

DRINKING WATER STATE REVOLVING FUND
SRF ANNUAL REPORT
STATE FISCAL YEAR ENDED JUNE 30, 2018

Prepared by the Commonwealth of Kentucky
For EPA Region IV

September 28, 2018

KENTUCKY WASTEWATER SRF ANNUAL REPORT

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DWSRF ANNUAL REPORT

I. INTRODUCTION

The Commonwealth of Kentucky respectfully submits the Drinking Water State Revolving Fund (DWSRF) Annual Report for State Fiscal Year (SFY) ended June 30, 2018. This report describes how Kentucky met the goals as identified in the 2018 Intended Use Plan (IUP) and presents the actual use of funds.

II. EXECUTIVE SUMMARY

The Kentucky Infrastructure Authority (KIA) is the responsible agency for the DWSRF program in Kentucky. Daily program activities are administered by KIA and DOW via a Memorandum of Agreement. KIA oversees \$393,099,040 in DWSRF first use funds (Exhibit 9) which are comprised of capitalization grants \$206,629,592, state match \$48,774,840 and leverage bond proceeds \$80,000,000.

Exhibit 1 shows that the Commonwealth of Kentucky made nine new binding commitments and three commitment increases for a total of \$19,539,504 to provide assistance for construction of drinking water projects during the year. The average interest rate on funds committed during the year was 1.00%. Exhibit 2 reflects commitments by quarter. Exhibit 5 shows disbursements from the SRF to various recipients, program administration and other set-aside activities during 2018 totaling \$25,212,775.

In an effort to assist small systems and disadvantaged communities, KIA provided binding commitments to nine small systems and eleven disadvantaged communities, some of which are also small systems (Exhibit 1). Binding commitments for small systems totaled \$12,320,433 or 63% of total binding commitments. Binding commitments for disadvantaged communities totaled \$15,539,504 or 80% of total binding commitments.

During 2018 six loans totaling \$10,874,682 were approved that were subsidized with principal forgiveness of \$3,849,000 (Exhibit 4). The subsidy was around 25% to 50% of project cost per project up to the 2018 maximum amount established in the IUP (\$1.3 million) allocated in priority order to disadvantaged communities on the priority list.

Since the inception of the program, the Commonwealth has issued 198 binding commitments totaling \$447,412,028. Cumulative set-asides made available from capitalization grant funds total \$57,694,608 (Exhibit 8). The program administration set-aside totals \$8,829,304 while the balance of \$48,865,304 has been for technical assistance, environmental support and management (Exhibit 9).

III. GOALS AND ACCOMPLISHMENTS

The primary goal of the DWSRF program is to assist public water systems (PWS) in providing safe drinking water at an affordable cost to their customers. The program offers low-cost financing to PWS for eligible drinking water infrastructure construction projects. Through set-aside funds, the DWSRF is also used to improve environmental programs that support the goals of the Safe Drinking Water Act (SDWA). Examples include capacity development, operator certification, source water protection, and wellhead protection. Effective and efficient administration of the DWSRF program, combined with below market interest rates and long term financing, will assist PWS to provide sufficient quality and quantity of affordable potable water throughout Kentucky.

A. Short Term Goals and Accomplishments

The 2018 IUP describes six short-term goals to be achieved by the SRF. The State continues to make significant progress toward successful completion of these goals as described below:

1. Enhance loan closing procedures and refine repayment terms.

Kentucky is reorganizing internal job duties to focus on loan compliance, loan closing procedures, and refining repayment terms. Language in the assistance agreements has been revised to document compliance expectations. Estimated amortization schedules will be provided at the time of assistance agreements are initiated based on estimated repayment dates.

2. Promote the principles of EPA's Sustainable Infrastructure (SI) Initiative to loan recipients through education and outreach so that SI practices are considered in planning, design, and construction activities.

As a way to promote the SI Initiatives to all communities, a SI brochure is distributed with the Call for Projects. The SI brochure is also available on the KIA and DOW websites. It explains the four pillars and examples of how projects planning can be modified to address more sustainable infrastructure and providing additional savings to utilities related to costs, future operation and maintenance expenses.

With the introduction of the Green Project Reserve requirement in the FFY 2010 Capitalization Grant the integrated project priority ranking system was modified to incorporate Energy Efficiency, Water Efficiency, Sustainable/Green Infrastructure and asset management/full cost pricing to promote the principles of EPA's Sustainable Infrastructure Initiative. The projects that incorporated components of sustainable infrastructure received bonus points on the project priority ranking. Forty-six of the eighty-seven projects submitted during the Call for Projects received points for green components. Nine projects received

points for incorporating two or more green components, while thirty-six projects incorporated one green component. The primary green category was for water efficiency for which thirty-two of the eighty-seven (38%) projects were awarded points.

3. Improve SRF training to borrowers, project administrators, Area Development Districts, and the engineering community.

During the 2018 SFY, the DOW and KIA continuously met with Area Development District (ADD) planners, Water Management Councils, and water system officials to provide guidance on how to apply for an SRF loan through the WRIS. The primary emphasis during training this year has been continuous planning and preparation for the entire loan process. A KIA Borrower and Administrator Training was held on November 16-17, 2017 to provide participants from Area Development Districts and the engineering community with advanced training on the life cycle of a KIA loan from Call for Projects and Intended Use Plan to repayments. The two-day training was very well received by over 100 participants who responded with positive feedback and comments.

Compliance related training and information has been provided through introductory meetings with each SRF borrower as well as reiterated during the preconstruction meetings held at the time the construction contracts are executed. A “Best Practices” document for Davis Bacon compliance and reporting has been distributed to borrowers throughout the loan process.

4. Identify distressed borrowers through compliance monitoring and provide targeted financial and managerial guidance.

DOW did not identify borrowers through compliance monitoring utilizing a new screening method. However, after DOW reviewed all projects that were submitted for funding, they also reviewed each entity for technical, managerial and financial capacity based on sanitary survey results. Any entity that did not have capacity were asked to meet that capacity before the start of construction of the said project. In future, DOW will work with KIA to come up with a process to identify distressed borrowers upfront.

Loan assistance efforts include KIA borrower visits by the Kentucky Rural Water staff, which was funded by an Appalachian Regional Commission grant. The inspections include targeted financial assistance for borrowers that have undergone changes in their management, Board or other decision makers. Services include rate studies, property inspections, training and technical assistance.

5. Develop a focused marketing strategy in conjunction with EEC to target systems with compliance and energy efficiency needs.

Kentucky plans to provide SRF training to not only highlight compliance but to also market programmatic changes, including targeting systems with compliance and energy needs. Interagency meetings with Division of Water, Division of Enforcement and Public Service Commission are held regularly to prioritize distressed borrowers.

6. Work toward the use of electronic forms and data as opposed to paper documents, where possible.

The SRF Call for Projects, project ranking and project tracking have been integrated into the Water Resource Information System (WRIS). The projects are submitted through WRIS and ranked in the portal. DOW and KIA staff have access to the data collected in the WRIS and are working together toward making the portal user-friendly for the staff to access all documents.

KIA has worked for several funding cycles to develop an electronic application process for borrowers. Application information will be pulled automatically from WRIS Project Profile to populate an electronic application after the borrower has worked with the Area Development District to update it. From there the borrower will download the PDF application and reach an attachment page with clickable links to additional documents required for the application. The borrower will then submit the entire electronic application package to KIA via email. The paperless application reduces paper usage, improve timeliness of submittal, and ease the burden of excessive paperwork during the process. KIA had fully implemented the electronic application process in the 2018 funding cycle.

B. Long Term Goals and Accomplishments

The IUP describes three long-term goals:

1. Work with the EEC to explore solutions to increase energy efficiency for drinking water utilities and future non-compliance issues under the SDWA.

The use of energy efficient methods and equipment is encouraged for DWSRF funded projects. Additional points are assigned during the ranking process for those projects utilizing energy efficient designs.

2. Streamline loan processes and improve communication and the sharing of data between KIA and DOW.

DOW and KIA provide administrative and technical assistance to borrowers by conducting an Introductory Meeting before work begins to instruct the borrowers on compliance with applicable rules (to both the borrower and contractors) during the construction process, by reviewing each payment to ensure the invoices provided substantiate the amount requested, and by conducting an administrative file review before the final payment is made to ensure that all required elements of the process have been satisfied.

