Financing Conservation Projects

The Georgia Environmental Finance Authority (GEFA) funds innovative programs to conserve and improve Georgia's energy, land, and water resources. GEFA strives to make its initiatives more financially accessible for communities throughout Georgia and supports the state's culture of conservation. Protecting the state's natural resources is important for the environment and economic growth. This document outlines eligible conservation projects for GEFA financing.

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Financing Conservation Projects

GEFA offers a conservation incentive program to support its mission of conserving Georgia's energy, land, and water resources. Eligible projects receive a 1 percent interest rate deduction, and bonus points when applying for GEFA funding.

According to Georgia law [O.C.G.A. Section 50-23-4(7)], the following entities are eligible to borrow from GEFA:

- Cities, towns, and counties;
- Local water, sewer, and sanitary districts created by the General Assembly; and
- State and local authorities, boards, and political subdivisions created by the General Assembly.

Table 1: Financing Terms and Conditions for Conservation Projects

Program	Financing Terms	Annual Loan† Maximum	Maximum Loan Term
Georgia Fund	1 percent interest rate reduction 1 percent closing fee	$15 million per borrower per year	20 years
CWSRF	1 percent interest rate reduction 1 percent closing fee	$12 million per borrower per year	30 years
DWSRF	1 percent interest rate reduction 1 percent closing fee**	$10 million per borrower per year	40 years
Find current interest rates: gefa.georgia.gov/water-programs/water-infrastructure-financing/interest-rates			

†*Final funding availability is contingent upon loan repayments and appropriations.*

***Interest rate is net of 1 percent interest rate reduction for water conservation projects.*

Financing Water Efficiency and Conservation Projects

GEFA provides low-interest financing to local governments for a wide range of water conservation projects in the areas of water loss and end-use water efficiency.

- Utility water loss consists of "real" losses in the form of leaks and "apparent" losses, such as metering inaccuracies and water theft.
- End-use water efficiency projects include upgrading water fixtures, e.g., toilets, faucets, irrigation systems, etc., encouraging water conservation by utility customers, and water reuse projects.

Diagram 1: Water Efficiency and Conservation Projects for Water and Wastewater Utilities

