

DRINKING WATER STATE REVOLVING FUND
SRF ANNUAL REPORT
STATE FISCAL YEAR ENDED JUNE 30, 2019

Prepared by the Commonwealth of Kentucky
For EPA Region IV

September 30, 2019

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, 2019. This report describes how Kentucky met the goals as identified in the 2019 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 \$415,062,640 in DWSRF first use funds (Exhibit 8) which are comprised of capitalization grants \$219,258,662, state match \$52,435,440, program administration \$9,561,424, other set asides \$53,807,114, and leverage bond proceeds \$80,000,000.

Exhibit 1 shows that the Commonwealth of Kentucky made thirteen new binding commitments and two commitment increases for a total of \$29,519,154 to provide assistance for construction of drinking water projects during the year. The average interest rate on funds committed during the year was 0.93%. Exhibit 2 reflects commitments by quarter. Exhibit 5 shows disbursements from the SRF to various recipients, program administration and other set-aside activities during 2019 totaling \$21,340,216.

In an effort to assist small systems and disadvantaged communities, KIA provided binding commitments to nine small systems and fourteen disadvantaged communities, some of which are also small systems (Exhibit 1). Binding commitments for small systems totaled \$18,355,955 or 62% of total binding commitments. Binding commitments for disadvantaged communities totaled \$29,519,154 or 100% of total binding commitments.

During 2019 seven loans totaling \$13,293,133 were approved that were subsidized with principal forgiveness of \$5,471,000 (Exhibit 4). The subsidy was between 25% and 50% of the project cost per project up to the 2019 maximum amount established in the IUP (\$1.3 million) allocated in priority order to disadvantaged communities on the priority list based on median household income information and affordability of water or sewer rates.

Since the inception of the program, the Commonwealth has issued 213 binding commitments totaling \$476,931,182. Cumulative set-asides made available from capitalization grant funds total \$63,368,538 (Exhibit 7). The program administration set-aside totals \$9,561,424 while the balance of \$53,807,114 has been for technical assistance, environmental support and management (Exhibit 8).

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 2019 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.

During the 2019 fiscal year, the KIA implemented a major reorganization. One piece of the reorganization created three new positions of Regional Compliance Coordinators. Each Regional Compliance Coordinator is responsible for all loans within a defined geographic area of the state. This part of the reorganization shifted internal job duties to focus on loan compliance, loan closing procedures, and refining repayment terms. This structure also allows for a redundancy of loan processing to minimize productivity stops when an employee leaves the KIA. A Deputy Executive Director position was created to oversee loan and accounting activities, assign duties, and supervise staff.

In addition to the reorganization of personnel, language in the assistance agreements has been revised to document compliance expectations. As a shift in KIA policy, beginning with the 2019 projects, any principal forgiveness amount will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower. Estimated amortization schedules are provided at the time of assistance agreements are initiated based on estimated repayment dates.

2. Promote the principles of United States Environmental Protection Agency (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 Green Project Reserve is not currently a requirement for the DWSRF, but Kentucky has continued to include green project scoring to promote SI. 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 2019 SFY, 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.

Additionally, KIA staff took advantage of numerous opportunities to speak to engineers, utilities, and other stakeholders throughout the state. Among the groups to which the presentations were made included the Kentucky Rural Water Association, the Kentucky Water Resources Symposium, the Utilities Management Institute, the Kentucky Drinking Water Infrastructure Legislative Taskforce, the Kentucky Capital Projects and Bond Oversight Legislative Committee, the Governor's Local Issues Conference.

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.

We are changing the way the ADDs work with and submit GIS mapping data from a bi-monthly check-in period to an automated synchronization where mapping and components are updated in real-time through a button click. The new process will also feature a programmatic QA/QC tool that the ADDs will use to improve the quality of their data. We expect to deploy this new process in the 2020 contract year.

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 was 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 through a grant from the Appalachian Regional Commission. 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.

The reorganization of the loan compliance personnel discussed under item 1 above also has helped identify distressed borrowers by having one Regional Compliance Coordinator responsible for all compliance on a given loan, rather than having different personnel responsible for compliance of different components.

5. Develop a focused marketing strategy in conjunction with the Energy and Environment Cabinet (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 downloads the PDF application and reaches an attachment page with clickable links to additional documents required for the application. The borrower then submits the entire electronic application package to KIA via email. The paperless application reduces paper usage, improves timeliness of submittal, and eases the burden of excessive paperwork during the process. KIA had fully implemented the electronic application process in the 2019 funding cycle. Going forward, this process will allow for a transition to electronic web submission of application information rather than emailing pdf files.

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.

The implementation of the use of electronic communication to streamline efforts have 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 9 shows the administrative and set-aside disbursements for 2019. Since the inception of the program, Kentucky has disbursed administrative and other (state programs, local assistance and technical assistance) set-asides of \$63,368,538 (Exhibit 7) as compared to \$57,694,608 in 2018.

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. 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 ACTIVITY

A. Fund Financial Status

Exhibit 8 shows the allocation of first use SRF funds for 2019. Exhibit 12 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 one loan is past due. Exhibit 9 shows the administrative and set-aside disbursements for 2019.

B. Financial Statements

Exhibits 10 and 11 present the 2019 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

No bonds were issued in 2019.

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

The Commonwealth of Kentucky entered into the operating agreement and each grant agreement with the EPA. All conditions of the agreements have been met. Some of the primary conditions are described below:

1. State Matching Funds

The Commonwealth of Kentucky appropriated sufficient funds to meet the 20% State Match requirement. State Match funds were disbursed to borrowers prior to disbursement of capitalization grant funds (Exhibit 8 displays the state match payment).

2. Binding Commitments within One Year

The Commonwealth of Kentucky entered into binding commitments to provide assistance from the SRF in amounts equal to 334% of the grant payments within one year after receipt of each payment (Exhibit 2).

3. Expeditious and Timely Expenditure

The Commonwealth of Kentucky disbursed all cash draws and other available SRF funds in a timely and expeditious manner. \$21,535,693 was disbursed to the borrowers for project expenses and to the state for program administration and other set-asides (Exhibit 5). Exhibit 1 "Projects Receiving SRF Financial Assistance for State Fiscal Year Ended June 30, 2019" 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

Projects identified in the annual IUP to be funded are included in Exhibit 3 of this report. All projects met eligibility requirements.

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

Kentucky negotiated with EPA an overall fair share proportion of the capitalization grant which is targeted for Women and Minority Business (MBE/WBE) or Disadvantaged Business Enterprises (DBE) as applicable. The State has developed procedures to ensure that loan recipients and prime contractors follow the six affirmative action steps to identify and utilize MBE/WBE or DBE firms. During 2019, \$15,380,904 in construction draw requests was reimbursed to DWSRF participants of which \$37,827, or 0.25% was reimbursed to MBE contractors and \$83,621 or 0.54% was reimbursed to WBE contractors. Kentucky is continuing to educate borrowers on the goal of an overall fair share proportion of the capitalization grant for MBE/WBE or DBE firms.

