

WIFIA — Increased Investment in Year Two

Appropriations Escalate for Critical Infrastructure Needs Special Report

Fitch-Rated WIFIA Transactions

Issuer	Rating	Loan (\$ Mil.)
Orange County Water District, CA	AAA	135.0
San Diego, CA	AA-	614.0
Metro St. Louis Sewer District, MO	AA+	44.7

Limited But Growing Role in Utility Investment: Loans granted under the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) are highly sought after for water and wastewater projects because they carry low interest rates and provide flexibility in debt amortization. However, the program has provided \$2 billion in loans closed thus far, which barely scratches the surface of the approximately \$743 billion the EPA has estimated is needed for water infrastructure improvements over a twenty-year period.

Second-Year Investments Escalate: Estimated investments by WIFIA have increased from 12 projects and \$2.5 billion in estimated potential loans in 2017, the first year of the program's implementation, to 39 projects and \$4.8 billion in estimated potential loans in 2018. The EPA announced funding for 2019 that increased estimated potential WIFIA loans to \$6 billion.

Flexible Loan Provisions: The WIFIA program's flexible terms include deferred repayment, 35-year amortization and subordination provisions. These provisions are rarely found in other financing methods and make the program attractive to even very highly rated issuers.

Applicants Represent States With Significant Needs: Some of the states identified by the EPA as having the most significant capital needs have applied for WIFIA loans in the first two years of implementation.

Mostly Municipal Borrowers: Municipal entities, as opposed to public-private-partnerships or corporations, have represented the vast majority of applicants and selected projects thus far. Fitch Ratings rated three of the eight loans.

Large Projects, Highly Rated Issuers: The WIFIA program fills a need to finance large water infrastructure projects while complementing state revolving fund (SRF) programs, which are primarily focused on smaller projects that may have more difficulty accessing the capital markets.

Most of the selected projects to date have been highly rated credits, including the three WIFIA loans rated by Fitch: San Diego, CA (rated 'AA-', Outlook Stable) for its Pure Water Program; Orange County Water District, CA (rated 'AAA', Outlook Stable) for its Groundwater Replenishment System; and Metropolitan St. Louis Sewer District, MO (rated 'AA+', Outlook Stable) for its Deer Creek sanitary sewer overflow project. As such, these entities do not benefit from the favorable interest rates as much as a lower-rated entity would but take advantage of other loan features.

Related Research

[WIFIA: Supporting Needed Investments in Water Infrastructure \(May 2017\)](#)

[2019 Water and Sewer Medians \(November 2018\)](#)

[Fitch Ratings 2019 Outlook: U.S. Water and Sewer Sector \(December 2018\)](#)

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Credit Profile

The WIFIA program was established to help fund a massive gap in capital spending for infrastructure needs across the country. According to the EPA, most of the underground water infrastructure in the U.S. was built 50 or more years ago, with some in older urban areas one hundred years old.

WIFIA was conceived as a complementary source of federal funding to the Clean Water and Drinking Water SRFs. SRFs, funded as state grants through annual congressional appropriations, are geared toward smaller projects with less access to capital markets. These SRF-funded projects have average loan sizes of \$2 million to \$3 million. In contrast, WIFIA is designed to handle complex and large water and wastewater projects. Originally a five-year pilot program, WIFIA was designated a permanent program, subject to annual appropriation, in 2018.

The size of the WIFIA program more than doubled in 2018, its second year of implementation. Congress increased its appropriation modestly in the recently announced third round of funding to support an estimated \$6 billion in WIFIA loans. Potential loan totals change periodically based upon the applications received and level of determined credit risk. The increase in potential loans occurs at an opportune time as interest rates and costs of borrowing in the public markets are increasing. Eligibility requirements include projects of at least \$20 million for large communities and \$5 million for SRF-eligible small communities (25,000 or less).

EPA Estimated Infrastructure Needs 20-Years

(\$ Bil.)