Electronic streamlining efforts have been improved for the call for projects, bypassing procedures, loan applications, change orders, and draw requests. The existing priority ranking system is evaluated annually to target the major environmental needs of the State with an emphasis on the applicant's readiness to proceed. The data collected in the WRIS is available as a tool in determining project rankings.

3. Create a utility portal within the Water Resources Information System (WRIS) to improve communication and reporting between the utility, KIA, and regulatory agencies.

Kentucky has created a utility portal within the Water Resources Information System. The portal will give utility personnel access to the WRIS to input current information on projects. The geographic information in the WRIS is being reviewed for quality assurance while the asset management tool will be evaluated for modifications to improve user-friendly measures. A WRIS workgroup has been formed to include stakeholders such as regulatory agencies, regulated utilities, technical assistance providers, KIA staff and other funding agencies.

IV. SET-ASIDE ACTIVITY

Exhibit 10 shows the administrative and set-aside disbursements for 2018. Since the inception of the program, Kentucky has disbursed administrative and other (state programs, local assistance and technical assistance) set-asides of \$57,694,608 (Exhibit 8) as compared to \$53,717,308 in 2017.

A. State Program Management Set-Aside

Section 1452(g)(2) of the Safe Drinking Water Act (SDWA) allows up to 4% of the DWSRF capitalization grant to be allotted to the state to cover the reasonable costs of administration of the programs under this section and up to 10% of the DWSRF capitalization grant to be set-aside to support other program initiatives of the SDWA. The Program Management Set-Aside requires a dollar for dollar match by Kentucky. Kentucky met this requirement based on expenditures from the General Fund of the Energy and Environment Cabinet for the PWSS program and activities. An additional set-aside of up to 2% may be taken to provide technical assistance to small PWS serving populations less than 10,000. For a

program overview of amounts for each set-aside category see Exhibit 9 and activities under Section 1452(g)(2) are listed in Attachment 1.

B. Local Assistance and Other Programs Set-Aside

Section 1452(k)(2) of the SDWA allows up to 15% of the DWSRF capitalization grant to be set-aside to support local assistance and other program initiatives of the SDWA. Activities under Section 1452(k)(2) are listed in Attachment 2.

V. ASSISTANCE ACITIVITY

A. Fund Financial Status

Exhibit 9 shows the sources and allocation of first use SRF funds for 2018. Exhibit 13 shows the Accounts Receivable Aging. If a borrower experiences late payments, KIA will work with them to assess rate structures or revise repayment schedules. To date, KIA has had no defaults and no loans are past due. Exhibit 10 shows the administrative and set-aside disbursements for 2018.

B. Financial Statements

Exhibits 11 and 12 present the 2018 unaudited Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position for the Drinking Water State Revolving Fund of the Kentucky Infrastructure Authority.

C. Revenue Bond Funding

Bonds with net proceeds of \$25,000,000 and a weighted average maturity of 9.918 years were issued in April 2018 at a true interest cost of 2.87%.

D. Provisions of the Operating Agreement/Conditions of the Grant

The Commonwealth of Kentucky agreed to abide by conditions in the operating agreement and in each grant agreement. All conditions have been met. Some of the primary conditions are described below:

1. State Matching Funds

The Commonwealth of Kentucky deposited into the SRF account an amount that equals at least 20% of the grant payment (Exhibit 9 displays the state match payment). This is similar to the EPA/ACH in that funds are not deposited until the revenue bonds are sold and federal funds are actually deposited. A state match was not required on ARRA grant funds.

2. Binding Commitments within One Year

Exhibit 2 shows that the state entered into binding commitments to provide assistance from the SRF in amounts equal to 137% of the total quarterly grant payments within one year of the receipt of the payment.

3. Expeditious and Timely Expenditure

Exhibit 5 shows that \$25,212,775 was disbursed to the borrowers for project expenses and to the state for program administration and other set-asides. The Commonwealth disbursed all cash draws and other available SRF funds in a timely and expeditious manner. Exhibit 1 "Projects Receiving SRF Financial Assistance for State Fiscal Year Ended June 30, 2018" demonstrates that SRF projects have moved in an expeditious and timely manner to start construction. Kentucky is monitoring the projects to ensure timely initiation of operations in accordance with the established schedules.

4. Eligible Activities of the State Revolving Fund

All projects met eligibility requirements.

5. Disadvantaged Business Enterprises (DBE), Minority Business Enterprise and Women's Business Enterprise (MBE/WBE) Requirement

Kentucky negotiated with Region IV an overall fair share objective of 8% for MBE/WBE participation on activities financed by the SRF. During 2018, \$18,382,478 in construction draw requests was reimbursed to DWSRF participants of which \$115,334, or 0.63% was reimbursed to MBE contractors and \$7,295 or 0.04% was reimbursed to WBE contractors. All borrowers were required to follow the six affirmative steps.

6. Other Federal Laws and Authorities

Kentucky and all recipients of SRF funds directly made available by the capitalization grant have complied with applicable federal authorities. Recipients agreed to do this in their loan agreement with the Commonwealth.

VI. PROPOSED IMPROVEMENTS

A. MHI Determination Guidance

KIA has developed the MHI Determination Guidance for CWSRF and DWSRF loan projects. MHI is used to determine the interest rate, principal forgiveness eligibility, and extended loan term eligibility for the CWSRF and DWSRF programs. The guidance document identifies and describes three accepted methodologies applicants can use to determine the MHI for a project area or for

the entire system area. The methodologies include:

- 1) Default Weighted Proximity Analysis (DWPA);
- 2) Modified Weighted Proximity Analysis (MWPA); and
- 3) Census or Sample Income Survey (IS).

The DWPA and MWPA are GIS based methodologies that use system mapping (waterlines, sewer lines, or meter points) to calculate the MHI based on 5-year American Community Survey census tract MHI estimates. The IS is modeled after Kentucky's Community Development Block Group program guidance. The DWPA is calculated for all projects in the WRIS Portal and is considered the primary MHI determination methodology; however, if the DWPA is insufficient, applicants may collaborate with KIA staff to select the MWPA or IS as an alternative.

To maintain the integrity of MHI determinations, the MHI Determination Guidance includes the hierarchy of the methodologies and the required conditions to proceed with each method. Additional forms and informational materials have been developed to ensure that the methodologies are applied consistently. Most notably, KIA has collaborated with other federal funding sources (Kentucky's Community Development Block Grant and USDA's Rural Development program) to develop a single multi-agency income survey form to streamline income surveys for projects with multiple funding sources. The form has also been translated into Spanish.

B. WRIS Work Group

The Water Resource Information Systems (WRIS) has been used to identify and develop water and sewer projects in the state of Kentucky since 2000. The three major components of the WRIS are System Data, Project Profiles, and GID mapping. The WRIS supports local, regional, and state planning and prioritization for water and sewer infrastructure development.

The WRIS Work Group was formed in 2018 to initiate the redesign of the WRIS Portal to support more planning and project development functionality in the WRIS Portal. The primary goals of the WRIS Work Group is to identify the strategies that will improve the integrity of the data in the WRIS, improve the functionality of the WRIS Portal for local, regional, and state users, and improve collaboration between water and sewer stakeholders across the state.

Attachment 1

**Activities Under Section 1452(g)(2)
of the Safe Drinking Water Act**

A. DWSRF Administration – Section 1452 (g)(2) – 4 percent maximum

The Kentucky Infrastructure Authority (KIA) has a Memorandum of Agreement with the Energy and Environment Cabinet, Department for Environmental Protection, Division of Water (DOW), to perform the technical aspects of the DWSRF program. KIA and DOW staff meet regularly to discuss the development, maintenance, and administration of the DWSRF program. Activities included developing reports, payment processing, pre-application activities, travel, application review, engineering review, environmental review, construction progress inspection, training, portfolio management, audit management, cash management, securities management, financial management, financial analysis and capacity review.