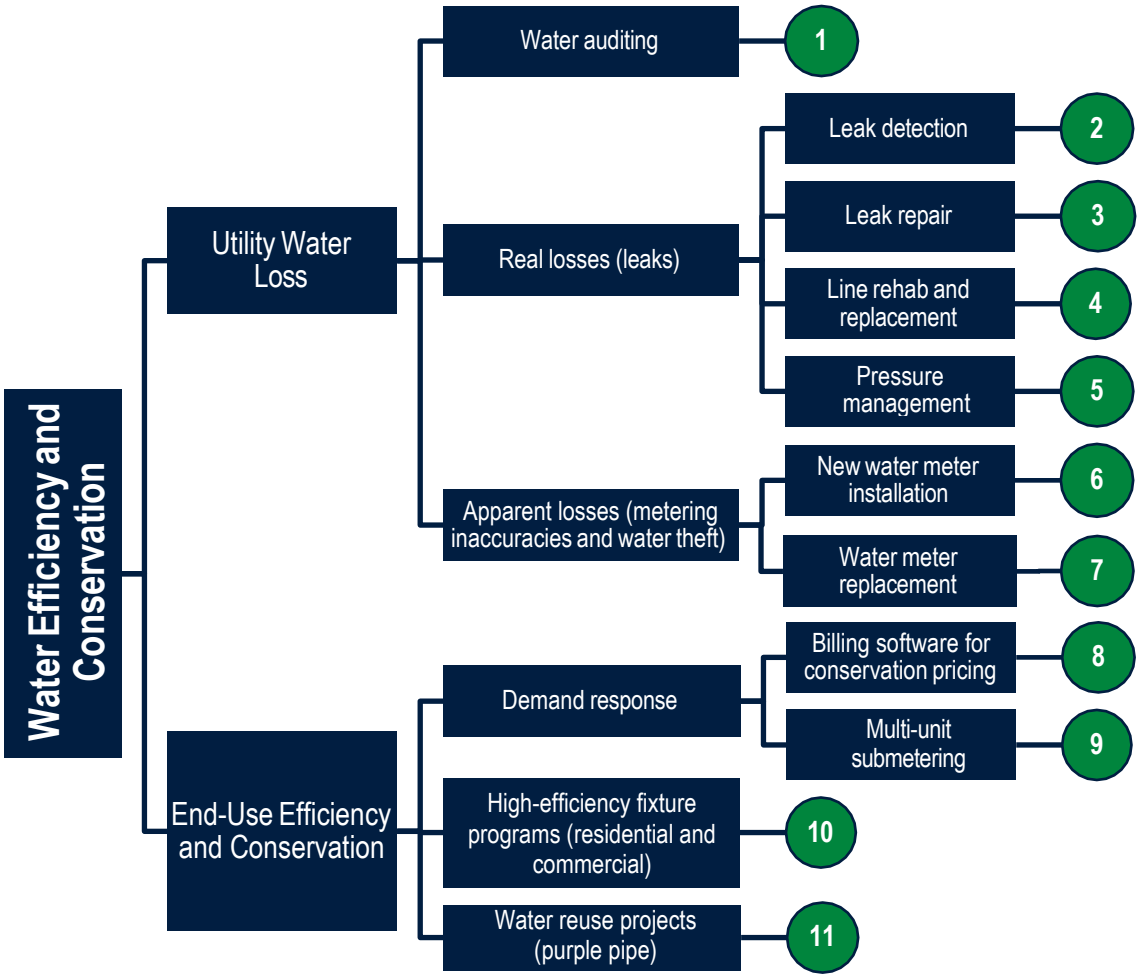


Table 2: Funding for Water Efficiency and Conservation Projects

1	***Water Auditing –*** Auditing is an important first step for utilities to determine its total non-revenue water and the scale of real and apparent water loss in the system.	Audit assistance is available to small systems (3,300 – 10,000 customers) through the Drinking Water SRF Small System Technical Assistance Program.
2	***Leak Detection –*** Several practices can help utilities to detect leaks within a water system, such as ultrasonic listening and advanced flow monitoring.	Leak detection is available to small systems (3,300 – 10,000 customers) through the DWSRF Small System Technical Assistance Program.
3	***Leak Repair –*** Leak repairs such as leaky water line replacement.	Georgia Fund and the DWSRF
4	***Line Rehabilitation and Replacement –*** Leaks can be avoided by reconditioning/replacing lines before the end of its useful life.	Georgia Fund and the DWSRF
5	***Pressure Management –*** Since higher pressure can lead to severe leakage, methods such as using pressure reducing valves to regulate water supply pressure in various zones of the water system can reduce water loss.	Georgia Fund and the DWSRF
6	***New Water Meter Installation –*** Installing water meters at residential or commercial buildings previously without meters.	Georgia Fund and the DWSRF
7	***Water Meter Replacement –*** Replacing older, inaccurate water meters with new meters.	Georgia Fund and the DWSRF
8	***Billing Software Upgrades –*** A water utility is sometimes required to upgrade its billing software to support the implementation of conservation initiatives such as a tiered pricing structure, refining of customer classes, etc.	Billing software upgrades may be financed as part of larger construction projects through the Georgia Fund and the DWSRF.
9	***Multi-unit Submetering –*** Submetering individual units in a multifamily building allows customers to get an accurate account of their water use to better guide their water use behavior.	The DWSRF and the Georgia Fund can potentially finance submetering in publicly-owned buildings, such as a housing authority complex. The DWSRF may be able offer financing to a public utility system to provide incentives for multi-unit submetering, depending on certain aspects of program design.
10	***High-efficiency Fixture Programs –*** Utilities can provide rebates and other programs to encourage customers to upgrade to high-efficiency fixtures.	CWSRF and DWSRF contingent on approval of local oversight and verification procedures.
11	***Water Reuse Projects (purple pipe) –*** Recycling and water reuse projects that displace the use of potable water for such uses as irrigation of golf courses, park areas, and other landscaping needs.	Georgia Fund, the DWSRF, and the CWSRF

Financing Energy Production and Conservation

GEFA has several loan programs for local governments to finance a wide range of energy production, energy conservation, and energy management projects at water and wastewater facilities and publicly-owned landfills.