Replace/Refurbish Aging or Deteriorating Pipelines	312.6
Water Treatment	83.0
Water Storage	47.6
Intake Structures, Wells and Spring Collectors	21.8
Other	7.6
Total Water Needs	472.6
Pipes and Treatment Facilities	197.8
Combined Sewer Overflow Correction	48.0
Stormwater Management	19.2
Recycled Water Distribution	6.1
Total Wastewater Needs	271.0
Total Water/Wastewater Needs	743.6

Source: Drinking Water Infrastructure Needs Survey and Assessment, Sixth Report to Congress, Office of Water, USEPA. Clean Watersheds Needs Survey 2012 Report to Congress, Office of Wastewater Management, USEPA.

WIFIA Program Growth

(\$Mil.)

Fiscal Year	Credit Subsidy	Administrative Costs	Potential WIFIA Loan Amounts	Project Totals	Closed Loans (as of 5/1/19)
2017	25	5	2,542	5,844	2,002
2018	55	8	4,808	10,156	N.A.
2019	60	8	6,000	N.A.	N.A.

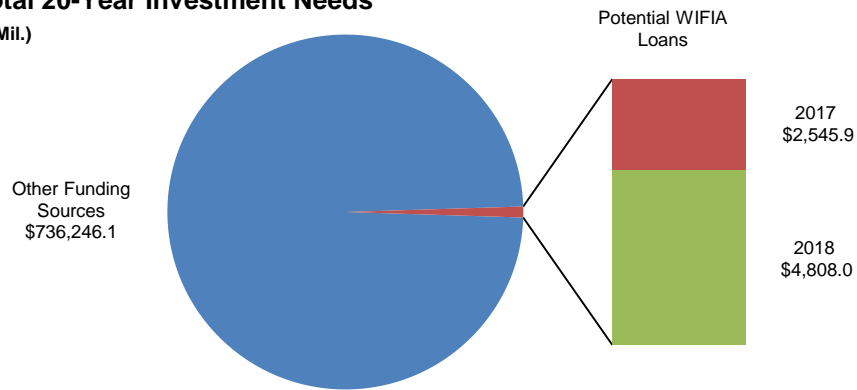
N.A. – Not applicable.
Source: WIFIA Program, USEPA. Note: Figures are as of April 30, 2019.

Limited But Growing Role in Significant Investment Needs

The combined potential WIFIA loan amount for the 2017 and 2018 selected projects is \$7.35 billion, of which \$2.0 billion in loans has closed. While these amounts are significant, they play a limited role in addressing the over \$743 billion that the EPA estimates is needed for water infrastructure improvements over a 20-year period. The 2018 Drinking Water Infrastructure Needs Survey and Assessment estimates \$472.6 billion to maintain and improve drinking water infrastructure over twenty years, including \$312.6 billion to replace or refurbish aging or deteriorating pipelines, \$83 billion to reduce contamination, \$47.6 billion for water storage reservoirs and \$21.8 billion for intake structures, wells and spring collectors. The 2012 Clean Watersheds Needs Survey estimates \$271 billion in wastewater and stormwater treatment and collection needs including \$197.8 billion for pipes and treatment facilities, \$48 billion for combined sewer overflow correction, \$19.2 billion for stormwater management and \$6.1 billion for recycled water treatment and distribution. The total project amounts of the WIFIA selected projects thus far would be approximately \$7.35 billion if fully funded, equal to 1% of the estimated 20-year need. However, the WIFIA program nearly doubled the estimated total potential loan amount in its second year of implementation and in 2019 increased it further to an estimated \$6 billion. A \$6 billion annual investment over 20 years would equal approximately 16% of the total estimated need.

Total 20-Year Investment Needs

(\$Mil.)



Source: WIFIA Program, USEPA and Drinking Water Infrastructure Needs Survey and Assessment, Sixth Report to Congress, Office of Water, USEPA. Clean Watersheds Needs Survey 2012 Report to Congress, Office of Wastewater Management, USEPA.

Flexible Program Features

The primary features of the WIFIA loan program, which was modeled on the Transportation Infrastructure Financing and Innovation Act (TIFIA) of 1998, include low interest rates and flexible amortization of principal. Loan repayment ultimately impacts utility rates, and both lower interest rates and flexible repayment can provide some rate affordability relief. This is particularly the case in communities that already struggle with affordability concerns.

Low Interest Rate

WIFIA loans finance up to 49% of project costs at an interest rate equal to or greater than the U.S. Treasury rate of a similar maturity. Interest rates for the first five loans to close ranged from 2.88% to 3.36%.

