Columbus, Ohio 43215  
Telephone: (614) 645-7020  
Fax:  
Email: mksteele@columbus.gov

U.S. Geological Survey  
United States  
Department of Interior

City of Columbus, OH

Signature

Signatures

By \_\_\_\_\_ Date: **06/12/2018**  
Name: Michael Griffin  
Title: Director

By \_\_\_\_\_ Date: \_\_\_\_\_  
Name:  
Title:

By \_\_\_\_\_ Date: \_\_\_\_\_  
Name:  
Title:

By \_\_\_\_\_ Date: \_\_\_\_\_  
Name:  
Title:

**City of Columbus, OH**  
Attachment for 19EMNF0000201  
10/1/2018 to 9/30/2019

<b>SURFACE WATER</b>							
<b>SITE NUMBER</b>	<b>DESCRIPTION</b>	<b>CODE</b>	<b>NO. UNITS</b>	<b>DIFF FACTOR</b>	<b>USGS FUNDS</b>	<b>CUST. OTHER CASH FUNDS</b>	<b>TOTAL COST</b>
03219500	Scioto River near Prospect OH Full Range Streamflow Station	QCONT	0.5	1	\$3,820	\$6,940	
				<b>SW Total:</b>			<b>\$10,760</b>
03220000	Mill Creek near Bellepoint OH Full Range Streamflow Station	QCONT	0.44	1	\$3,490	\$6,710	
				<b>SW Total:</b>			<b>\$10,200</b>
03220500	OShaughnessy Reservoir near Dublin OH Elevation, Continuous	ELEVCONT	0.88	0.5	\$2,180	\$3,500	
				<b>SW Total:</b>			<b>\$5,680</b>
03221000	Scioto River below OShaughnessy Dam nr Dublin OH Full Range Streamflow Station	QCONT	0.6	1	\$3,820	\$8,940	
				<b>SW Total:</b>			<b>\$12,760</b>
03221500	Griggs Reservoir at Columbus OH Elevation, Continuous	ELEVCONT	0.5	0.9	\$2,180	\$3,500	
				<b>SW Total:</b>			<b>\$5,680</b>
03221646	Scioto River at 5th Ave at Columbus OH Full Range Streamflow Station	QCONT	1	1		\$14,500	
				<b>SW Total:</b>			<b>\$14,500</b>
03225500	Olentangy River near Delaware OH Full Range Streamflow Station	QCONT	0.34	1	\$2,720	\$4,780	
				<b>SW Total:</b>			<b>\$7,500</b>
03226800	Olentangy River near Worthington OH Full Range Streamflow Station	QCONT	0.57	1	\$3,490	\$8,410	
				<b>SW Total:</b>			<b>\$11,900</b>
03227107	Olentangy River at J H Herrick Dr at Columbus OH Full Range Streamflow Station	QCONT	1	1		\$14,500	
				<b>SW Total:</b>			<b>\$14,500</b>
03228300	Big Walnut Creek at Sunbury OH Full Range Streamflow Station	QCONT	0.71	1	\$4,020	\$10,480	
				<b>SW Total:</b>			<b>\$14,500</b>
03228400	Hoover Reservoir at Central College OH Elevation, Continuous	ELEVCONT	0.91	0.5	\$2,180	\$3,500	
				<b>SW Total:</b>			<b>\$5,680</b>
03228500	Big Walnut Creek at Central College OH Full Range Streamflow Station	QCONT	0.71	1	\$4,020	\$10,480	
				<b>SW Total:</b>			<b>\$14,500</b>
03228750	Alum Creek near Kilbourne OH Full Range Streamflow Station	QCONT	0.78	1	\$3,050	\$11,450	
				<b>SW Total:</b>			<b>\$14,500</b>
03229500	Big Walnut Creek at Rees OH Full Range Streamflow Station	QCONT	0.71	1	\$4,020	\$10,480	
				<b>SW Total:</b>			<b>\$14,500</b>
03229610	Scioto River near Commercial Point OH Full Range Streamflow Station	QCONT	0.7	1	\$4,180	\$10,320	
				<b>SW Total:</b>			<b>\$14,500</b>
03230450	Hellbranch Run near Harrisburg OH Full Range Streamflow Station	QCONT	0.82	1	\$2,515	\$11,985	
				<b>SW Total:</b>			<b>\$14,500</b>
<b>SW Grand Total:</b>					<b>\$45,685</b>	<b>\$140,475</b>	<b>\$186,160</b>