The Water Infrastructure Branch of the Kentucky DOW performed the following:

1. There were 42 active drinking water loan projects in various stages of the DWSRF process at the end of the 2018 state fiscal year (SFY). The projects are sponsored by the following systems:

SFY 2018 Active DWSRF Projects		
Columbia/Adair County Utilities District	City of Louisa	City of Campbellsville
Cave Run Water Commission	City of Morehead	City of Nicholasville
Monroe County Water District	City of Evarts	City of Lancaster
Whitley County Water District	City of Olive Hill	City of South Shore
Green-Taylor Water District	City of Pineville	City of Prestonsburg
Northern Kentucky Water District	City of Irvine	City of Williamstown
Frankfort Electric/Water Plant Board	City of Salyersville	City of Harrodsburg
Southern Water/Sewer District	City of Stanford	City of Fleming Neon
Cumberland Falls Highway Water District	City of Lebanon	City of Centertown
Hopkinsville Water Environmental Authority	City of Danville	Ohio County Water District
Western Pulaski County Water District		

2. Loan applications have been reviewed for all of the projects listed above. Eleven drinking water projects were closed out during the 2018 state fiscal year.
3. Thirteen DWSRF environmental reviews were conducted during the SFY 2018 for drinking water infrastructure projects.
4. Twelve drinking water projects were reviewed by Water Infrastructure Branch Engineering Section from July 1, 2017 to June 30, 2018. The Engineering Section also performed associated project management responsibilities including attending preconstruction meetings, project inspections, review of invoices and change orders, etc.

SFY 2018 Project Review Summary	
Distribution- Line Extension	1
Distribution- Major Construction	3
Replacement/Rehabilitation	3
Tank	3
Water Treatment- Modifications, New, Preliminary	2

B. Technical Assistance – Section 1452(g)(2) – 2 percent maximum

Kentucky used the Technical Assistance set-aside as follows:

- ◆ Provided approximately 133 instances of assistance, training and consultation, covering technical, managerial, and financial capacity.
- ◆ Of the 140 sanitary surveys conducted in SFY 2018 39% were conducted at small drinking water systems (less than 10,000 population). Over 37% of those were in very small systems with less than 3,300 population.
- ◆ Sixty-six drinking water treatment plants achieved Area-Wide Optimization Program (AWOP) turbidity goals, resulting in safer drinking water for over 1.5 million Kentucky citizens.
- ◆ Two Modular Distribution System Optimization (DSO) trainings were conducted throughout the state:
 - Campbellsville – included 7 participating systems (September 14, 2017)
 - Frankfort – included 6 participating systems (October 11, 2017)
- ◆ Also conducted:
 - DCA Water Regulations and Compliance Workshop, Frankfort (June 28, 2018)
 - PSC Presentation—DW & Lead Update (September 19, 2017)
 - Drinking Water 101 for new staff, (October 6, 2017)
 - Distribution System Optimization Presentation at DCA Operator Certification Continuing Ed Class at Rough River (February 13, 2018)
 - DOW Update & AWOP Presentations @ PADD Training (March 21, 2018)
 - DOW Update & AWOP Presentations @ Gary Russ Training Muhlenberg Ag Center (March 27, 2018)
 - Compliance Issues and Drinking Water Updates, KWWOA Annual Conference (April 9, 2018)
 - Small system operator Training, Achieving and Maintaining Compliance, Harlan (April 12, 2018)

- Water Quality Intro & Compliance Workshop, Prestonsburg (April 19, 2018)
 - Water Age Study Presentation at Western KWWOA KY Dam Village (May 8, 2018)
- ◆ The partnership with USEPA's Technical Support Center (TSC Cincinnati) continued for the SFY 2018. Activities focused on AWOP, Disinfection Byproducts, and Optimal Corrosion Control Treatment (OCCT). The Division also began participating in the EPA-State Deep Dive analysis. Technical Assistance staff attended the following:
- Attended AWOP National Conference and Training Cincinnati (August 8-9, 2017)
 - Multi-State Comprehensive Performance Evaluation Concord, NC. (September 18-22, 2017)
 - Hosted AWOP Region 4 Meeting and Training with Corrosion Control Workshop (November 7-9, 2017)
- ◆ The Division of Water's drinking water staff and management attended and/or participated in training events with a focus on small systems:
- RCAP Financial Training (July 2017)
 - EFCN Webinar "Telling Your Water Story" (July 2017)
 - EFCN Webinar "Messaging Water to Your Stakeholders" (July 2017)
 - EPA Webinar "Water Loss and Distribution System Infrastructure: Leak Detection and Cost Savings" (July 2017)
 - EPA Webinar "August CUPSS Community Call" (August 2017)
 - EFCN Webinar "Private Water and Sewer Companies – Understanding What Their Role Maybe With Your System" (August 2017)
 - EPA/ASDWA – "2017 EPA Region 1-5 Capacity Development and Operator Certification Workshop" (August 2017)
 - 14th Annual EPA Drinking Water Workshop: Small System Challenges and Solutions (August 2017)
 - EFCN Webinar "Ask the Experts - Energy Management in Water Supply and Distribution Systems" (September 2017)
 - UK/WVU/RCAP/KRADD – "Sustainable Management of Rural and Small Systems Workshop (September 2017)
 - EFCN Webinar "Asset Management for Small Water Systems" (September 2017)
 - EFCN Webinar "Resilience: Planning on Disaster and Preparing for Disruption" (September 2017)
 - EPA Webinar "Drinking Water State Revolving Fund and Capacity Building in Action: Water Loss Management" (September 2017)
 - Actiflo Carb and Disc Filter Presentation (September 2017)

- EPA webinar “CUPSS Train-the-Trainer Series (3 webinars): Session 1: Setting up CUPSS and My Inventory” (October 2017)
- EPA Webinar “CUPSS Train-the-Trainer Series (3 webinars): Session 2: My O&M and My Finances” (October 2017)
- EFCN Webinar “Ask the Expert – Asset Management” (October 2017)
- EPA Webinar “CUPSS Train-the-Trainer Series (3 webinars): Session 3: My CUPSS Plan, Advanced Features, and Tips for Trainers” (October 2017)
- EFCN Webinar “Water Audits as the First Part of Water Loss Control” (October 2017)
- ASDWA Annual Conference, Norfolk, VA, (October, 2017)
- EPA and KYDOW Workshop “Region 4 AWOP Planning Meeting and Corrosion Control Workshop” (November 2017)
- EFCN Webinar “Water System Management and Finance for Board Members” (November 2017)
- KIA and DOW Training “KIA Borrower and Administrator Training” (November 2017)
- 3 State UV Workgroup, Cincinnati, OH (November, 2017)
- Drinking Water Annual Training Meeting, Compliance and Jar Testing (December, 2017)
- EFCN Webinar “Asset Management for Small Water Systems” (January 2018)
- EFCN Webinar “Pricing Water for Full Cost Recovery” (January 2018)
- EFCN Webinar “Intermediate Asset Management- Benefits of Mapping your Assets” (January 2018)
- EFCN Webinar “Resiliency Planning 101” (February 2018)
- NRWA Webinar “Source Water Protection and SDWA Compliance” (February 2018)
- EPA Webinar “Small Systems Funding” (February 2018)
- EPA Webinar “Workforce Tools - Knowledge Retention Tool and Electronic Preventive Operation and Maintenance Logs” (March 2018)
- EFCN Webinar “Demystifying Electric Bills” (March 2018)
- EPA Webinar “Asset Management” (March 2018)
- RCAP/AWWA/KYDOW “Small Systems Training” (April 2018)
- EFCN Webinar “Technologies to Save Energy, Resources, and Time in Water System Operations” (April 2018)
- EPA Webinar “Conventional Treatment Options for Harmful Algal Blooms” (June 2018)
- Developing Capacity through Preventive Maintenance – Training provided with RCAP – (March, April, May 2018)
- Webinar - Harmful Algal Blooms: Treatment, Risk Communications Toolbox, and Management Plans
- Webinar - ASDWA CWA-SDWA Webinar: Creative Uses of Clean Water Funding for Drinking Water Benefits