Flexible Repayment, Amortization

Repayment may be deferred up to 5 years after substantial project completion, with a final maturity equal to the lesser of 35 years from substantial completion or the useful life of the project. Loans have included interest capitalization during construction, five-year capitalized interest after construction and a 10-year interest-only period. Further, amortization may be customized to accommodate existing debt schedules, which may allow for a more gradual implementation of rate hikes necessary to support debt. Amortization periods for the first five loans to close were 30 to 35 years from project completion.

Subordination of WIFIA Loan

According to the EPA, a WIFIA loan may be subordinate in both priority and security to existing or future debt obligations for purposes unrelated to the WIFIA project for highly rated public agency issuers in which the WIFIA loan obligation is rated in the 'A' category or higher. A WIFIA loan may be subordinate to other WIFIA project debt but springs to parity with respect to the project's senior obligations in a bankruptcy-related event.

Rating Opinions Required

When applying for the loan, EPA requires each applicant to provide a preliminary rating opinion letter from at least one rating agency indicating that the senior obligations of the project have the potential to achieve an investment-grade rating. However, WIFIA may accept an existing rating instead in certain circumstances. Prior to the closing of the WIFIA loan, the borrower is

required to provide public rating letters indicating investment grade ratings for senior debt from at least two rating agencies.

WIFIA Increases Leverage

Congress appropriates funding to the EPA in order to cover the estimated losses for WIFIA funded projects. The appropriations cover the estimated losses for projects while the loan amount is provided by the Treasury. In 2017, Congress appropriated \$25 million for credit subsidy allowing EPA to provide an estimated \$2.5 billion in loans. In 2018, Congress increased its appropriation for credit subsidy to \$55 million, allowing for an estimated \$4.8 billion in loans. The 2019 appropriations bill approved \$60 million for the credit subsidy providing for an estimated \$6 billion in loans.

Based on EPA estimates for WIFIA loan defaults at approximately 1%, \$10 million in appropriations can support \$1 billion in loans. Further, as WIFIA loans finance up to 49% of total project costs, the \$10 million appropriation supports a total of \$2 billion in infrastructure investments.

Investments Ramp Up In Year Two

The first round of WIFIA loans included 12 projects in nine states, including four projects located in California. Thus far, WIFIA loans have been granted to eight projects — including three rated by Fitch — totaling over \$2.0 billion in credit assistance. The eight projects will finance over \$4.7 billion in water investments.

In the second round, WIFIA invited 39 projects in 16 states to apply for loans. It again heavily featured California, including 12 projects from that state. It also included five projects from Florida and three each from Kentucky and Missouri.

Enhanced Access for State Revolving Funds

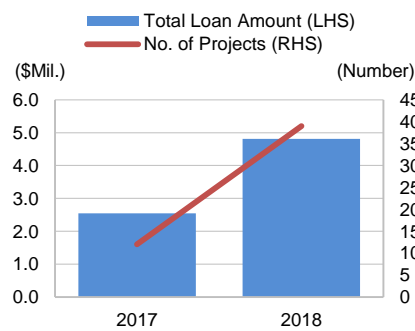
Only one SRF program — the Indiana Finance Authority — has thus far been selected to apply for a WIFIA loan. In an effort to expand access to funds for SRFs, in 2018 Congress increased the proportion of project costs WIFIA loans will fund for SRF programs to 100% from 49%. It included the provision that, in the event of a default, the state infrastructure financing authority would be solely responsible for immediate repayment. WIFIA must respond to SRF applications within 180 days after submission. Further WIFIA does not require SRF projects to undertake any additional environmental or engineering reviews beyond those otherwise required.

Additionally, after \$50 million has been appropriated for WIFIA in any given fiscal year, Congress has the option of appropriating additional funds for credit subsidy costs to support loans to SRF programs. However, WIFIA will not fund SRF borrowing in any given year unless appropriations to each of the Clean Water SRF and the Drinking Water SRF are equal to the greater of 1) the fiscal 2018 appropriation for each SRF or 2) 105% of the previous fiscal year's appropriation to each SRF.