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. The Regional Compliance Coordinators assist in monitoring for compliance.

VI. PROPOSED AND ONGOING IMPROVEMENTS

A. Median Household Income Determination Guidance

KIA has developed the Median Household Income (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. During 2019, the Work Group did not meet but the KIA is still implementing recommendations from the Work Group.

C. KIA and ACEC-KY Partnership

To facilitate an open line of communication, the KIA staff and members of the American Society of Consulting Engineers met every other month in 2019 SFY with a common purpose to strengthen the relationship between the two parties and help each other achieve goals and fulfill responsibilities. The typical agenda of the meetings covered discussions of current regulatory and legislative issues, specific and potential funding sources, investigation of functional problems with the system, and identification of opportunities to improve application and use of funds.

This open forum has allowed for clear and candid discussion of current relevant issues that both entities are facing. The forum also provides a chance for both sides of the issues to be put on the table and addressed. The regular and timely communication with the engineering community has enabled KIA to improve the pace of fund revolving to meet the borrowers' infrastructure needs. KIA will continue to participate in the bi-monthly meetings hosted by ACEC in the foreseeable years. Below is a list of highlights from 2019.

- Discussion of legislative impacts such as: American Water Infrastructure Act of 2018
- Clarification on 2 CFR Part 200 provisions pertaining to CDBG, EDA, ARC funded projects
- Updated ACEC and KIA staff on staffing changes for both entities
- Project profile and ranking updates and assistance
- Scheduled site visits to communities to review their water and sewer systems and improvement/needs
- Updated ACEC on new capabilities at the KIA
- Coordinated use of funds between funding agencies
- Streamlining of the application and use of funds for ACEC and KIA
- Discussion of the American Iron and Steel requirements
- WRIS status, improvements, and use
- Discussion of principal forgiveness
- Discussion of design/build and the viability of projects of this nature using KIA dollars
- Project schedule discussions
- Types of work and funds available
- Compliance assistance

D. KIA WRIS Funding Dashboards

The WRIS Funding Dashboards were created as a proof of concept for using GIS technology to help present information that illustrates Kentucky's water and wastewater infrastructure funding needs over the next 20 years. Three dashboards have been created, thus far, as prototypes that will help pave the way for more engaging ways to interpret, interact, and analyze data with WRIS. These funding dashboards aggregate and display the WRIS information. The dashboards present information in a comprehensive and transparent manner using existing data sets relative to drinking water and wastewater utilities in Kentucky.

Each innovative dashboard is linked directly to Project Profiles in the WRIS portal. When the data is revised the components are updated in real-time allowing users to view projects based on current information via three separate mediums. The function of each version is detailed below:

- By Region – This dashboard allows the user to filter down by Area Development District, County, Applicant, and/or Project Number. With each descending filter, all components of the dashboard update. Also included is a list of projects with basic details such as title, cost, and description that are seeking funding. Upon filtering to a specific project, the map symbolizes the project. Graphs are designed to show the number of projects listed in the WRIS portal by their schedule (0-2 years, 3-5 years, etc.) and the associated funding needs.

- By Region via mobile or tablet – This dashboard is a replica of the first dashboard but optimized for mobile viewing on a tablet or phone.
- WRIS Projects by Legislative Districts – The dashboard filters the WRIS data either by House or Senate Legislative District and the District number. It allows quick access to visualize water and wastewater needs in that District. The process is similar to the first and second dashboards in that all of the same information is present.

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 39 active drinking water loan projects in various stages of the DWSRF process at the end of the 2019 state fiscal year (SFY). The projects are sponsored by the following systems:

SFY 2019 Active DWSRF Projects		
Cave Run Water Commission	City of Irvine	City of Salyersville
City of Burnside	City of Jamestown	City of Lancaster
City of Campbellsville	City of Lebanon	City of South Shore
City of Centertown	City of Louisa	City of Stanford
City of Cynthiana	City of Morehead	Cumberland Falls Highway Water District
City of Danville	City of Mortons Gap	Frankfort Electric/Water Plant Board
City of Edmonton	City of Nicholasville	Green-Taylor Water District
City of Elkton	City of Olive Hill	Hopkinsville Water Environmental Authority
City of Evarts	City of Pineville	Northern Kentucky Water District
City of Hardinsburg	City of Prestonsburg	Paintsville Utilities Commission
Western Pulaski County Water District		

2. Loan applications have been reviewed for all of the projects listed above. Thirteen drinking water projects were closed out during the 2019 state fiscal year.
3. Eight DWSRF environmental reviews were conducted during the SFY 2019 for drinking water infrastructure projects.
4. Ten drinking water projects were reviewed by Water Infrastructure Branch Engineering Section from July 1, 2019 to June 30, 2019. The Engineering Section also performed associated project management responsibilities including

attending preconstruction meetings, project inspections, review of invoices and change orders, etc.

SFY 2019 Project Review Summary	
Distribution- Line Extension	2
Distribution- Major Construction	0
Replacement/Rehabilitation	2
Tank	2
Water Treatment- Modifications, New, Preliminary	4

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

Kentucky used the Technical Assistance set-aside as follows:

- ◆ Provided approximately 136 instances of assistance, training and consultation, covering technical, managerial, and financial capacity.
- ◆ Of the 139 sanitary surveys conducted in SFY 2019 81% were conducted at small drinking water systems (less than 10,000 population). Over 56% were in very small systems with less than 3,300 population.
- ◆ Fifty five drinking water treatment plants achieved Area-Wide Optimization Program (AWOP) turbidity goals, resulting in safer drinking water for 1.42 million Kentucky citizens.
- ◆ Had EPA priority Review
- ◆ Two Modular Distribution System Optimization (DSO) trainings were conducted throughout the state:
 - Somerset – included 7 participating systems (April 2019)
- ◆ Also conducted:
 - EPA Disinfection By-product (DBP) Webinar series presentation, Approaches to Prioritize Distribution System Optimization Efforts (May 6, 2019)
 - EPA DBP Webinar series presentation, Implementation of DBP Control Strategies (May 13, 2019)
 - KRWA Corrosion Control Workshop, Calvert City, KY (March 21, 2019)
 - KRWA Corrosion Control Workshop, Bowling Green, KY (June 19, 2019)
 - Kentucky Water/Wastewater Operators Association (KWWOA) Annual Conference, Drinking Water Updates (April 15, 2019)
 - KWWOA Annual Conference, How to avoid Monitoring & Reporting violations (April 15, 2019)