- Webinar - Successfully Protecting Your Investment in Drinking Water Infrastructure: Best Practices from Communities and Local Experts
- Webinar - Decision Support Methodology for Small Systems to Evaluate and Select Treatment Technologies
- Webinar - SDWIS Prime – the Big Picture, a Look at the Year Ahead
- Webinar - SDWIS Prime: Overall System Demo 2 (includes Process Candidate Schedules)
- Webinar - SDWIS Prime: Overall System Demo 3
- Webinar Series - Responding to a Water Contamination Event Webinar Series
- Webinar - Rebroadcast of State Acceptance of UV Disinfection Technologies
- Demonstration of AWOP CT Spreadsheet
- Webinar - Alternative Disinfection: Dichlor & Trichlor
- PIRC Presentation with Region 4 & 6 States
- Treating Taste/Odor and Cyanotoxins with GAC
- Webinar - Small Systems Funding
- Webinar - Consumer Confidence Reports, Part 1: Overview, Electronic Delivery, and Best Practices
- Webinar - Peracetic Acid for Municipal Water and Wastewater Related Processes Online Workshop for Regulators
- Webinar - USGS Drinking Water-Related Research, Data, and Tools
- Webinar - EMAC/Interstate Mutual Aid for the Water Sector – How Primacy Agencies Can Get Involved
- Deep Dive: Discussion Stage 2 - national data trends and potential topics for state evaluations
- Webinar - Lead and Copper Rule: Tiering Criteria and Developing a Sampling Pool
- Webinar - Conventional Treatment Options for Harmful Algal Blooms
- Webinar - DMUC 2018 Pre-Con Series
- Webinar - Use of Microbial Source Tracking Tools in Waterborne Disease Outbreak Response

C. State Program Management – Section 1452(g)(2)(A) – (D) – 10 percent maximum (Public Water System Supervision Program)

Kentucky used the Supplemental Public Water System Supervision Program set-aside to fund the following drinking water program activities:

- ◆ Overall administration of the drinking water program, including implementation of work plans, tracking of regulatory developments and coordinating inter-and intra-division activities.

- ◆ Assessed SDWA compliance of 435 public water systems:
 - All water systems are monitoring for Stage 2 DBP and LT2 Rules.
 - Tracked and recorded that 140 Sanitary Surveys were conducted from July 1, 2017 to June 30, 2018.
 - Submitted federal SDWIS data to EPA on time each quarter.
- ◆ Participated in SDWIS Prime activities.
- ◆ Conducted inspections, investigated complaints, and assisted with drinking water compliance activities at the DOW Regional Office level.
- ◆ Continued to implement and support the Microbiology, Chemistry, and Cryptosporidium Laboratory Certification Programs. In SFY 2018 there were 6 Chemistry Laboratories and 42 Microbiology audited by DOW Certification Officers. Currently, three staff members are EPA certified to conduct Chemistry, Microbiology, Cryptosporidium, or Radiochemistry Laboratory audits.
- ◆ Provided compliance and technical assistance presentations at various conferences:
 - Drinking Water Compliance Presentation at the Kentucky Water and Wastewater Operators Association (KWWOA) Annual Conference (April 2018)
 - KY AWOP Update and Self-Assessment Presentations at the USEPA National AWOP Meeting in Cincinnati on KY AWOP (August 2017)
 - Consumer Confidence Rule (CCR) 2018- and covered Drinking Water Watch, Enforcement, and ETT, March 1st, 2018 – Lake Cumberland ADD in Russell Springs, March 14th, 2018- Pennyrile ADD in Hopkinsville, April 20th, 2018- Bluegrass ADD in Lexington.
 - Consumer Confidence (CCR) and Public Notices (PN) Rules 2018, April 25th, 2018- KRWA Training Event at KACO in Frankfort.
 - Public Notices (PN) Rules 2018- and covered Drinking Water Watch, Enforcement, and ETT, June 21, 2018- Green River ADD in Owensboro.
- ◆ Continued to support the microbial and disinfection by-products activities associated with the Area-Wide Optimization Program. The focus for SFY 2018 was disinfection by-product formation control for both water treatment plants and distribution systems.

Attachment 2

Activities Under Section 1452(k)(2) of the Safe Drinking Water Act

*State/Local Assistance Sections 1452(k)(2)(A) – (E)
15 percent maximum*

A. Capacity Development Program – Technical, Managerial, and Financial Assistance

State/Local Assistance set-aside funds were utilized to provide assistance to small systems.

- ◆ Reviewed 59 projects through Federal Assistance Review requests from the Kentucky e-Clearinghouse to ensure projects applying for funding have adequate capacity.
- ◆ The Capacity Development Program staff evaluate utilities using a section of the Kentucky Sanitary Survey form. For this year 140 surface water systems, groundwater systems, and subsequent systems were reviewed.
- ◆ The DOW's Capacity Development Section provided assistance to public water systems throughout the state related to managerial and financial capacity. Technical capacity was offered through inspections, on-site assistance, and AWOP activities. All drinking water systems are inspected annually.
- ◆ DWSRF set-aside funds were used for conference travel for DOW drinking water staff to attend and/or present at various conferences as previously mentioned.
- ◆ Continued to provide funding to the Kentucky Rural Water Association (KRWA) to support a small system assistance program focusing on Disinfection By-Products (DBPs) treatment, leak detection, water loss, operation and maintenance manuals, and rate studies. Targeted DBP assistance was provided to approximately 34 small public water systems and additional assistance was provided to multiple systems (95) upon request.
- ◆ Funding was provided to support the drinking water operator certification program.

B. Source Water Assessment Program

The Division of Water provides support to the United States Geological Survey's real-time stream gauging network with funding from DWSRF set asides. During SFY2018, \$292,000 was provided in network support with a 40/60 cost share by the USGS. In addition to allocating funds, the DOW coordinates with USGS in the placement of gauging stations with an emphasis on optimization of the network's data collection

capabilities. This ongoing partnership has helped to produce a system where both scientific and regulatory interests are served.

C. Operator Certification Program

◆ License Administration

- The Division of Compliance Assistance (DCA), Operator Certification Program received and processed 522 drinking water certification applications, administered 480 drinking water certification exams, and issued 339 new drinking water certificates during the 2018 state fiscal year. The drinking water certification program had an average pass rate of 71 percent.
- The administrative staff was responsible for entering the operator training hours which are used for the renewal process, as well as operator updates into the department database. They processed 2,484 online renewals, and issued wallet cards.

◆ Training

The DCA staff prepared and published the Kentucky Operator Certification Program training schedule which outlines all training events offered by the program. A post card was mailed to all certified operators making them aware the schedule was available on the Division's Website. DCA technical staff conducted 17 drinking water training events during this timeframe totaling approximately 258 training hours with 652 operators or potential operators in attendance. In addition, staff within the program, along with the Kentucky Board of Certification of Water Treatment and Distribution System Operators, reviewed 178 requests from third-party training providers seeking approval of courses for continuing education credit.

◆ National Involvement

- Staff within the certification program continues to promote the importance of operator certification in Kentucky as well as nationwide. Staff has attended the ASDWA 32nd Annual Conference as well as engaged with vendors, operators, and others in the certification field at various events.

◆ Communications

- Operation Matters, the certification blog, continues to thrive. It has gained followers in 169 countries, has 200,000 all-time views, and has several direct blog followers who have subscribed to receive emails for every post made. Positive feedback has been received from the operator community. Go to www.kyocp.wordpress.com to follow the blog.