Loan Applicants Represent States With Largest Needs

Many of the projects that have applied for WIFIA loans in the first two years of implementation have come from states identified as having the most significant capital needs in nominal terms. EPA's Drinking Water Report and CWNS identified several states as having the largest investment needs over 20 years. These are also states with the largest populations and include California at \$51 billion for water and \$20.1 billion for wastewater, Texas at \$45 billion

Year 2 Investments Increase

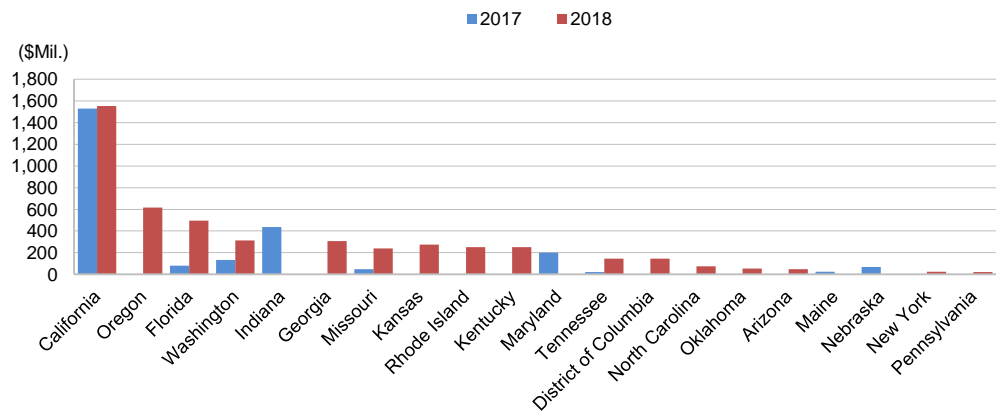


Source: WIFIA Program, USEPA.

for water and \$9.2 billion for wastewater, New York at \$22.8 billion for water and \$28.7 for wastewater, Florida at \$21.9 billion for water and \$15.8 billion for wastewater, and Illinois at \$20.9 billion for water and \$6.5 billion for wastewater.

California projects have applied for the most funding in the first two years of WIFIA implementation. In the first year (2017), the four California projects selected to apply represented one-third of the total selected projects. In addition, these represented 60% (\$1.5 billion) of the total possible loan amounts of \$2.5 billion. In the second year (2018), the 16 California project selected to apply comprised 30% of the total number of projects selected. They represented 32% (\$1.6 billion) of the total possible loan amounts of \$4.8 billion. In addition, over the first two years, six Florida projects were selected to apply for a total of \$574 million in WIFIA loans, one Oregon project with a total estimated loan amount of \$617 million and three Washington projects for a total of \$448 million in loans.

Potential WIFIA Loans by State



Source: WIFIA Program, USEPA.

Primarily Municipal Borrowers

Borrowers submitting letters of interest for loans and those selected by EPA to apply thus far have mostly consisted of municipal entities, and not private companies or public-private-partnerships. The EPA received 62 letters of interested for its 2018 round of funding, including three public-private partnerships, three corporations and one tribe. Of those selected to apply, the vast majority were municipal entities with notable exceptions including Poseidon Resources (California), which was invited to apply for \$32 million for rehabilitation of its Carlsbad Intake Project, and American Water Capital Corporation (Missouri) which was invited to apply for \$84 million for the St. Louis Area Water Main Replacement and Lead Abatement Program and \$103 million for the Joplin Water Supply Reservoir.

Large Projects and Highly Rated Issuers Selected

As contemplated in the design of WIFIA, the projects that have participated thus far have generally been large. The average and median loan sizes for the 2017 selected projects were \$231 million and \$135 million, respectively, while the average and median for 2018 were \$123 million and \$74 million.

The largest WIFIA loan amount thus far has been the \$699 million awarded to the San Francisco Public Utilities Commission for replacements of its biosolids digester followed by the \$614 million for the City of San Diego’s Pure Water (PW) program to recycle wastewater

effluent. The largest potential projects for the 2018 funding round are the Willamette Water Supply Program from the City of Hillsboro and Tualatin Valley Water District, Oregon, at \$617 million and the Joint Water Pollution Control Plant Effluent Outfall Tunnel from the Sanitation District No. 2 of Los Angeles County at \$426 million. The smallest projects are those submitted by the City of Frontenac, KS at \$5 million and the City of Cortland, NY at \$9 million.