- ◆ The partnership with USEPA's Technical Support Center (TSC Cincinnati) continued for the SFY 2019. 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 EPA Data Management Users Conference, Salt Lake City, UT (July 7-12, 2019)
 - Attended EPA Region 4 Meeting in Cherokee, NC (March 12-14, 2019)
 - Attended KWWOA Annual Conference (April 15-17, 2019)

- ◆ The Division of Water's drinking water staff and management attended and/or participated in training events with a focus on small systems:
 - EPA/ORD UV Toolkit Review, Cincinnati
 - Webinar "Partnerships Information Network"
 - Monochloramine Method Secondary Laboratory Verification Discussion
 - EPA Webinar "DWSRF and Capacity Building in Action – Assessing Financial Capacity" (July 2019)
 - Environmental Finance Center Network (EFCN) Webinar "Understanding Asset Criticality – Reduce Risk and Optimize" (July 2019)
 - KRWA Annual Conference (August 2019)
 - U.S. EPA's Small Water Systems Monthly Webinar Series "Pathogens and Biofilms" (August 2019)
 - EFCN Webinar "How to Build Marketing Skills to Gain Support from Water Customers" (August 2019)
 - EFCN Webinar "Encouraging Conservation – An In-Depth Look at Non-Pricing" (August 2019)
 - EFCN Webinar "Communicating Water to Your Board" (September 2019)
 - EFCN Workshop in London, KY – "Setting the Right Rates for Your System" (September 2019)
 - EPA State Revolving Fund 101 Training (September 2019)
 - EFCN Webinar "Understanding the Root Cause of a Problem at Your Water System" (October 2019)
 - Provided Training at RCAP Water and Wastewater Continuing Education Training – Asset Management/Capacity Development (October 2019)
 - American Water Works Association (AWWA) KY/TN – Non-Revenue Water Workshop at the Frankfort Plant Board (November 2019)
 - EPA Webinar "SDWIS Prime Update and RTCR Implementation" (December 2019)

- EFCN Webinar “How to Manage Grants” (January 2019)
- WaterOperator.org Webinar “Operator Certification (January 2019)
- EPA Webinar “Treatment Technologies for Removing Chemicals of Concern” (January 2019)
- EFCN Webinar “Jump-Starting Long-Term Planning and Setting Financial Targets” (February 2019)
- Water Treatment Plant Operation, Volume 1 Course by the California State University (Sacramento) (February 2019)
- Trenchless Technology Webinar “UV CIPP in Small Diameter Pipelines (February 2019)
- EPA’s Capacity Development Operator Certification Workgroup Call (February 2019)
- EPA Webinar “Lead Management in Homes and Buildings” (March 2019)
- Assisted with Rural Community Assistance Partnership (RCAP) Water and Wastewater Continuing Education Training – 90th Percentile for Lead and Copper Results Module (March 2019)
- EPA Webinar “DBP Webinar Series: DBP Optimization Process and Priority Setting” (April 2019)
- EPA Webinar “DBP Webinar Series: Approaches to Prioritize Plant Optimization Efforts” (April 2019)
- EPA Webinar “Stage 2 Disinfection Byproducts Rule and Simultaneous Compliance” (April 2019)
- Trenchless Technology Webinar “Using FELL to Pinpoint Infiltration, Improve Decision Making, and Measure Rehab Effectiveness” (April 2019)
- EPA Webinar “DBP Webinar Series: Approaches to Prioritize Distribution System Optimization Efforts” (May 2019)
- EPA Webinar “DBP Webinar Series: Implementation of DBP Control Strategies” (May 2019)
- EPA Webinar “Chemical Contaminant Rule Webinar Series” (May 2019)
- Association of State Drinking Water Administrators (ASDWA) Webinar “Minnesota PFAS Actions - Investigation, Response, and Lessons Learned” (May 2019)
- EPA Webinar “Harmful Algal Blooms and Algal Toxin Treatment” (May 2019)
- Provided Training at RCAP Water and Wastewater Continuing Education Training – Asset Inventories and Asset Criticality, DWSRF/CWSRF, GIS/GPS, and O&M Manuals (May 2019)
- EFCN Webinar “Connecting the Dots: Regional Development Organizations and Water Systems” (May 2019)
- EFCN Webinar “Ask the Expert: Capital Improvement Planning” (May 2019)
- RCAP/AWWA Training in Somerset, KY (May 2019)

- EPA Webinar “Chemical Contaminant Rule Webinar Series” (June 2019)
- EPA Webinar “Sanitary Surveys” (June 2019)
- ASDWA/USEPA Webinar “Water Utility Resilience” (June 2019)
- ASDWA/USEPA Webinar “Water Utility Resilience” (June 2019)
- EFCN Webinar “Innovations in Small Water Systems: Barriers and Case Studies from Appalachia” (June 2019)
- EPA Webinar “Sanitary Surveys” (June 2019)
- EFCN Webinar “Blending Source Water Protection into Asset Management” (June 2019)

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 Long Term 2 Enhanced Surface Water Treatment Rules.
 - Tracked and recorded that 139 Sanitary Surveys were conducted from July 1, 2019 to June 30, 2019.
 - 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 2019 there were 8 Chemistry Laboratories and 33 Microbiology audited by DOW Certification Officers. Currently, four 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 2019)
 - KY AWOP Update and Self-Assessment Presentations at the USEPA National AWOP Meeting in Cincinnati on KY AWOP (August 2019)
 - KRWA Corrosion Control Workshops in Prestonsburg, Calvert City and Bowling Green.
 - KWWOA Annual Conference, Drinking Water Updates and, How to avoid M&R violations.
 - EPA DBP Webinar series presentation, Approaches to Prioritize Distribution System Optimization Efforts.
 - EPA DBP Webinar series presentation, Implementation of DBP Control Strategies.
 - Kentucky Municipal Utilities Association, Water Plant Safety Programs.
- ◆ Continued to support the microbial and disinfection by-products activities associated with the Area-Wide Optimization Program. The focus for SFY 2019 remained 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 65 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, 139 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 25 small public water systems and additional assistance was provided to multiple systems (83) upon request.
 - Four continuing education training sessions were conducted during the contract year, which covered corrosion control, disinfection by-product mitigation, granular activated carbon and SDWA monitoring and compliance. Although, the contract requires three hours of training to be performed quarterly; participants received no less than six Continuing Educational Units at any of the classes. The objective of the sessions was to provide useful information to attendees to help them better perform their duties as drinking water professionals and to enhance the operations at their facilities. The following training sessions were conducted:

FY 2019 PROGRAM TRAINING CONDUCTED				
Date	Location	Topic	Attendees	CEU
September 27, 2019	Lexington	Corrosion Control & Compliance	47	6
November 27-28, 2019	Prestonsburg	Corrosion Control & Compliance	30	12
March 20-21, 2019	Calvert City	Corrosion Control & Compliance	30	12
June 20-21, 2019	Bowling Green	Corrosion Control & Compliance	44	12
TOTALS			151	42

- ◆ 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 SFY2019, \$342,000 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 511 drinking water certification applications, administered 451 drinking water certification exams, and issued 313 new drinking water certificates during the 2019 state fiscal year. The drinking water certification program had an average pass rate of 69 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 75 online drinking water 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 12 drinking water training events during this timeframe totaling approximately 204 training hours with 464 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 339 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 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 299,000 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. To follow the blog, go to www.kyocp.wordpress.com.