D. Wellhead Protection Program

Wellhead Protection Program (WHPP) staff provide assistance to communities reliant on groundwater sources for their drinking water with protection and planning efforts. This includes developing and reviewing wellhead protection plans, conducting system site visits and facilitating public meetings throughout the state. During this fiscal year program staff streamlined and modernized wellhead protection plan templates and brochures, and developed a Contaminant Source Inventory form and database. Staff have worked to develop programmatic Standard Operating Procedures and have integrated all of the past and current wellhead plans and compliance into Advantage Regulatory Management (ARM), the Department's database. Program staff also worked to contact and provide assistance to wellhead systems to bring them back into compliance with the required plan update and approval schedules. In a continued effort to manage and maintain correct and accurate programmatic databases, the Wellhead staff have conducted field site inspections to verify Water Withdrawal Permits and Groundwater Well activity status. In addition to this, program staff have worked with the GIS and Data Analysis Section to make regular updates to the Wellhead Protection Areas and Groundwater Database within the GIS. Although funding for the Source Water Protection Assistance Program (SWPAP) has been suspended due to state budget constraints, program staff have continued to provide technical assistance to active SWPAP projects, update programmatic guidance documents and templates, and ensure all the application, invoices and reports for funded projects are in ARM. Program staff further developed education and outreach efforts by updating the Environmental Systems Research Institute (ESRI) Story Map application for source water protection, including wellhead, and the assistance program. Staff also assisted with development of rating criteria to assess drinking water systems for the Division of Water. Throughout the fiscal year, staff have worked on Geologist-In-Training projects and presented their research to internal DOW staff. Wellhead staff also attended and/or provided presentations at the following conferences and meetings:

- 2018 Kentucky Water Resources Research Institute Annual Symposium
- 2018 Kentucky Geological Survey Annual Seminar
- Statewide Area Development Districts' Water Management Council Meetings
- Kentucky Rural Water Association Operator Trainings
- U.S. Geological Survey Indiana-Kentucky Water Science Center Day of Science
- Kentucky Division of Water Regional Field Office Annual Training Meeting

- Source Water Protection Sub-Committee of the Drinking Water Advisory Council
- University of Kentucky, Earth and Environmental Sciences Careers in Geoscience Seminar
- U.S. Environmental Protection Agency, Region 4 Harmful Algal Blooms (HABs) workshop
- Lake Linville Source Water Protection Meeting
- GIS Lunch Series – Source Water Protection Story Map Development Presentation
- Viper Elementary School Enviroscape Demonstration
- Adventures in H₂O Educational Booth
- Kentucky Water & Wastewater Operator Association Training- Source Water Protection Presentation
- Kentucky River Basin Team Meeting
- Triplett Creek 319/Non-Point Source Watershed Plan Education and Outreach Field Day
- WHPP Public Meetings: Water Service Corporation of Kentucky & Fleming Neon Water Company
- Division of Compliance Assistance – Grant Writing Workshop
- Microbiology Laboratory Training
- Records Retention and Kentucky Open Records Act Training
- U.S. Environmental Protection Agency, Region 4 Source Water Protection Annual Visit

The following data and information reflects the most current program statistics:

Community Water Systems Utilizing Groundwater Sources						
		Population Served				
		25 – 1,000	1,001 – 3,300	3,301 – 10,000	10,001 – 50,000	Over 50,000
Number Community Supplies	of GW	25	31	21	14	3
Total Served	Population	8,661	63,258	113,829	250,777	899,503*

*Includes Louisville Water Company, which uses groundwater and surface water sources.

Non-Community Water Systems Utilizing Groundwater Sources		
	Number Systems	of Population
Non-Transient Non-Community Systems	12	5,576
Transient Non-Community Systems	31	3,394

Wellhead Protection Plans				
	Phase I Plan	Phase II Plan	Five Update	Year
Developed	2	2	25	
Reviewed	1	0	13	
Approved	1	0	12	

EXHIBIT 1
 KENTUCKY INFRASTRUCTURE AUTHORITY
 FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
 PROJECTS RECEIVING SRF FINANCIAL ASSISTANCE
 FISCAL YEAR ENDED JUNE 30, 2018

RECIPIENT NAME	LOAN NUMBER	AMOUNT OF ASSISTANCE	BINDING COMMITMENT DATE	ESTIMATED CONSTRUCTION START DATE	ESTIMATED INITIATE OPERATION	TYPE OF ASSISTANCE	INTEREST RATE	LOAN TERM	POPULATION CATEGORY	SMALL SYSTEM	DISADVANTAGED COMMUNITY
Monroe County Water District	F15-002	\$111,347.00	6/12/2018	7/1/2016	10/31/2018	L(1)	0.75%	30	3,301 to 10,000	Y	Y
Whitley County Water District	F15-030	\$37,204.00	4/9/2018	2/1/2017	8/1/2018	L(1)	0.75%	20	3,301 to 10,000	Y	Y
Campbellsville, City	F17-014	\$1,377,000.00	7/10/2018	8/1/2018	8/1/2019	L(1)	0.25%	20	10,001 to 100,000	N	Y
Salyersville, City	F18-002	\$655,982.00	5/8/2018	5/1/2018	10/28/2018	L	0.50%	30	501 to 3,300	Y	Y
Pineville, City	F18-003	\$1,864,590.00	7/10/2018	7/1/2018	4/1/2019	L	0.50%	20	501 to 3,300	Y	Y
Morehead, City	F18-004	\$1,297,200.00	12/6/2017	5/1/2019	6/1/2019	L(2)	2.75%	5	3,301 to 10,000	Y	Y
Green Taylor Water District	F18-005	\$1,842,071.00	2/1/2018	5/1/2018	11/1/2018	L	1.75%	20	10,001 to 100,000	N	Y
Lebanon, City	F18-006	\$2,641,680.00	2/1/2018	9/6/2018	5/30/2019	L	0.50%	30	3,301 to 10,000	Y	Y
Frankfort Electric & Water Plant Board	F18-016	\$4,000,000.00	4/9/2018	2/1/2019	12/1/2019	L	1.75%	20	10,001 to 100,000	N	N
Lancaster, City	F18-017	\$4,000,000.00	5/8/2018	12/1/2018	7/1/2020	L	0.50%	30	3,301 to 10,000	Y	Y
Louisa, City	F18-018	\$834,430.00	4/9/2018	7/1/2018	2/28/2019	L	0.50%	20	3,301 to 10,000	Y	Y
South Shore, City	F18-019	\$878,000.00	3/1/2018	9/1/2018	7/1/2019	L	0.50%	20	3,301 to 10,000	Y	Y

TOTAL 12 **\$** 19,539,504

1.00%

<u>Summary</u>	<u>Total</u>	<u>Loan Count</u>	<u>% of Total</u>
Total Funding For Loans	\$ 19,539,504	12	
Total Funding For Small Communities	\$ 12,320,433	9	63%
Total Funding For Disadvantaged Communities	\$ 15,539,504	11	80%
Weighted Average Interest Rate	1.00%		

Type of Assistance
 L = Loan
 (1) = Increase / (Decrease)
 (2) = Planning & Design

**EXHIBIT 2
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
BINDING COMMITMENTS BY QUARTER
FISCAL YEAR ENDED JUNE 30, 2018**

RECIPIENT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL	TYPE OF ASSISTANCE
Monroe County Water District	F15-002				\$ 111,347	\$ 111,347	L(1)
Whitley County Water District	F15-030				\$ 37,204	\$ 37,204	L(1)
Campbellsville, City	F17-014				\$ 1,377,000	\$ 1,377,000	L(1)
Salyersville, City	F18-002				\$ 655,982	\$ 655,982	L
Pineville, City	F18-003	\$ -	\$ -	\$ -	\$ 1,864,590	\$ 1,864,590	L
Morehead, City	F18-004		\$ 1,297,200			\$ 1,297,200	L(2)
Green Taylor Water District	F18-005			\$ 1,842,071		\$ 1,842,071	L
Lebanon, City	F18-006			\$ 2,641,680		\$ 2,641,680	L
Frankfort Electric & Water Plant Board	F18-016				\$ 4,000,000	\$ 4,000,000	L
Lancaster, City	F18-017				\$ 4,000,000	\$ 4,000,000	L
Louisa, City	F18-018				\$ 834,430	\$ 834,430	L
South Shore, City	F18-019			\$ 878,000		\$ 878,000	L
TOTAL	12	\$ -	\$ 1,297,200	\$ 5,361,751	\$ 12,880,553	\$ 19,539,504	
PROGRAM ADMINISTRATION		\$ 119,791	\$ -	\$ -	\$ 354,975	\$ 474,766	
SET-ASIDES		\$ -	\$ 2,276,789	\$ -	\$ 4,078,742	\$ 6,355,531	
TOTAL		\$ 119,791	\$ 3,573,989	\$ 5,361,751	\$ 17,314,270	\$ 26,369,801	
CUMULATIVE TOTALS		\$ 119,791	\$ 3,693,780	\$ 9,055,531	\$ 26,369,801		
FEDERAL PAYMENTS - 2017		\$ 6,949,872	\$ 4,017,414	\$ 6,623,045	\$ 1,594,687		
CUMULATIVE FEDERAL PAYMENTS		\$ 6,949,872	\$ 10,967,286	\$ 17,590,332	\$ 19,185,018		
BINDING COMMITMENT % OF PAYMENTS		2%	34%	51%	137%		