Of those loans closed so far, Fitch ratings have been in at least the 'AA' category. Of the Fitch-rated issuers selected to apply in the 2017 and 2018 rounds, ratings on outstanding debt are all investment grade, ranging from 'BBB-' to 'AAA'.

WIFIA Funded Projects

Issuer	WIFIA Loan Amount (\$Mil.)	Total Project Cost (\$Mil.)	Loan Closed	Fitch WIFIA Loan Rating
King County	134.5	275.0	4/20/18	N.A.
City of Omaha	69.7	142.2	6/20/18	N.A.
Orange County Water District	135.0	282.0	7/26/18	AAA
San Francisco Public Utilities Commission	699.0	1,400.0	7/27/18	N.A.
City of San Diego	614.0	1,400.0	11/14/18	AA-
Metropolitan St. Louis Sewer District	47.7	97.0	12/19/18	AA+
Baltimore City Department of Public Works	202.0	942.0	12/20/18	N.A.
Miami-Dade County	99.7	203.5	3/22/19	N.A. ^a
Total	2,001.6	4,741.7	—	—

^aFitch rates Issuer's revenue bonds 'A+'. N.A. – Not applicable.
Source: Fitch Ratings and WIFIA Program, USEPA.

Orange County Water District (OCWD; WIFIA Loan 'AAA' Stable Outlook 7/05/18)

OCWD's approximately \$135 million WIFIA loan will fund up to 49% of the district's \$275.5 million Ground Water Replenishment System (GWRS) expansion to 130 million gallons per day (mgd) from 100 mgd using treated wastewater from the Orange County Sanitation District Plant #2.

The district's financial performance is exemplary, marked by strong financial policies, limited fixed expenditures, and a history of increasing rates in line with operating and capital costs. It maintains substantial rate flexibility with low charges relative to competing supplies from the Metropolitan Water District of Southern California (MWD; water revenue bonds rated 'AA+/Stable'). The district's board has the authority to adjust rates on an annual basis and adjust allowed basin pumping at any time. Further, district revenues are derived primarily from assessments paid by municipal and private groundwater providers on the volume of water pumped and property taxes, both of which have proven relatively stable over time. The district's capital plans are manageable despite plans to increase the debt load by more than one-third due to the GWRS expansion with an associated modest increase in rates expected.

City of San Diego (WIFIA Loan 'AA-' Stable Outlook 11/06/18)

The city of San Diego's WIFIA loan totaling up to \$614 million will fund a portion of the city's water system costs related to Phase 1 of the city's PW program. The PW program will provide a drought-resilient potable water resource at a price that appears to be comparable to other alternative potable water supply options. The program enjoys broad community support and will greatly reduce the city's dependence on imported supplies, ultimately accounting for around one-third of the city's water resources.

The system's debt service coverage (DSC) improved over the last two years; however, financial metrics will face increasing pressure over the next several years as significant debt is issued to

support the PW program. In addition, debt levels are relatively high and will climb rapidly over the next few years to very high amounts as the system enters into the first phase of construction of PW.

User charges are relatively high and will incrementally increase in the coming years as the city contends with continued escalation in wholesale pass-through costs and pushes forward with its own capital improvement program, including PW. Necessary ongoing rate adjustments could ultimately pressure rate affordability.

Metropolitan St. Louis Sewer District (WIFIA Loan 'AA+' Stable Outlook 12/06/18)

The district's approximately \$47.7 million WIFIA loan will finance its Deer Creek Sanitary Tunnel and Sanitary Relief project. This project will address overflows and improve the water quality by providing storage for excessive inflow and infiltration during wet weather events; regulate sanitary flow into the foul water system; allow for removal of 24 sanitary sewer overflow outfalls; alleviate surcharging, basement backups; and meet Total Maximum Daily Loads requirements.

(DSC margins and liquidity are solid over the past five years and management provided forecast indicates a continuation of this trend. Leverage ratios are elevated and will continue to climb as the district borrows to address regulatory requirements. The district's charter requires voter approval of any new debt issuance. Strong approval levels experienced to date should provide ongoing support for rate increases necessary to service the district's increasing debt carrying costs. Ongoing retail rate support will be critical to maintenance of rating given the rapid escalation in system debt.