D. Wellhead Protection Program

The Wellhead Protection Program (WHPP) staff provides assistance to communities which are reliant on groundwater sources for their drinking water with protection and planning efforts. This includes technical assistance during wellhead protection plan development and review, conducting system site visits, and facilitating public meetings throughout the state. During this fiscal year, program staff continued to develop programmatic Standard Operating Procedures and integrated all of the past and current wellhead plans and compliance into the Department's Advantage Regulatory Management database (ARM). Program staff also worked to contact non-compliant wellhead systems and provided assistance to bring them back into compliance with the required plan update and approval schedules. In a continued effort to develop, manage, and maintain correct and accurate programmatic data and information, the Wellhead staff conducted numerous site inspections to verify Water Withdrawal Permits, Well and Spring records, and revised delineated protection areas when necessary. Additionally, program staff worked with the GIS and Data Analysis Section to make regular updates to the Wellhead Protection Areas and Groundwater Database

and ArcMap data layer file. The staff also revised and updated all of the Source Water Protection Areas for 187 public water systems and updated the ArcMap data layer file.

Program staff developed a training module in coordination with the Kentucky Department of Compliance Assistance (DCA) for the Kentucky Operator Certification Program regarding the background, core elements, and requirements of the Wellhead Protection Program. Training modules for operator certification and licensing from the branch were updated to include this new material. Staff attended a Carbonate Core Logging workshop offered by the Kentucky Geological Society and delivered a presentation to the Division of Water on the training they received. Staff have also been crucial in revising the state Groundwater under the Direct Influence (GUDI) guidance for eventual approved use in assessments by the Division of Water. Staff also conducted a mapping exercise and assessment of potential projects in Kentucky's priority watersheds in coordination with the U.S. Department of Agriculture, Natural Resources Conservation Service National Water Quality Initiative. This coordination focused on Source Water Protection areas in watersheds with agricultural influences and will remain an ongoing effort.

Wellhead staff also attended and/or provided presentations at the following conferences and meetings:

- 2019 Kentucky Water Resources Research Institute Symposium
- 2019 Kentucky Geological Survey Annual Seminar
- Statewide Area Development Districts' Water Management Council Meetings
- U.S. Geological Survey Indiana-Kentucky Water Science Center Day of Science
- Source Water Protection Sub-Committee of the Drinking Water Advisory Council
- Kentucky River Basin Team Meeting
- WHPP Public Meetings: Georgetown Municipal Water Service, Hickman Water Department, Francis Water Company, Brandenburg Water Works, Oldham County Water District, Henry County Water District #2, Monument (Arch) Chemical Kentucky, LLC., City of Worthington/ Worthington Municipal Water Works, Trinity Holiness School
- U.S. Environmental Protection Agency, Region 4 Source Water Protection Annual Visit
- Kentucky Harmful Algal Bloom Workgroup Meeting

- Wastewater & Drinking Water Joint Advisory Council Meetings
- U. S. Department of Agriculture, National Resource Conservation State Technical Meeting
- Kentucky Geological Society Carbonate Core Logging Workshop
- Watershed Coordinator Meetings
- Annual Quality Assurance Project Plan (QAPP) Water Quality training
- Region 4 State Revolving Fund 101 Training

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 of Community GW Supplies	25	32	22	13	3
Total Population Served	8,963	64,326	119,438	249,087	899,499*

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

Non-Community Water Systems Utilizing Groundwater Sources		
	Number of Systems	Population
Non-Transient Non-Community Systems	12	5,756
Transient Non-Community Systems	31	4,650

Wellhead Protection Plans			
	Phase I Plan	Phase II Plan	Five Year Update
Developed	0	1	16
Reviewed	2	3	17
Approved	2	3	17

EXHIBIT 1
 KENTUCKY INFRASTRUCTURE AUTHORITY
 FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
 PROJECTS RECEIVING SRF FINANCIAL ASSISTANCE
 FISCAL YEAR ENDED JUNE 30, 2019

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
Green Taylor Water District	F18-005	\$121,319.00	11/13/2018	11/15/2018	5/15/2019	L(1)	1.75%	20	10,001 to 100,000	N	Y
Cynthiana, City	F19-020	\$954,565.00	11/13/2018	4/1/2019	9/1/2019	L	0.50%	20	3,301 to 10,000	Y	Y
Paintsville Utilities Commission	F19-009	\$2,010,000.00	12/11/2018	8/15/2019	8/15/2020	L	0.50%	30	10,001 to 100,000	N	Y
Jamestown, City	F19-019	\$500,000.00	12/11/2018	6/15/2019	3/15/2020	L	0.50%	30	3,301 to 10,000	Y	Y
Irvine, City	F17-006	\$1,200,000.00	1/8/2019	10/8/2018	10/7/2019	L(1)	0.25%	30	3,301 to 10,000	Y	Y
Burnside, City	F19-005	\$2,227,000.00	1/8/2019	1/1/2020	11/30/2020	L	0.50%	30	501 to 3,300	Y	Y
Green Taylor Water District	F19-018	\$564,600.00	1/8/2019	3/15/2019	9/1/2019	L	2.00%	20	10,001 to 100,000	N	Y
Hardinsburg, City	F19-059	\$760,280.00	1/8/2019	5/1/2019	12/31/2019	L	2.00%	20	10,001 to 100,000	N	Y
Morehead, City	F19-002	\$5,257,000.00	3/7/2019	8/1/2019	8/1/2020	L	0.50%	30	10,001 to 100,000	N	Y
Danville, City	F19-042	\$4,918,257.00	4/4/2019	11/30/2019	11/30/2020	L	2.00%	20	3,301 to 10,000	Y	Y
South Shore, City	F19-041	\$3,051,133.00	5/7/2019	5/1/2020	6/1/2021	L	0.50%	20	3,301 to 10,000	Y	Y
Edmonton, City	F19-004	\$4,500,000.00	6/18/2019	5/1/2020	5/1/2021	L	0.50%	30	3,301 to 10,000	Y	Y
Mortons Gap, City	F19-044	\$835,000.00	7/9/2019	1/15/2020	10/31/2020	L	0.50%	30	501 to 3,300	Y	Y
Elkton, City	F19-035	\$170,000.00	7/9/2019	10/1/2019	1/1/2020	L	0.50%	30	501 to 3,300	Y	Y
Allen County Water District	F19-025	\$2,450,000.00	8/6/2019	10/1/2019	8/31/2020	L	2.00%	20	10,001 to 100,000	N	Y