Type of Assistance

L = Loan

(1) = Increase / (Decrease)

(2) = Planning & Design

**EXHIBIT 3
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
PROJECT PRIORITY LIST STATUS REPORT
FISCAL YEAR ENDED JUNE 30, 2018**

Rank	Applicant	Project Name	Action
	*Irvine, City of	Water Plant Modernization	Bypassed
1	**Nicholasville, City of	Nicholasville 24" Parallel Transmission Main	Bypassed
2	**Salyersville, City of	Salyersville Church Street Storage Tank	Accepted
3	**Pineville, City of	Pineville: WTP Expansion Project	Accepted
4	Morehead, City of	Regional Water Treatment Plant Construction	Accepted
5	Green-Taylor Water District	Green-Taylor Water District System Improvements in Taylor County	Accepted
6	Lebanon, City of	Lebanon Water Works System Improvements	Accepted
7	Owensboro Municipal Utilities	Calvin Water Treatment Plant Expansion	Declined
8	Cadiz, City of	Cadiz Water Treatment Plant Project	Declined
9	Elkton, City of	Elkton - Water System Rehabilitation and Upgrade project	Declined
10	Campton, City of	Campton Tank Replacement Project	Bypassed
11	South Hopkins Water District	South Hopkins Water Tank Rehabilitation and Improvement Project	Bypassed
12	Salyersville Water Works	Salyersville Water Aging Water Main Phase III	Expired
13	Whitesburg, City of	Whitesburg Water Treatment Plant Upgrade	Withdrawn
14	Berea, City of	Raw Water and High Service Pumping and Controls Modification	Declined
15	Richmond, City of	Richmond Westover 8" Water Main Replacement	Declined
16	Frankfort Electric & Water Plant Board	Frankfort Plant Board Water Storage Improvement Project	Accepted
17	Lancaster, City of	Lancaster - New Water Treatment Plant	Accepted
18	Louisa, City of	Downtown Water Rehab Project	Accepted
19	South Shore, City of	City of South Shore Water System Improvement Project	Accepted
20	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	Declined
21	Logan-Todd Regional Water Commission	Logan Todd RWC – Springfield, Tennessee Supply Project	Declined
22	Caldwell County Water District	Caldwell County Water District - U.S. Hwy 62 Area Water System Improvements	Not Invited
23	Vanceburg Electric Plant Board	Vanceburg School Tank Rehab	Not Invited
24	Versailles, City of	Versailles - Water Distribution System Improvements Phase 2	Not Invited
25	Letcher County Water & Sewer District	Water Line Extensions for Federal Prison Facility at Roxanna	Not Invited
26	Mount Vernon, City of	Tower Tank Transmission Main	Not Invited
27	Hardinsburg, City of	Harned Pump Station Replacement	Not Invited
28	Hardinsburg, City of	City of Hardinsburg - Extension Area A	Not Invited
29	Muhlenberg County Water District #3	MCWD #3 - Pump Station Efficiency Upgrade	Not Invited
30	Parksville Water District	Parksville Water District - KY 34 Pump Station Replacement Project	Not Invited
31	Flatwoods, City of	City of Flatwoods New 250,000 Gallon Water Storage Tank	Not Invited
32	Mayfield Electric & Water Systems	Water Line Extension to Wildwood Subdivision	Not Invited
33	Richmond, City of	Standby Power Upgrade for Side Storage and College Hill Plant	Not Invited

**EXHIBIT 3
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
PROJECT PRIORITY LIST STATUS REPORT
FISCAL YEAR ENDED JUNE 30, 2018**

Rank	Applicant	Project Name	Action
34	Versailles, City of	Versailles Raw Water Main Replacement	Not Invited
35	Mountain Water District	MWD-Various Waterline Extensions	Not Invited
36	Elkhorn City, City of	City of Elkhorn City - Water Improvements - Radio Read Meters	Not Invited
37	Maysville, City of	Maysville Second Street Waterline Replacement	Not Invited
38	Mountain Water District	Radio Read Meter Replacement Project - Phase I	Not Invited
39	Lincoln County Fiscal Court	Waynesburg Water Line Replacement (KY HWY 328)	Not Invited
40	McLean County Fiscal Court	Pack Schoolhouse Road	Not Invited
41	Benton, City of	City of Benton-Line Replacement Along Main Street	Not Invited
42	Murray, City of	Clearwell at Water Treatment Plant	Not Invited
43	Southern Water & Sewer District	Southern Water & Sewer District – Water Meter Change Out Program	Not Invited
44	Northern Kentucky Water District	Taylor Mill Treatment Plant Emergency Generator	Not Invited
45	Oak Grove, City of	Oak Grove - Hugh Hunter Road Waterline Replacement	Not Invited
46	Pikeville, City of	Radio Read Water Meter Upgrade	Not Invited
47	Larue County Water District #1	LaRue Co. W.D. - Hwy 84 Pump Station	Not Invited
48	Paris, City of	Paris Water Treatment Plant Improvements	Not Invited
49	Danville, City of	Danville - Perryville Standpipe Replacement and Water Main	Not Invited
50	Paris, City of	City of Paris Creek Crossing Pipe Replacement Under Houston and Stoner Creeks.	Not Invited
51	Cloverport, City of	Cloverport Service Line Replacement & Extension	Not Invited
52	Clay, City of	Hwy 132 - Hwy 109 S. Water Line Replacement and West Elm Replace	Not Invited
53	Wilmore, City of	Wilmore Elevated Storage Tank Rehabilitation	Not Invited
54	Nebo Water District	Nebo - Water System Improvements	Not Invited
55	Flemingsburg, City of	Flemingsburg Water - East Water Street Water Line Replacement	Not Invited
56	Russell, City of	City of Russell Downtown Water Main Replacement Project	Not Invited
57	Martin County Water District	Water Treatment Plant Clarifier Rehab	Not Invited

EXHIBIT 4
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
LOAN COMMITMENTS WITH PRINCIPAL FORGIVENESS SUBSIDY
FISCAL YEAR ENDED JUNE 30, 2018

RECIPIENT NAME / LOCATION	LOAN NUMBER	PROJECT NAME	AMOUNT OF ASSISTANCE	ORIGINAL SUBSIDY	INTEREST RATE	MHI	MHI AS % OF STATE	POPULATION
Salyersville, City	F18-002	Church Street Storage Tank	\$ 655,982	\$ 352,991	0.50%	\$ 23,544	53.8%	2,227
Pineville, City	F18-003	WTP Expansion Project	\$ 1,864,590	\$ 825,509	0.50%	\$ 24,481	56.0%	3,106
Lebanon, City	F18-006	Lebanon Water Works System Improvements Project	\$ 2,641,680	\$ 1,000,000	0.50%	\$ 26,445	60.5%	6,144
Lancaster, City	F18-017	New Water Treatment Plant Project	\$ 4,000,000	\$ 1,000,000	0.50%	\$ 31,032	70.9%	3,943
Louisa, City	F18-018	Downtown Water Rehab Project	\$ 834,430	\$ 231,500	0.50%	\$ 31,416	71.8%	5,471
South Shore, City	F18-019	City of South Shore Water System Improvements Project	\$ 878,000	\$ 439,000	0.50%	\$ 32,551	74.4%	4,582
						\$ 26,376	60.3%	
TOTALS	<u>6</u>		<u>\$ 10,874,682</u>	<u>\$ 3,849,000</u>			<u>65.9%</u>	

All subsidies were provided in the form of loan forgiveness. A borrower's entire service area must have a median household income (MHI) less than \$34,992 to be eligible under the 2018 Intended Use Plan. See "Additional Subsidization" in the written IUP commentary for a detailed discussion of principal forgiveness for 2018.