Appendix

Selected Projects 2017 and 2018 and Outstanding Fitch Ratings

Borrower	State	Loan Amount (\$M)	Project	Security	Fitch Rating	Outlook	Status
2017 Round							
Miami-Dade County	FL	99.0	Ocean Outfall Discharge Reduction and Resiliency Enhancement Project	Water and Sewer Revs	A+	Stable	Loan Closed
Metropolitan St. Louis Sewer District	MO	47.7	Deer Creek Sanitary Tunnel and Sanitary Relief	WIFIA; Sewer Revs	AA+	Stable	Loan Closed
City of Omaha	NE	69.7	Saddle Creek Combined Sewer Overflow Retention Treatment Basin				Loan Closed
Orange County Water District	CA	135.0	Groundwater Replenishment System Final Expansion	WIFIA; Water Revs	AAA	Stable	Loan Closed
City of San Diego	CA	614.0	Pure Water San Diego	WIFIA; Subordinate Water Revs	AA-	Stable	Loan Closed
Indiana Finance Authority	IN	436.0	Clean Water and Drinking Water State Revolving Fund Program Expansion	SRF Program	AAA	Stable	Application Received
King County	WA	134.5	Georgetown Wet Weather Treatment Station	—	—	—	Loan Closed
Baltimore City Department of Public Works	MD	202.0	Comprehensive Wastewater Repair, Rehabilitation, and Replacement Program	—	—	—	Loan Closed
Maine Water Company	ME	N/A	Saco River Water Treatment Facility	—	—	—	Withdrawn
City of Oak Ridge	TN	22.0	Water Treatment Plant Design and Construction	—	—	—	Application Received
City of Morro Bay	CA	82.0	Water Reclamation Facility Project	—	—	—	Application Received
San Francisco Public Utilities Commission	CA	699.0	Southeast Water Pollution Control Plant Biosolids Digester Facilities Project	—	—	—	Loan Closed
2017 Total	—	2,541.6	—	—	—	—	—
2017 Closed	—	2,001.6	—	—	—	—	—
2017 Average Loan Size	—	231.1	—	—	—	—	—
2017 Median Loan Size	—	134.5	—	—	—	—	—
2018 Round							
City of Phoenix	AZ	49.0	Water Main Replacement Program	—	—	—	—
San Mateo-Foster City Public Financing Authority	CA	277.0	San Mateo Wastewater Treatment Plant Upgrade and Expansion Project	—	—	—	—
Coachella Valley Water District	CA	22.0	Coachella Valley Stormwater Channel Improvement Project	—	—	—	—
Poseidon Resources (Channelside) LP	CA	32.0	Carlsbad Intake Project	Plant bonds and Pipeline bonds	BBB-	Stable	—
City of Stockton Public Financing Authority	CA	53.0	Regional Wastewater Control Facility Modifications Project	Sewer Revs	A-	Stable	—
Silicon Valley Clean Water	CA	181.0	Regional Environmental Sewer Conveyance Upgrade (RESCU) Program	Sewer Revs	A+	Stable	Application Received
City of Sunnyvale	CA	166.0	Sunnyvale Cleanwater Program Phase 2	—	—	—	—
San Juan Water District	CA	12.0	Hinkle and Kokila Reservoir Rehabilitation and Replacement	Water Revs	AA	Stable	—
City of Los Angeles	CA	185.0	Donald C. Tillman Advanced Water Purification Facility	Senior and Subordinate Sewer Revs	AA+/AA	Stable	—
Inland Empire Utilities Agency	CA	138.0	Recycling plant No. 5 Expansion Project	—	—	—	—
Sanitation District No. 2 of Los Angeles	CA	426.0	Joint Water Pollution Control Plant Effluent Outfall Tunnel	—	—	—	—
City of Antioch	CA	32.0	Brackish Water Desalination Project	—	—	—	—
Coachella Valley Water District	CA	29.0	North Indio Regional Flood Control Project	—	—	—	—
District of Columbia Water and Sewer Authority	DC	144.0	Comprehensive Infrastructure Repair, Rehabilitation and Replacement Program	Water and Sewer Revs	AA/AA-	Positive	—
Florida Keys Aqueduct Authority	FL	45.0	Florida Keys Imperiled Water Supply Rehabilitation	Water Revs	AA-	Stable	—
City of North Miami Beach Water	FL	62.0	Regional Potable Water Improvements	Water Revs	AA-	Stable	—

Continued on next page.
Source: Fitch Ratings and WIFIA Program, USEPA.