TOTAL	15	\$29,519,154.00		0.93%
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<u>Summary</u>	<u>Total</u>	<u>Loan Count</u>	<u>% of Total</u>
Total Funding For Loans	\$29,519,154.00	15	
Total Funding For Small Communities	\$18,355,955.00	9	62%
Total Funding For Disadvantaged Communities	\$29,519,154.00	15	100%
Weighted Average Interest Rate	0.93%		

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, 2019

RECIPIENT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL	TYPE OF ASSISTANCE
Green Taylor Water District	F18-005		\$ 121,319			\$ 121,319	L(1)
Cynthiana, City	F19-020		\$ 954,565			\$ 954,565	L
Paintsville Utilities Commission	F19-009		\$ 2,010,000			\$ 2,010,000	L
Jamestown, City	F19-019		\$ 500,000			\$ 500,000	L
Irvine, City	F17-006			\$ 1,200,000		\$ 1,200,000	L(1)
Burnside, City	F19-005			\$ 2,227,000		\$ 2,227,000	L
Green Taylor Water District	F19-018			\$ 564,600		\$ 564,600	L
Hardinsburg, City	F19-059			\$ 760,280		\$ 760,280	L
Morehead, City	F19-002			\$ 5,257,000		\$ 5,257,000	L
Danville, City	F19-042				\$ 4,918,257	\$ 4,918,257	L
South Shore, City	F19-041				\$ 3,051,133	\$ 3,051,133	L
Edmonton, City	F19-004			\$ 4,500,000		\$ 4,500,000	L
Mortons Gap, City	F19-044				\$ 835,000	\$ 835,000	L
Elkton, City	F19-035				\$ 170,000	\$ 170,000	L
Allen County Water District	F19-025				\$ 2,450,000	\$ 2,450,000	L
TOTAL	15	\$ -	\$ 3,585,884	\$ 14,508,880	\$ 11,424,390	\$ 29,519,154	
PROGRAM ADMINISTRATION		\$ -	\$ 306,320	\$ 3,972	\$ 544,108	\$ 854,400	
SET-ASIDES		\$ -	\$ 1,303,411	\$ 2,488,972	\$ 1,508,004	\$ 5,300,387	
TOTAL		\$ -	\$ 5,195,615	\$ 17,001,824	\$ 13,476,502	\$ 35,673,941	
CUMULATIVE TOTALS		\$ -	\$ 5,195,615	\$ 22,197,439	\$ 35,673,941		
FEDERAL PAYMENTS - 2018		\$ -	\$ 2,396,580	\$ -	\$ 8,269,219	\$ 10,665,799	
CUMULATIVE FEDERAL PAYMENTS		\$ -	\$ 2,396,580	\$ 2,396,580	\$ 10,665,799		
BINDING COMMITMENT % OF PAYMENTS			217%	926%	334%		

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, 2019**

Rank	Applicant	Project Name	Action
**	Nicholasville, City of	Nicholasville 24" Parallel Transmission Main	Bypassed
**	Morehead, City of	Regional Water Treatment Plant Construction	Accepted
1	Lebanon Water Works Company Inc	Lebanon Main Replacement Project	Withdrawn
2	Edmonton, City of	Edmonton Water Improvement Project - Contract A & B	Accepted
3	Burnside, City of	Burnside Combined Waterline Improvements	Accepted
4	Pikeville, City of	Myra Barnes Avenue Waterline Rehabilitation	Bypassed
5	Martin County Water District	Water System Controls and Raw Water Modifications	Declined
6	Princeton Water & Wastewater Commission	Princeton - Water Line Improvements	Declined
7	Paintsville Utilities Commission	Miscellaneous Water System Improvements	Accepted
8	Pikeville, City of	Scott Avenue Water Line Rehabilitation	Bypassed
9	Garrison-Quincy-Ky-O-Heights Water District	Eastern Lewis-Garrison Water Extension	Declined
10	Flatwoods, City of	City of Flatwoods Water Tank Rehab Project	Withdrawn
11	Martin County Water District	Water Treatment Plant Clarifier Rehab	Bypassed
12	Pikeville, City of	Pikeville Water Plant Filter Subsurface Wash System Improvements	Declined
13	Fordsville, City of	Fordsville Water Tank Rehab Project	Withdrawn
14	Mountain Water District	Water Loss Prevention Program Phase I – Contract #1	Declined
15	Princeton Water & Wastewater Commission	Princeton - Tank Rehabilitation	Declined
16	Green-Taylor Water District	Green-Taylor Water District - Distribution Upgrades	Accepted
17	Jamestown, City of	Downtown Jamestown Waterline Replacement	Accepted
18	Cynthiana, City of	Cynthiana - New Booster Pump Station	Accepted
19	Martin County Water District	Water Treatment Plant Clarifer and Disinfection byproduct reduction	Withdrawn
20	Southern Water & Sewer District	Water System Improvements - Mink Branch to Ligdon	Bypassed
21	Mount Vernon, City of	Tower Tank Transmission Main	Declined
22	Caldwell County Water District	Caldwell County Water District - U.S. Hwy 62 Area Water System Improvements	Withdrawn
23	Allen County Water District	US 231 Elevated Water Tank	Withdrawn
24	Wheelwright Utilities Commission	Wheelwright-Water Source Renovation	Declined
25	McKee, City of	Downtown Water Storage Tank Replacement	Bypassed
26	Glasgow Water and Sewer Commission	Glasgow Water Improvement - 24-Inch Transmission Line Pritchardsville to Old Cavalry Drive	Withdrawn
27	Allen County Water District	Old KY 231 Water Line Replacement	Withdrawn
28	Elkhorn City, City of	City of Elkhorn City - Water Improvements - Radio Read Meters	Declined
29	Versailles, City of	Automatic Meter Reading (AMR) System	Bypassed
30	Northern Kentucky Water District	Taylor Mill Treatment Plant Emergency Generator	Withdrawn
31	Martin County Water District	ARC Water System Improvements	Declined
32	Somerset, City of	Oak Hill Storage Tank Replacement, 5 MG Booster Station, & Water Main Extension	Withdrawn

**EXHIBIT 3
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
PROJECT PRIORITY LIST STATUS REPORT
FISCAL YEAR ENDED JUNE 30, 2019**