- Renewable energy production projects that benefit publicly-owned water or wastewater utilities and municipal solid waste landfills. Examples include, but are not limited to, wind, solar, geothermal, micro-hydroelectric, biogas, combined heat and power, and alternative fuel.
- Projects designed to reduce the energy consumption of the water or wastewater facilities.
- Energy management initiatives undertaken to identify potential energy saving projects or processes at water or wastewater utilities.
- Eligible energy production or energy conservation projects may be funded as part of a larger infrastructure project or as a stand-alone project. GEFA will work with the borrower to identify which portion(s) of the project are eligible for the energy conservation designation.

Renewable Energy Production Eligibility Requirements

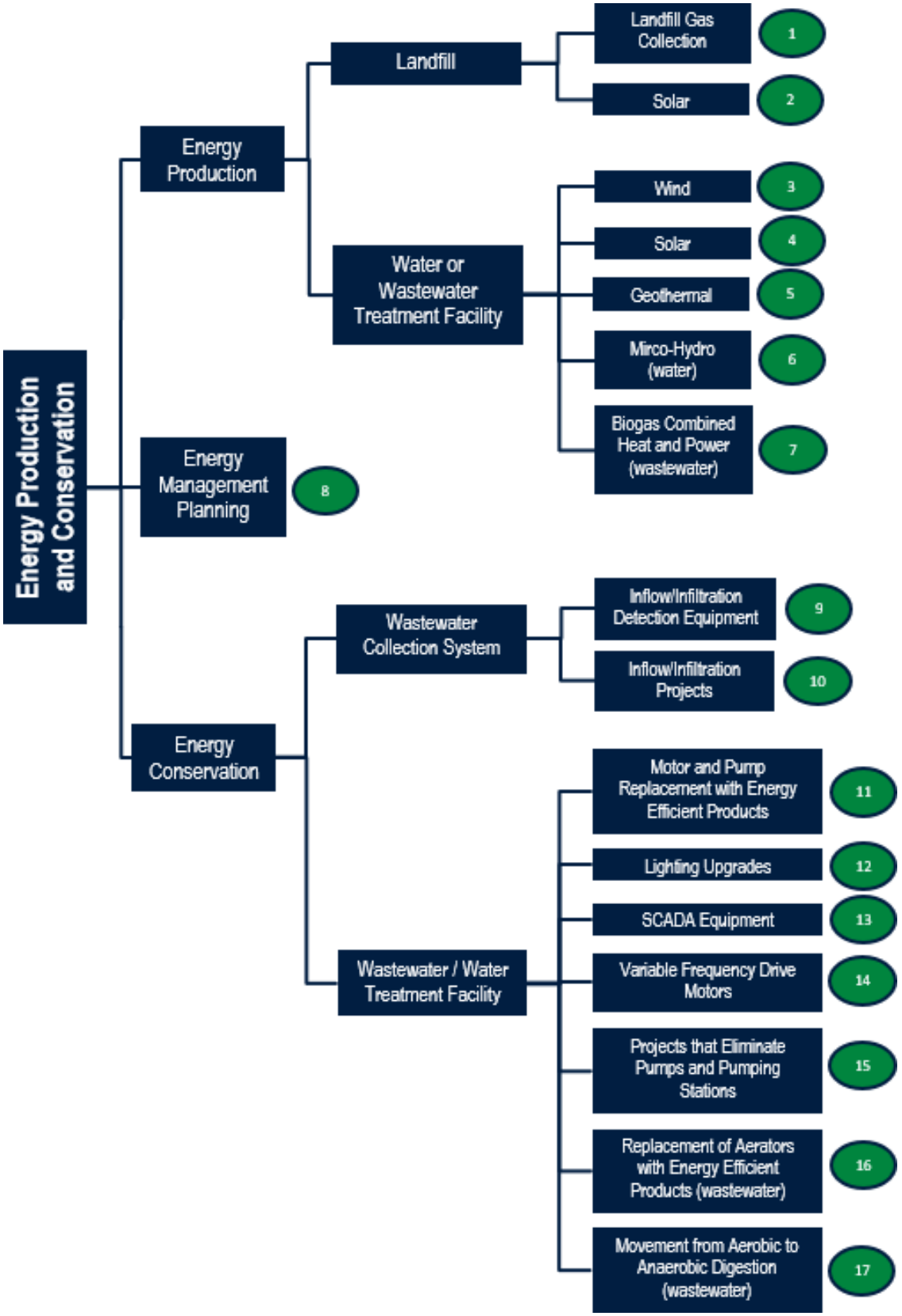
Publicly-owned renewable energy projects that provide energy to a publicly-owned water, wastewater, or municipal solid waste landfill are eligible for GEFA financing, including:

1. Projects located on-site that provide renewable energy to water, wastewater, or landfill facilities for the purpose of direct energy use.
    a. Renewable energy production in excess of the needs of the facility can be sold back to the electrical grid or natural gas distribution system, but GEFA will only fund projects sized to meet the peak demand of the water or wastewater facility. There are no sizing limitations on landfills.
2. On-site projects that provide renewable energy to the electrical grid or natural gas distribution system for the purpose of selling renewable energy, e.g., Georgia Power's Advanced Solar Initiative Program.
    a. GEFA will only fund projects sized to meet the peak demand of the water or wastewater facility. There are no sizing limitations on landfills.
3. Off-site projects designed to provide renewable energy to the same electrical grid or natural gas distribution system in which the facility is connected.
    a. Renewable energy generated off-site can be sold to the electrical grid or natural gas distribution system, but GEFA will only fund projects sized to meet the peak demand of the water or wastewater facility. There are no sizing limitations on landfills.

Table 3: Eligible Renewable Energy Production Projects

	Project Eligibility	
	On-site Project	Off-site Project
Renewable energy directly used by: • Publicly-owned water facility • Publicly-owned wastewater facility • Publicly-owned municipal solid waste landfill	Eligible	Eligible
Renewable energy sold to the electrical grid or natural gas distribution system (must be the same electrical grid or natural gas system in which the publicly-owned water, wastewater, or landfill is connected)	Eligible	Not eligible

Diagram 2: Energy Production and Conservation Projects for Local Government Facilities



This chart is not an all-inclusive list, but it does represent many of the energy projects eligible for funding.