Appendix (continued)

Selected Projects 2017 and 2018 and Outstanding Fitch Ratings (Continued)

Borrower	State	Loan Amount (\$M)	Project	Security	Fitch Rating	Outlook	Status
2018 Round							
Miami-Dade County	FL	343.0	Wastewater Treatment Plant (WWTP) Electrical Distribution Building Upgrade	Water and Sewer Revs	A+	Stable	—
Tohopekaliga Water Authority	FL	32.0	Accelerated Gravity Sewer Assessment and Rehabilitation Project	Water and Sewer Revs	AAA	Stable	—
Pinellas County Utilities	FL	13.0	Water Reclamation Facility Improvements	Sewer Revs	AA	Stable	—
DeKalb County Government	GA	251.0	Priority Areas Sewer Assessment & Rehabilitation Program (PASARP) Consent Decree Packages	Water and Sewer Revs	AA-	Stable	—
City of Atlanta	GA	55.0	North Fork Peachtree Creek Tank and Pump Station	Water and Sewer Revs	AA-	Stable	—
City of Wichita	KS	270.0	Northwest Water Treatment Facility (NWWTF)	—	—	—	—
City of Frontenac	KS	5.0	Water Supply, Treatment, Distribution and Storage Improvements and Additions	—	—	—	—
Louisville and Jefferson County Metropolitan Sewer District	KY	44.0	Upper Middle Fork Pump Station (UMFPS) — Louisville, Kentucky	Sewer and Drainage Revs	AA-	Stable	—
Louisville and Jefferson County Metropolitan Sewer District	KY	118.0	Ohio River Flood Pump Station Capacity Upgrades, Louisville, Kentucky	Sewer and Drainage Revs	AA-	Stable	—
Louisville and Jefferson County Metropolitan Sewer District	KY	88.0	Morris Forman Biosolids Processiong Solution, Louisville, Kentucky	Sewer and Drainage Revs	AA-	Stable	—
American Water Capital Corporation	MO	84.0	St. Louis Area Water Main Replacement and Lead Abatement Program	—	—	—	—
American Water Capital Corp. (AWCC) — Joplin	MO	103.0	Joplin Water Supply Reservoir	—	—	—	—
Kansas City Missouri Water Services Department	MO	51.0	Blue River WWTP Biosolids Facility Project	—	—	—	—
City of Cortland	NY	9.0	City of Cortland Clinton Avenue Gateway Project	—	—	—	—
Monroe County	NY	15.0	Frank E. Van Lare Secondary Treatment Upgrades	—	—	—	—
Brunswick County	NC	74.0	Northwest Water Treatment Plant 36 MGD Improvements Project	Water and Sewer Revs	AA-	Stable	—
Enid Municipal Authority	OK	53.0	Enid Kaw Lake Alternative Water Supply Pipeline	—	—	—	—
City of Hillsboro and Tualatin Valley Water District	OR	617.0	Willamette Water Supply Program	—	—	—	—
City of Lancaster	PA	22.0	Sewer System Improvements	—	—	—	—
Narragansett Bay Commission	RI	251.0	Combined Sewer Overflow Phase III Facilities	—	—	—	—
City of Memphis	TN	144.0	T.E. Maxson Wastewater Treatment Facility Process and Biosolids Upgrades Program	Sewer Revs	AA-	Stable	—
City of Seattle	WA	197.0	Ship Canal Water Quality Project	—	—	—	—
City of Waukesha Water Utility	WI	116.0	Great Lakes Water Supply Project (Great Water Alliance [GWA] Program)	—	—	—	—
2018 Total	—	4,808.0	—	—	—	—	—
2018 Closed	—	—	—	—	—	—	—
2018 Average Loan Size	—	123.3	—	—	—	—	—
2018 Median Loan Size	—	74.0	—	—	—	—	—
Total Potential Loans 2017 and 2018	—	7,349.6	—	—	—	—	—

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