Rank	Applicant	Project Name	Action
33	Elkton, City of	Elkton - Water System Rehabilitation and Upgrade project	Accepted
34	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	Bypassed
35	Versailles, City of	Versailles - Water Distribution System Improvements Phase 2	Bypassed
36	Versailles, City of	Versailles - Water Distribution System Improvements - Low Pressu	Bypassed
37	Larue County Water District #1	LaRue Co. W.D. - Hwy 84 Pump Station & Improvements	Declined
38	Cumberland County Water District	Kentucky Highway 704 Water Sysem Improvements	Declined
39	South Shore, City of	New South Shore Water Treatment Plant	Accepted
40	Danville, City of	Danville - Perryville Standpipe Replacement and Water Main	Accepted
41	Versailles, City of	Versailles - Water Treatment Plant Improvements - Generators	Bypassed
42	Mortons Gap, City of	Mortons Gap Water System Improvement Project	Accepted
43	Mayfield, City of	Water Line Extension to Wildwood Subdivision and Douthitt Street	Bypassed
44	Maysville, City of	Maysville Second Street Waterline Replacement	Withdrawn
45	Hopkinsville Water Environment Authority	HWEA Water Meter Replacement and AMR	Bypassed
46	Williamsburg, City of	Valve locating; recovery; exercising and/or replacement	Bypassed
47	Olive Hill, City of	Olive Hill: Water Treatment Plant Rehab Project	Expired
48	Muhlenberg County Water District #3	MCWD #3 - Pump Station Efficiency Upgrade	Bypassed
49	Pikeville, City of	Pikeville Water Plant High Service Pumps Improvements	Withdrawn
50	Logan-Todd Regional Water Commission	Logan/Todd - 12" Waterline Upgrade (Elkton to Allender's Hill)	Declined
51	Mountain Water District	Radio Read Meter Replacement Project	Bypassed
52	Mountain Water District	Radio Read Meter Replacement Project- Phase II	Withdrawn
53	Scottsville, City of	City of Scottsville - WTP Emergency Generator Project	Bypassed
54	Russell, City of	Russell: Upgrade Water Treatment Plant and System Improvements	Withdrawn
55	Mayfield, City of	Mayfield Electric & Water-WTP Clearwell Rehabilitation	Withdrawn
56	Southern Water & Sewer District	Southern Water & Sewer District – Water Meter Change Out Program	Bypassed
57	Hardinsburg, City of	Harned Pump Station Replacement	Accepted
58	Oak Grove, City of	Oak Grove - Hugh Hunter Road Waterline Replacement	Declined
59	Science Hill, City of	KY 1247 Waterline Extension	Withdrawn
60	Fredonia, City of	Fredonia - Tank Rehabilitation	Declined
61	Hopkinsville Water Environment Authority	HWEA - Crofton Water Main Extension Project	Bypassed
62	Graves County Water District	Graves County Water District (South Graves)-Interconnection	Withdrawn
63	North Marshall Water District	Water Line and Booster Station Rehab and installation of Radio Read Meter	Expired

**EXHIBIT 3
 KENTUCKY INFRASTRUCTURE AUTHORITY
 FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
 PROJECT PRIORITY LIST STATUS REPORT
 FISCAL YEAR ENDED JUNE 30, 2019**

Rank	Applicant	Project Name	Action
64	Hickory Water District	Hickory Water District-Hickory Road Extension	Expired
65	Southern Water & Sewer District	City of Martin Emergency Water Interconnect	Bypassed
66	Paris, City of	City of Paris Creek Crossing Pipe Replacement Under Houston and Stoner Creeks.	Expired
67	Lawrenceburg, City of	South Main Street Water Line Replacement	Declined
68	Augusta, City of	Augusta Lagoon Cleaning	Declined
69	Hopkinsville Water Environment Authority	HWEA - Crofton Water Line Replacement	Bypassed
70	Paris, City of	Paris to Kentucky American Water System Connection	Expired
71	Dixon, City of	Dixon Water Line Upgrade	Declined
72	Calvert City, City of	HEIGHTS PHASE IV WATER MAIN REPLACEMENT – CHERRY & CEDAR STREETS	Bypassed
73	North Marshall Water District	New Water Line and Booster Station	Expired

* Funding is being prioritized for projects requesting an increase to an existing SRF construction loan or multi-year loans.

** Funding is being prioritized for projects having an active SRF planning and design loan

EXHIBIT 4
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
LOAN COMMITMENTS WITH PRINCIPAL FORGIVENESS SUBSIDY
FISCAL YEAR ENDED JUNE 30, 2019

RECIPIENT NAME / LOCATION	LOAN NUMBER	PROJECT NAME	AMOUNT OF ASSISTANCE	ORIGINAL SUBSIDY	INTEREST RATE	MHI	MHI AS % OF STATE	POPULATION
Paintsville Utilities Commission	F19-009	Miscellaneous Water System Improvements	\$ 2,010,000	\$ 1,005,000	0.50%	\$ 33,104	73.9%	21,797
Jamestown, City	F19-019	Downtown Jamestown Waterline Replacement	\$ 500,000	\$ 250,000	0.50%	\$ 31,244	69.7%	7,402
Burnside, City	F19-005	Burnside Combined Waterline Improvements	\$ 2,227,000	\$ 1,113,500	0.50%	\$ 35,706	79.7%	1,388
South Shore, City	F19-041	New South Shore Water Treatment Plant	\$ 3,051,133	\$ 1,300,000	0.50%	\$ 31,416	70.1%	5,471
Edmonton, City	F19-004	Water Improvement Project	\$ 4,500,000	\$ 1,300,000	0.50%	\$ 32,551	72.6%	4,582
Mortons Gap, City	F19-044	Water System Improvement Project	\$ 835,000	\$ 417,500	0.50%	\$ 28,974	64.7%	862
Elkton, City	F19-035	Water System Rehabilitation and Upgrade Project	\$ 170,000	\$ 85,000	0.50%	\$ 32,622	72.8%	2,155
TOTALS	<u>7</u>		<u>\$ 13,293,133</u>	<u>\$ 5,471,000</u>			<u>72.5%</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 \$35,849 to be eligible under the 2019 Intended Use Plan. See "Additional Subsidization" in the written IUP commentary for a detailed discussion of principal forgiveness for 2019.