Table 4: Funding for Energy Production and Conservation Projects

1	***Landfill Methane Gas Collection –*** Projects that collect methane gas from a municipal landfill to produce electricity or fuel. Project may also incorporate the production of compressed natural gas (CNG).	Georgia Fund
2	***Landfill Solar Power Production –*** Projects that install solar panels at a municipal landfill for the purpose of generating electricity.	Georgia Fund
3	***Wind Power Production –*** Wind projects that provide power to the water or wastewater facility. Projects can be located on-site for direct use or located on-site or off-site to provide power to the grid the utility draws from.	Georgia Fund, DWSRF, and CWSRF
4	***Solar Power Production –*** Solar projects that provide power to the water or wastewater facility. The installation of solar-powered reservoir circulators is also eligible in this category.	Georgia Fund, DWSRF, and CWSRF
5	***Geothermal Power Production –*** Projects that harness geothermal energy located on-site at the water or wastewater facility or located off-site to provide power to the grid the utility draws from.	Georgia Fund, DWSRF, and CWSRF
6	***Micro-hydro Power Production –*** Projects that involve capturing energy from pipe flow and provide power to the facility or to the grid the utility draws from.	Georgia Fund and DWSRF
7	***Biogas Combined Heat and Power –*** Biogas projects that provide power to the wastewater facility**.** Project may also incorporate the production of compressed natural gas (CNG).	Georgia Fund and CWSRF
8	***Energy Management Planning –*** Energy assessments, energy audits, optimization studies, and submetering of individual processes to determine high energy use areas, which are reasonably expected to result in a capital project, can be funded as a part of a larger project.	Georgia Fund, DWSRF, and CWSRF
9	***Inflow/Infiltration (I/I) Detection Equipment –*** Wastewater collection system I/I detection equipment used to identify and correct I/I problems that save energy from pumping and reduced treatment costs.	Georgia Fund and CWSRF
10	***Inflow/Infiltration (I/I) Projects –*** (I/I) Projects that save energy from reduced pumping and reduced treatment costs.	Georgia Fund and CWSRF
11	***Motor Replacement –*** Projects that replace pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors. Replacing a motor at the end of its useful life with something of average efficiency is not eligible.	Georgia Fund, DWSRF, and CWSRF
12	***Lighting Upgrades –*** Upgrade lighting at a water and/or wastewater facility to energy efficient sources such as metal halide pulse-start lamps, compact fluorescent, or LED.	Georgia Fund, DWSRF, and CWSRF
13	***SCADA Equipment –*** SCADA system projects at water and wastewater facilities that result in substantial energy savings.	Georgia Fund, DWSRF, and CWSRF
14	***Variable Frequency Drive Motors –*** Energy-efficient retrofits, upgrades, or new pumping systems and treatment processes, such as variable frequency drives, that result in substantial energy savings.	Georgia Fund, DWSRF, and CWSRF
15	***Projects that Eliminate Pumps and Pumping Stations –*** Projects that cost effectively eliminate pumps or pumping stations.	Georgia Fund, DWSRF, and CWSRF

16	***Aerator Replacement –*** Projects that replace inefficient aerators with energy-efficient aerators. Replacing an aerator at the end of its useful life with something of average efficiency is not eligible.	Georgia Fund and CWSRF
17	***Aerobic to Anaerobic Digestion –*** Projects that convert wastewater treatment from aerobic digestion to anaerobic digestion to reduce energy costs. Only the cost of the treatment process is eligible.	Georgia Fund and CWSRF

Financing Nonpoint Source Pollution Control Projects

GEFA provides low-interest financing to local governments for nonpoint source pollution control projects. Approved projects must provide a water quality benefit consistent with the state's Nonpoint Source Management Plan as determined by the Georgia Environmental Protection Division. Nonpoint source pollution control projects are eligible through the Clean Water State Revolving Fund (CWSRF).

Table 5: Eligible Nonpoint Source Pollution Control Projects

1	***Tree Cover***	Street trees or urban forestry programs, expansion of tree boxes to manage stormwater and enhance tree health.
2	***Flood protection***	Areas within the 100-year floodplain of surface water bodies.
3	***Wetland Protection and Management***	Protection, establishment, or restoration of wetlands.
4	***Erosion Reduction***	Protection of steep slope, erodible soil, and stream bank areas that contain slopes with a greater than 10 percent grade and/or are underlain by soils labeled 'erodible' by the NRCS
5	***Habitat Protection and Restoration***	Includes shoreline activities, instream activities, and capital costs associated with protecting habitat for threatened, endangered, or high priority on-game wildlife species.
6	***Wet Weather Management Systems***	Permeable pavement, bioretention, trees, constructed and restored wetlands.
7	***Protection of Riparian Buffers***	Protection of areas that border rivers, creeks, lakes, or rest upon aquifer recharge areas. Purchase of land including leasing, fee-simple purchase, or easements are eligible.
8	***Stormwater Harvesting and Reuse***	Stormwater harvesting and reuse projects such as cisterns and systems that allow for utilization of harvested stormwater.
9	***Downspout Disconnection***	Downspout disconnection to remove stormwater from sanitary, combined sewers, and separate storm sewers and manage runoff onside.
10	***Septic to Sewer***	Extending sewer lines to remove septic tanks.