**EXHIBIT 5
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
TOTAL DISBURSEMENTS
FISCAL YEAR ENDED JUNE 30, 2018**

PROJECT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
CAPITALIZATION GRANT FUNDS						
Adair County Water District	F12-04			351,339	562,629	913,968
Bath County Water District	F16-011			16,640		16,640
Campbellsville, City of	F15-013			156,518		156,518
Cumberland Falls Highway WD	F16-002			282,926	135,456	418,382
Fleming-Neon, City of	F17-003			151,846	215,312	367,158
Harrodsburg, City of	F16-049			106,752	247,477	354,230
Henry County Water District #2	F15-014				269,235	269,235
Hodgenville, City of	F16-008			53,744	70,000	123,744
Hopkinsville, City of	F16-001			223,961	241,745	465,706
Monroe County WD	F15-002			445,654	928,503	1,374,158
Morehead, City of	F18-004			146,265	143,848	290,113
Northern Kentucky Water District	F15-011				901,131	901,131
Prestonsburg, City of	F16-045			371,073	144,754	515,827
Western Pulaski County WD	F16-003			159,927	49,765	209,692
Williamstown, City of	F13-013			25,000		25,000
PROJECT TOTAL		\$ -	\$ -	\$ 2,491,647	\$ 3,909,855	\$ 6,401,502
PROGRAM ADMINISTRATION		\$ 119,791	\$ -	\$ -	\$ 354,975	\$ 474,766
SET-ASIDES		\$ -	\$ 2,276,789	\$ -	\$ 4,078,742	\$ 6,355,531
FIRST USE TOTALS		\$ 119,791	\$ 2,276,789	\$ 2,491,647	\$ 8,343,572	\$ 13,231,799
CUMULATIVE TOTALS		\$ 119,791	\$ 2,396,580	\$ 4,888,227	\$ 13,231,799	

**EXHIBIT 5
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
TOTAL DISBURSEMENTS
FISCAL YEAR ENDED JUNE 30, 2018**

PROJECT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
REPAYMENT FUNDS						
Adair County Water District	F12-04	37,348				37,348
Campbellsville, City of	F15-013	283,719	299,779	51,575		635,073
Cave Run Water Commission	F16-032	148,079	54,353			202,432
Crittenden-Livingston County WD	F16-021	15,810	103,852			119,663
Cumberland Falls Highway WD	F16-002		429,266	77,974	40,397	547,637
Cynthiana, City of	F16-041	391,607	270,127	70,146	22,659	754,539
Fleming-Neon, City of	F17-003	58,779	230,856	75,616		365,251
Harrodsburg, City of	F16-049	344,495	518,733	150,396	78,912	1,092,536
Henry County Water District #2	F15-014	69,050				69,050
Hodgenville, City of	F16-008	508,415	152,966	63,246		724,628
Hodgenville, City of	F16-042	230,953	312,568	49,473		592,994
Hopkinsville, City of	F13-020		130,470			130,470
Hopkinsville, City of	F16-001		1,197,855	29,311		1,227,166
Jessamine-South Elkhorn Water Dist	F11-12	186,712	319,029			505,741
Lyon County Water District	F12-02	105,197	92,767		36,911	234,875
Monroe County WD	F15-002	1,317,589	1,379,375	313,251		3,010,214
Morehead, City of	F18-004				46,190	46,190
Mount Vernon, City of	F12-01		201,858			201,858
Ohio County Water District	F15-069	153,946				153,946
Paducah, City of	F15-064	21,413				21,413
Prestonsburg, City of	F16-045		203,724	103,281		307,005
Salyersville, City of	F16-038				10,513	10,513
Western Lewis-Rectorville Wat & Gas	F15-005	25,000				25,000
Western Pulaski County WD	F16-003	609,098	96,900			705,998
Whitley County Water District	F15-030	259,438				259,438
PROJECT TOTAL		\$ 4,766,648	\$ 5,994,478	\$ 984,268	\$ 235,582	\$ 11,980,977
GRAND TOTAL		\$ 4,886,439	\$ 8,271,267	\$ 3,475,915	\$ 8,579,154	\$ 25,212,775

EXHIBIT 6
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
PROPORTIONATE FEDERAL SHARE THROUGH CASH DRAWS
FISCAL YEAR ENDED JUNE 30, 2018

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
DISBURSEMENT SCHEDULE					
SELECT DISBURSEMENTS					
FIRST ROUND	\$ -	\$ -	\$ 2,491,647	\$ 3,909,855	\$ 6,401,502
ADMINISTRATION	119,791	0	0	354,975	474,766
SET-ASIDES	0	2,276,789	0	4,078,742	6,355,531
REPAYMENT	4,766,648	5,994,478	984,268	235,582	11,980,977
REVENUE BONDS	0	0	0	0	0
TOTAL SELECT DISBURSEMENTS	\$ 4,886,439	\$ 8,271,267	\$ 3,475,915	\$ 8,579,154	\$ 25,212,775
CUMULATIVE TOTAL	\$ 4,886,439	\$ 13,157,706	\$ 16,633,622	\$ 25,212,775	
CASH DRAW FROM LINE OF CREDIT	\$ 6,949,872	\$ 4,017,414	\$ 6,623,045	\$ 1,594,687	\$ 19,185,018
STATE SHARE	\$ -	\$ 2,588,200	\$ -	\$ -	\$ 2,588,200
CASH DRAWS AS % OF DISBURSEMENTS	142%	49%	191%	19%	76%

**EXHIBIT 7
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
FINANCIAL PROGRAM OVERVIEW
FISCAL YEAR ENDED JUNE 30, 2015**

Reference	Capitalization Grant FFY:	1997 - 2010	2011	2012	2013	2014	2015	2016	2017	Totals
	Capitalization Grant Award Date:	Various	9/29/2011	9/19/2012	9/11/2013	8/25/2014	9/29/2015	9/27/2016	9/19/2017	
	Capitalization Grant Award Amount:	172,612,200	13,595,000	12,956,000	12,956,000	13,770,000	13,680,000	\$12,941,000	\$12,830,000	265,340,200
DWSRF Program Administration (4%):										
		6,904,488	535,160	388,680	364,680	413,100	547,200	517,640	513,200	10,192,788
1452(g)(2)	DOW (3%)	5,178,366	407,850	259,120	243,120	275,400	410,400	388,230	384,900	7,547,386
1452(g)(2)	KIA (1%)	1,726,122	135,950	129,560	121,560	137,700	136,800	129,410	128,300	2,645,402
State Program Management (up to 10% available):										
		13,754,768	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	22,925,968
1452(g)(2)(A)	Supplement PWSS Program	13,061,117	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	22,232,317
1452(g)(2)(B)	SWP Technical Assistance	0	0	0	0	0	0	0	0	0
1452(g)(2)(C)	Develop/Implement Capacity Development Strategy	344,023	0	0	0	0	0	0	0	344,023
1452(g)(2)(D)	Develop/Implement Operator Certification Program	349,628	0	0	0	0	0	0	0	349,628
Small Systems Technical Assistance (2% maximum):										
1452(g)(2)(D)		2,792,068	267,580	259,120	243,120	275,400	273,600	258,820	256,600	4,626,308
State/Local Assistance (up to 15%-10% maximum):										
		10,413,869	1,605,480	1,807,362	1,452,642	2,065,500	2,052,000	1,941,150	1,924,500	23,262,503
1452(k)(2)(A)	Land Acquisition and Conservation Easements	999,000	0	0	0	0	0	0	0	999,000
1452(k)(2)(E)	Wellhead Protection Program	1,913,833	58,380	259,120	0	413,100	410,400	388,230	384,900	3,827,963
1452(k)(2)(D)	Source Water Assessment Program:	1,384,988	0	252,642	237,042	268,515	273,600	258,820	256,600	2,932,207
1452(k)(2)(C)	Capacity Development – TMF assistance	6,116,048	1,547,100	1,295,600	1,215,600	1,383,885	1,368,000	1,294,100	1,283,000	15,503,333
	Total Grant Set-Asides:	33,865,193	3,754,760	3,750,762	3,276,042	4,131,000	4,240,800	4,011,710	3,977,300	61,007,567
	Project Funds:	138,747,007	9,840,240	9,205,238	9,679,958	9,639,000	9,439,200	8,929,290	8,852,700	204,332,633
	Kentucky Matching Dollars:	30,432,440	2,675,800	2,591,200	2,431,200	2,431,201	2,736,000	2,588,200	2,566,000	48,452,041
	Total Project Fund:	169,179,447	12,516,040	11,796,438	12,111,158	12,070,201	12,175,200	11,517,490	11,418,700	252,784,674