**EXHIBIT 5
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
TOTAL DISBURSEMENTS
FISCAL YEAR ENDED JUNE 30, 2019**

PROJECT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
CAPITALIZATION GRANT FUNDS						
Adair County Water District	F12-04	130,865	136,917	1,000		268,782
Campbellsville, City of	F17-014		1,137,299	434,739	1,756,284	3,328,323
Cumberland Falls Highway WD	F16-002	220,954				220,954
Fleming-Neon, City of	F17-003	156,518	135,175		105,184	396,877
Green-Taylor Water District	F18-005			802,030	389,105	1,191,135
Harrodsburg, City of	F16-049	116,061	26,643	5,263		147,966
Hopkinsville, City of	F16-001	203,591	216,095			419,686
Irvine, City of	F17-006			944,868	1,320,928	2,265,797
Lebanon, City of	F14-036	114,031	402,645		83,031	599,707
Lebanon, City of	F18-006			205,265	494,636	699,901
Monroe County WD	F15-002	120,484	497,548	65,697		683,729
Morehead, City of	F18-004	121,168	64,408			185,575
Nicholasville, City of	F115-066		28,383	20,637		49,020
Nicholasville, City of	F17-001		102,500	82,532	151,409	336,441
Northern Kentucky Water District	F14-015	258,767				258,767
Ohio County Water District	F15-069		87,546	100,055		187,601
Olive Hill, City of	F17-007		202,578	235,672		438,251
Pineville, City of	F18-003		8,573	13,520	262,942	285,035
Prestonsburg, City of	F16-045	56,390		25,026		81,416
Salyersville, City of	F18-002		245,655			245,655
Western Pulaski County WD	F16-003		126,984			126,984
Whitley County Water District	F15-030	113,358		102,541		215,899
PROJECT TOTAL		\$ 1,612,186	\$ 3,418,949	\$ 3,038,846	\$ 4,563,518	\$ 12,633,500
PROGRAM ADMINISTRATION		\$ -	\$ 306,320	\$ 3,972	\$ 544,108	\$ 854,400
SET-ASIDES		\$ -	\$ 1,303,411	\$ 2,488,972	\$ 1,508,004	\$ 5,300,387
FIRST USE TOTALS		\$ 1,612,186	\$ 5,028,680	\$ 5,531,790	\$ 6,615,630	\$ 18,788,287
CUMULATIVE TOTALS		\$ 1,612,186	\$ 6,640,866	\$ 12,172,656	\$ 18,788,287	

**EXHIBIT 5
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
TOTAL DISBURSEMENTS
FISCAL YEAR ENDED JUNE 30, 2019**

PROJECT NAME	LOAN NUMBER	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
REPAYMENT FUNDS						
Campbellsville, City of	F17-014			445,907		445,907
Cumberland Falls Highway WD	F16-002	54,144				54,144
Fleming-Neon, City of	F17-003	85,071		86,505		171,576
Harrodsburg, City of	F16-049	28,509	5,135			33,644
Hodgenville, City of	F16-008	41,500				41,500
Hopkinsville, City of	F16-001	60,099				60,099
Irvine, City of	F17-006			279,704		279,704
Lebanon, City of	F14-036			71,518		71,518
Lebanon, City of	F18-006			547,554		547,554
Monroe County WD	F15-002	35,375			36,605	71,980
Morehead, City of	F18-004	89,340	37,160		39,565	166,065
Nicholasville, City of	F115-066	2,280	15,502	26,410	72,815	117,007
Nicholasville, City of	F17-001			29,848	54,383	84,231
Ohio County Water District	F15-069			64,556	27,236	91,792
Olive Hill, City of	F17-007			83,093	118,239	201,332
Pineville, City of	F18-003				13,580	13,580
Prestonsburg, City of	F16-045			16,295		16,295
Salyersville, City of	F18-002	185,017			69,463	254,480
Williamstown, City of	F13-013	25,000				25,000
PROJECT TOTAL		\$ 606,333	\$ 57,797	\$ 1,651,390	\$ 431,886	\$ 2,747,406
GRAND TOTAL						
		\$ 2,218,520	\$ 5,086,477	\$ 7,183,180	\$ 7,047,516	\$ 21,535,693

EXHIBIT 6
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
PROPORTIONATE FEDERAL SHARE THROUGH CASH DRAWS
FISCAL YEAR ENDED JUNE 30, 2019

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
DISBURSEMENT SCHEDULE					
SELECT DISBURSEMENTS					
FIRST ROUND	\$ 1,612,186	\$ 3,418,949	\$ 3,038,846	\$ 4,563,518	\$ 12,633,500
ADMINISTRATION	0	306,320	3,972	544,108	854,400
SET-ASIDES	0	1,303,411	2,488,972	1,508,004	5,300,387
REPAYMENT	606,333	57,797	1,651,390	431,886	2,747,406
REVENUE BONDS	0	0	0	0	0
TOTAL SELECT DISBURSEMENTS	\$ 2,218,520	\$ 5,086,477	\$ 7,183,180	\$ 7,047,516	\$ 21,535,693
CUMULATIVE TOTAL	\$ 2,218,520	\$ 7,304,997	\$ 14,488,177	\$ 21,535,693	
CASH DRAW FROM LINE OF CREDIT	\$ -	\$ 2,396,580	\$ -	\$ 8,269,219	\$ 10,665,799
STATE SHARE	\$ -	\$ 1,570,718	\$ 2,089,882	\$ -	\$ 3,660,600
CASH DRAWS AS % OF DISBURSEMENTS	0%	47%	0%	117%	50%

**EXHIBIT 7
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
AMENDED FINANCIAL PROGRAM OVERVIEW
FISCAL YEAR ENDED JUNE 30, 2019**