**WATER QUALITY**

<b>SITE NUMBER</b>	<b>DESCRIPTION</b>	<b>CODE</b>	<b>NO. UNITS</b>	<b>DIFF FACTOR</b>	<b>USGS FUNDS</b>	<b>CUST. OTHER CASH FUNDS</b>	<b>TOTAL COST</b>
03219500	Scioto River near Prospect OH Water Quality, Continuous	WQCONT	1	1		\$21,000	
				<b>WQ Total:</b>			<b>\$21,000</b>
03220500	OShaughnessy Reservoir near Dublin OH Miscellaneous QW	QW-MISC	1	1	\$167	\$500	
				<b>WQ Total:</b>			<b>\$667</b>
03220510	Scioto R. at OShaughnessy Dam near Dublin OH Water Quality, Continuous	WQCONT	1	1		\$21,000	
				<b>WQ Total:</b>			<b>\$21,000</b>
03221500	Griggs Reservoir at Columbus OH Miscellaneous QW	QW-MISC	1	1	\$167	\$500	
				<b>WQ Total:</b>			<b>\$667</b>
03228039	Scioto River above Shadeville OH Water Quality, Continuous	WQCONT	1	1		\$22,000	
				<b>WQ Total:</b>			<b>\$22,000</b>
03228300	Big Walnut Creek at Sunbury OH Water Quality, Continuous	WQCONT	1	1		\$21,000	
				<b>WQ Total:</b>			<b>\$21,000</b>
03228400	Hoover Reservoir at Central College OH Miscellaneous QW	QW-MISC	1	1	\$166	\$500	
				<b>WQ Total:</b>			<b>\$666</b>
03230450	Hellbranch Run near Harrisburg OH Periodic Sample Collection and Processing	WQSPER	1	1		\$25,000	
	Daily Suspended Sediment	DSuspSed	1	1		\$36,400	
				<b>WQ Total:</b>			<b>\$61,400</b>
				<b>WQ Grand Total:</b>	<b>\$500</b>	<b>\$147,900</b>	<b>\$148,400</b>

**GROUND WATER**

<b>SITE NUMBER</b>	<b>DESCRIPTION</b>	<b>CODE</b>	<b>NO. UNITS</b>	<b>DIFF FACTOR</b>	<b>USGS FUNDS</b>	<b>CUST. CASH FUNDS</b>	<b>OTHER FUNDS</b>	<b>TOTAL COST</b>
394903083015400	FR-366 Groundwater level, Continuous	GWCONT	1	1		\$2,000		
				<b>GW Total:</b>				<b>\$2,000</b>
395008082593100	FR-126 M13 Groundwater level, Continuous	GWCONT	1	1		\$2,000		
				<b>GW Total:</b>				<b>\$2,000</b>
395039082585800	FR-115 TH-67 Groundwater level, Continuous	GWCONT	1	1		\$2,000		
				<b>GW Total:</b>				<b>\$2,000</b>
395055082592400	FR-271 PARSONS AVE WTP DEEP WELL AT COLUMBUS OH Groundwater level, Continuous	GWCONT	1	1		\$2,000		
				<b>GW Total:</b>				<b>\$2,000</b>
395055082592401	FR-272 PARSONS AVE WTP SHALLOW WELL AT COLUMBUS OH Groundwater level, Continuous	GWCONT	1	1		\$2,000		
				<b>GW Total:</b>				<b>\$2,000</b>
				<b>GW Grand Total:</b>		<b>\$10,000</b>		<b>\$10,000</b>

**SUMMARY FOR 19EMNF0000201**

City of Columbus, OH

<b>TYPE</b>	<b>USGS FUNDS</b>	<b>CUST. CASH</b>	<b>OTHER FUNDS</b>	<b>TOTAL COST</b>
<b>SURFACE WATER (SW)</b>	\$45,685	\$140,475		\$186,160
<b>WATER QUALITY (WQ)</b>	\$500	\$147,900		\$148,400
<b>GROUND WATER (GW)</b>		\$10,000		\$10,000
<b>GRAND TOTAL</b>	\$71,795	\$340,894		\$412,689