EXHIBIT 8
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
AMENDED FINANCIAL PROGRAM OVERVIEW
FISCAL YEAR ENDED JUNE 30, 2018

Reference	Capitalization Grant FFY:	1997 - 2010	2011	2012	2013	2014	2015	2016	2017	Totals
	Capitalization Grant Award Date:	Various	9/29/2011	9/19/2012	9/11/2013	9/2/2014	9/29/2015	9/27/2016	9/19/2017	
	Capitalization Grant Award Amount:	\$172,612,200	\$13,379,000	\$12,956,000	\$12,156,000	\$13,770,000	\$13,680,000	\$12,941,000	\$12,830,000	\$264,324,200
	DWSRF Program Administration (4%):	5,809,644	535,160	388,680	364,680	413,100	547,200	517,640	513,200	8,829,304
1452(g)(2)	DOW (3%)	4,083,522	141,370	259,120	243,120	275,400	410,400	388,230	384,900	6,186,062
1452(g)(2)	KIA (1%)	1,726,122	133,790	129,560	121,560	137,700	136,800	129,410	128,300	2,643,242
	State Program Management (up to 10% available):	14,005,944	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	23,177,144
1452(g)(2)(A)	Supplement PWSS Program	13,061,117	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	22,232,317
1452(g)(2)(B)	SWP Technical Assistance	251,176	0	0	0	0	0	0	0	251,176
1452(g)(2)(C)	Develop/Implement Capacity Development Strategy	344,023	0	0	0	0	0	0	0	344,023
1452(g)(2)(D)	Develop/Implement Operator Certification Program	349,628	0	0	0	0	0	0	0	349,628
1452(g)(2)(D)	Small Systems Technical Assistance (2% maximum):	2,787,910	267,580	259,120	243,120	275,400	273,600	258,820	256,600	4,622,150
	State/Local Assistance (up to 15%-10% maximum):	9,173,658	649,198	1,807,362	1,452,642	2,065,500	2,052,000	1,941,150	1,924,500	21,066,010
1452(k)(2)(A)	Land Acquisition and Conservation Easements	759,630	0	0	0	0	0	0	0	759,630
1452(k)(2)(E)	Wellhead Protection Program	1,857,975	58,380	259,120	0	413,100	410,400	388,230	384,900	3,772,105
1452(k)(2)(D)	Source Water Assessment Program:	676,413	0	252,642	237,042	268,515	273,600	258,820	256,600	2,223,632
1452(k)(2)(C)	Capacity Development – TMF assistance	5,879,640	590,818	1,295,600	1,215,600	1,383,885	1,368,000	1,294,100	1,283,000	14,310,643
	Total Grant Set-Asides:	31,777,156	2,529,838	3,750,762	3,276,042	4,131,000	4,240,800	4,011,710	3,977,300	57,694,608
	Project Funds:	140,835,044	10,849,162	9,205,238	8,879,958	9,639,000	9,439,200	8,929,290	8,852,700	206,629,592
	Kentucky Matching Dollars:	30,432,440	2,675,800	2,591,200	2,431,200	2,754,000	2,736,000	2,588,200	2,566,000	48,774,840
	Total Project Fund:	171,267,484	13,524,962	11,796,438	11,311,158	12,393,000	12,175,200	11,517,490	11,418,700	255,404,432

Reflects transfers to construction during 2013 and other accumulated amendments.

**EXHIBIT 9
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
SOURCE AND ALLOCATION OF SRF FUNDS
FISCAL YEAR ENDED JUNE 30, 2018**

CUMULATIVE SOURCES		FY 2018 DISBURSEMENTS				
	TOTAL	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
Capitalization Grants	\$ 206,629,592	\$ -	\$ -	\$ 27,396	\$ 3,808,106	\$ 3,835,502
State Matching Funds	48,774,840	0	0	2,464,251	101,749	2,566,000
Program Administration	8,829,304	119,791	0	0	354,975	474,766
Other Set Asides	48,865,304	0	2,276,789	0	4,078,742	6,355,531
Revenue Bond Proceeds (Net)	80,000,000	0	0	0	0	0
TOTALS	<u>\$ 393,099,040</u>	<u>\$ 119,791</u>	<u>\$ 2,276,789</u>	<u>\$ 2,491,647</u>	<u>\$ 8,343,572</u>	<u>\$ 13,231,799</u>

EXHIBIT 10
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
ADMINISTRATIVE AND SET-ASIDE EXPENSES
FISCAL YEAR ENDED JUNE 30, 2018

SET-ASIDE DISBURSEMENTS

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Administration	\$ 119,791	\$ -	\$ -	\$ 354,975	\$ 474,766
Technical Assistance	0	0	0	261,211	261,211
State Programs	0	974,537	0	1,918,962	2,893,498
Local Assistance	0	1,302,252	0	1,898,569	3,200,822
Total Set-Aside Expenses	\$ 119,791	\$ 2,276,789	\$ -	\$ 4,433,717	\$ 6,830,297

EXHIBIT 11
KENTUCKY INFRASTRUCTURE AUTHORITY
BALANCE SHEET
JUNE 30, 2018
(UNAUDITED Statement of Net Position)

	Fund F
ASSETS	
Current assets:	
Cash and cash equivalents	\$ 628,697
Investments, current portion	82,203,201
Accrued interest receivable, investments	107,229
Accrued interest receivable, assistance agreements	269,630
Current maturities of long-term receivables	12,211,000
Total current assets	95,419,757
Long-term receivables:	
Assistance agreements receivable:	
Principal	213,723,009
Total long-term receivables	213,723,009
Total assets	309,142,766
Deferred outflow of resources:	
Pension related	395,103
Post-employment benefits other than pension	73,040
Unamortized deferred amount on refunding	1,026,274
Total assets and deferred outflow of resources	\$ 310,637,183
LIABILITIES	
Current liabilities:	
Current maturities of revenue bonds payable, net of unamortized premiums and discounts	\$ 3,629,938
Accrued interest payable	818,433
Total current liabilities	4,448,371
Long-term debt:	
Revenue bonds payable, less current maturities and unamortized premiums and discounts	57,411,408
Net pension liability	1,985,426
Post-employment benefits other than pension	375,654
Total liabilities	64,220,859
Deferred inflow of resources:	
Pension related	478,290
Post-employment benefits other than pension	8,084
Total liabilities and deferred inflow of resources	\$ 64,707,233
NET POSITION	
Net investment in capital assets	\$ -
Restricted net position	245,929,950
Total net assets	\$ 245,929,950

EXHIBIT 12
KENTUCKY INFRASTRUCTURE AUTHORITY
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RETAINED EARNINGS
FISCAL YEAR ENDED JUNE 30, 2018
(UNAUDITED Statement of Revenues, Expenses and Changes in Net Position)

	Fund F
Operating revenues:	
Assistance agreements:	
Servicing fee	\$ 565,832
Interest income	3,547,836
Total operating revenues	4,113,668
Operating expenses:	
General and administrative	555,713
Intergovernmental administrative expense reimbursement	6,830,297
Revenue bonds:	
Amortization of bond premiums	(592,090)
Interest	1,938,007
Gain on early extinguishment of bonds payable	(261,678)
Total operating expenses	8,470,249
Operating loss	(4,356,581)
Non-operating gain / (loss):	
Investment income	752,210
Bond issuance cost	(192,609)
Federal grants	10,665,799
Loan subsidy required by federal capitalization grants	(2,450,104)
Intergovernmental revenue from the Commonwealth	2,566,000
Total non-operating revenues	11,341,296
Change in net position	\$ 6,984,715
Net position, beginning of year (as previously stated)	239,242,524
Cumulative effect on prior years (to June 30, 2017) resulting from the retroactive change in accounting for postemployment benefits other than pensions (See Note 2)	(297,289)
Net position, beginning of year (as adjusted)	238,945,235
Net position, end of year	\$ 245,929,950

EXHIBIT 13
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN PROGRAM
REPORT OF ANNUAL LOAN REPAYMENTS
FISCAL YEAR ENDED JUNE 30, 2018

Loan Number	Loans Outstanding	Total	Number of Days Past Due		
			0 - 30	31 - 120	121 and Over
		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
TOTALS		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

No principal amounts delinquent as of June 30, 2018.