Reference	Capitalization Grant FFY:	2011	2012	2013	2014	2015	2016	2017	2018	Totals
	Capitalization Grant Award Date:	9/29/2011	9/19/2012	9/11/2013	9/2/2014	9/29/2015	9/27/2016	9/19/2017	8/14/2018	
	Capitalization Grant Award Amount:	\$13,379,000	\$12,956,000	\$12,156,000	\$13,770,000	\$13,680,000	\$12,941,000	\$12,830,000	\$18,303,000	\$282,627,200
	DWSRF Program Administration (4%):	535,160	388,680	364,680	413,100	547,200	517,640	513,200	732,120	9,561,424
1452(g)(2)	DOW (3%)	141,370	259,120	243,120	275,400	410,400	388,230	384,900	549,090	6,735,152
1452(g)(2)	KIA (1%)	133,790	129,560	121,560	137,700	136,800	129,410	128,300	183,030	2,826,272
	State Program Management (up to 10% available):	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	1,830,300	25,007,444
1452(g)(2)(A)	Supplement PWSS Program	1,337,900	1,295,600	1,215,600	1,377,000	1,368,000	1,294,100	1,283,000	1,830,300	24,062,617
1452(g)(2)(B)	SWP Technical Assistance	0	0	0	0	0	0	0	0	251,176
1452(g)(2)(C)	Develop/Implement Capacity Development Strategy	0	0	0	0	0	0	0	0	344,023
1452(g)(2)(D)	Develop/Implement Operator Certification Program	0	0	0	0	0	0	0	0	349,628
1452(g)(2)(D)	Small Systems Technical Assistance (2% maximum):	267,580	259,120	243,120	275,400	273,600	258,820	256,600	366,060	4,988,210
	State/Local Assistance (up to 15%-10% maximum):	649,198	1,807,362	1,452,642	2,065,500	2,052,000	1,941,150	1,924,500	2,745,450	23,811,460
1452(k)(2)(A)	Land Acquisition and Conservation Easements	0	0	0	0	0	0	0	0	759,630
1452(k)(2)(E)	Wellhead Protection Program	58,380	259,120	0	413,100	410,400	388,230	384,900	549,090	4,321,195
1452(k)(2)(D)	Source Water Assessment Program:	0	252,642	237,042	268,515	273,600	258,820	256,600	366,060	2,589,692
1452(k)(2)(C)	Capacity Development – TMF assistance	590,818	1,295,600	1,215,600	1,383,885	1,368,000	1,294,100	1,283,000	1,830,300	16,140,943
	Total Grant Set-Asides:	2,529,838	3,750,762	3,276,042	4,131,000	4,240,800	4,011,710	3,977,300	5,673,930	63,368,538
	Project Funds:	10,849,162	9,205,238	8,879,958	9,639,000	9,439,200	8,929,290	8,852,700	12,629,070	219,258,662
	Kentucky Matching Dollars:	2,675,800	2,591,200	2,431,200	2,754,000	2,736,000	2,588,200	2,566,000	3,660,600	52,435,440
	Total Project Fund:	13,524,962	11,796,438	11,311,158	12,393,000	12,175,200	11,517,490	11,418,700	16,289,670	271,694,102

**EXHIBIT 8
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
SOURCE AND ALLOCATION OF SRF FUNDS
FISCAL YEAR ENDED JUNE 30, 2019**

CUMULATIVE SOURCES		FY 2019 DISBURSEMENTS				
	TOTAL	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
Capitalization Grants	\$ 219,258,662	\$ -	\$ 2,354,775	\$ 2,236,891	\$ 4,563,519	\$ 9,155,184
State Matching Funds	52,435,440	0	1,570,718	2,089,882	0	3,660,600
Program Administration	9,561,424	0	306,320	3,972	544,108	854,400
Other Set Asides	53,807,114	0	1,303,411	2,488,972	1,508,004	5,300,387
Revenue Bond Proceeds (Net)	80,000,000	0	0	0	0	0
TOTALS	<u>\$ 415,062,640</u>	<u>\$ -</u>	<u>\$ 5,535,224</u>	<u>\$ 6,819,717</u>	<u>\$ 6,615,631</u>	<u>\$ 18,970,571</u>

EXHIBIT 9
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER LOAN PROGRAM
ADMINISTRATIVE AND SET-ASIDE EXPENSES
FISCAL YEAR ENDED JUNE 30, 2019

	SET-ASIDE DISBURSEMENTS				
	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Administration	\$ -	\$ 306,320	\$ 3,972	\$ 544,108	\$ 854,400
Technical Assistance	0	85,134	164,325	9,191	258,650
State Programs	0	516,736	276,328	39,372	832,436
Local Assistance	0	701,541	2,048,319	1,459,441	4,209,301
Total Set-Aside Expenses	\$ -	\$ 1,609,731	\$ 2,492,944	\$ 2,052,112	\$ 6,154,787

EXHIBIT 10
KENTUCKY INFRASTRUCTURE AUTHORITY
BALANCE SHEET
JUNE 30, 2019
(UNAUDITED Statement of Net Position)

ASSETS

Current assets:

Cash and cash equivalents	\$ 1,053,458
Investments, current portion	95,340,525
Intergovernmental receivables	3,660,600
Accrued interest receivable, investments	11,218
Accrued interest receivable, assistance agreements	262,525
Current maturities of long-term receivables	13,485,000
Total current assets	113,813,326

Long-term receivables:

Assistance agreements receivable	209,203,109
Total assets	\$ 323,016,435

Deferred outflows of resources:

Pension related	\$ 344,448
Post-employment benefits other than pension	78,806
Unamortized deferred amount on refunding	903,814
Total deferred outflows of resources	\$ 1,327,068

LIABILITIES

Current liabilities:

Current maturities of revenue bonds payable, net of unamortized premiums and discounts	\$ 3,899,182
Accrued interest payable	963,015
State treasury advances for capitalization grant matching funds	3,660,600
Total current liabilities	8,522,797

Long-term liabilities:

Revenue bonds payable, less current maturities and unamortized premiums and discounts	53,300,829
Net pension liability	2,001,946
Net post-employment benefits other than pension liability	348,238
Total liabilities	\$ 64,173,810

Deferred inflows of resources:

Pension related	\$ 217,484
Post-employment benefits other than pension	34,380
Total deferred inflows of resources	\$ 251,864

NET POSITION

Restricted net position	259,917,829
Total net position	\$ 259,917,829

EXHIBIT 11
KENTUCKY INFRASTRUCTURE AUTHORITY
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN RETAINED EARNINGS
FISCAL YEAR ENDED JUNE 30, 2019
(UNAUDITED Statement of Revenues, Expenses and Changes in Net Position)

Operating revenues:	
Assistance agreements:	
Servicing fee	\$ 558,173
Interest income	3,309,077
Total operating revenues	<u>3,867,250</u>
Operating expenses:	
General and administrative	542,637
Intergovernmental administrative expense reimbursement	5,960,308
Amortization of bond premiums	(1,011,335)
Interest	2,548,624
Total operating expenses	<u>8,040,234</u>
Operating income / (loss)	(4,172,984)
Non-operating gain / (loss):	
Investment income	1,998,118
Federal grants	15,309,971
Loan subsidy required by federal capitalization grants	(2,806,344)
Intergovernmental revenue from the Commonwealth	3,660,600
Total non-operating revenues	<u>18,162,345</u>
Change in net position	13,989,361
Net position, beginning of year	245,928,468
Net position, end of year	<u><u>\$ 259,917,829</u></u>

EXHIBIT 12
KENTUCKY INFRASTRUCTURE AUTHORITY
FEDERALLY ASSISTED DRINKING WATER REVOLVING LOAN PROGRAM
REPORT OF ANNUAL LOAN REPAYMENTS
FISCAL YEAR ENDED JUNE 30, 2019

Loan Number	Loans Outstanding	Total	Number of Days Past Due		
			0 - 30	31 - 120	121 and Over
F08-05	Manchester, City of	34,482	34,482		
	TOTALS	<u>\$ 34,482</u>	<u>\$ 34,482</u>	<u>\$ -</u>	<u>\$ -</u>

No principal amounts delinquent as of June 30, 2018.