

Green Infrastructure

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Business Case Required		<ul style="list-style-type: none"> • Fencing to keep livestock out of streams and stream buffers 	<ul style="list-style-type: none"> • Fencing to keep livestock out of streams and stream buffers
Categorically Eligible	<p>Publicly Owned:</p> <ul style="list-style-type: none"> • Green streets <ul style="list-style-type: none"> • Permeable pavement • Bioretention • Trees • Green roofs • Constructed wetlands • Other practices that mimic natural hydrology to prevent wet weather flows • Equipment to maintain green streets <ul style="list-style-type: none"> • Vactor trucks • Other equipment • Street tree/urban forestry <ul style="list-style-type: none"> • Expansion of tree boxes • Stormwater harvesting/reuse <ul style="list-style-type: none"> • Cisterns • Distribution pipes • Downspout disconnection • Riparian buffers <ul style="list-style-type: none"> • Floodplains • Wetlands • Bioengineered streambank • Stream daylighting • Sustainable landscaping and site design 	<ul style="list-style-type: none"> • Green streets <ul style="list-style-type: none"> • Permeable pavement • Bioretention • Trees • Green roofs • Constructed wetlands • Other practices that mimic natural hydrology to prevent wet weather flows • Equipment to maintain green streets <ul style="list-style-type: none"> • Vactor trucks • Other equipment • Street tree/urban forestry <ul style="list-style-type: none"> • Expansion of tree boxes • Stormwater harvesting/reuse <ul style="list-style-type: none"> • Cisterns • Distribution pipes • Downspout disconnection • Riparian buffers <ul style="list-style-type: none"> • Floodplains • Wetlands • Bioengineered streambank • Stream daylighting • Sustainable landscaping and site design • Fee simple land purchase or easement 	<ul style="list-style-type: none"> • Green streets <ul style="list-style-type: none"> • Permeable pavement • Bioretention • Trees • Green roofs • Constructed wetlands • Other practices that mimic natural hydrology to prevent wet weather flows • Equipment to maintain green streets <ul style="list-style-type: none"> • Vactor trucks • Other equipment • Street tree/urban forestry <ul style="list-style-type: none"> • Expansion of tree boxes • Stormwater harvesting/reuse <ul style="list-style-type: none"> • Cisterns • Distribution pipes • Downspout disconnection • Riparian buffers <ul style="list-style-type: none"> • Floodplains • Wetlands • Bioengineered streambank • Stream daylighting • Sustainable landscaping and site design • Fee simple land purchase or easement
CWSRIF GPR Ineligible	<ul style="list-style-type: none"> • Stormwater controls with impervious or semi-impervious liners with no evapotranspiration or harvesting functions • Stormwater ponds with extended detention and/or filtration <ul style="list-style-type: none"> • Dirt-lined detention basins • In-line or end-of-pipe treatment systems that only filter or detain stormwater • Underground stormwater control <ul style="list-style-type: none"> • Swirl concentrators • Hydrodynamic separators • Baffle systems for grit • Trash/floatables removal • Oil and grease • Inflatable booms • Dams for in-line underground storage and flow diversion • Stormwater conveyance systems that are not soil/vegetation-based <ul style="list-style-type: none"> • Pipes and concrete channels • Hardening, channelizing or straightening streams and/or stream banks • Street sweepers, sewer cleaners and vactor trucks (unless they support green infrastructure projects) 	<ul style="list-style-type: none"> • Stormwater controls with impervious or semi-impervious liners with no evapotranspiration or harvesting functions • Stormwater ponds with extended detention and/or filtration <ul style="list-style-type: none"> • Dirt-lined detention basins • In-line or end-of-pipe treatment systems that only filter or detain stormwater • Underground stormwater control <ul style="list-style-type: none"> • Swirl concentrators • Hydrodynamic separators • Baffle systems for grit • Trash/floatables removal • Oil and grease • Inflatable booms • Dams for in-line underground storage and flow diversion • Stormwater conveyance systems that are not soil/vegetation-based <ul style="list-style-type: none"> • Pipes and concrete channels • Hardening, channelizing or straightening streams and/or stream banks • Street sweepers, sewer cleaners and vactor trucks (unless they support green infrastructure projects) 	<ul style="list-style-type: none"> • Stormwater controls with impervious or semi-impervious liners with no evapotranspiration or harvesting functions • Stormwater ponds with extended detention and/or filtration <ul style="list-style-type: none"> • Dirt-lined detention basins • In-line or end-of-pipe treatment systems that only filter or detain stormwater • Underground stormwater control <ul style="list-style-type: none"> • Swirl concentrators • Hydrodynamic separators • Baffle systems for grit • Trash/floatables removal • Oil and grease • Inflatable booms • Dams for in-line underground storage and flow diversion • Stormwater conveyance systems that are not soil/vegetation-based <ul style="list-style-type: none"> • Pipes and concrete channels • Hardening, channelizing or straightening streams and/or stream banks • Street sweepers, sewer cleaners and vactor trucks (unless they support green infrastructure projects)

Energy Efficiency

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Business Case Required

- Publicly Owned:**
- POTW projects or unit process projects that achieve less than a 20% energy efficiency improvement
 - (Non-categorical) projects implementing recommendations from an energy audit
 - Projects that cost effectively eliminate pumps or pumping stations
 - Infiltration/inflow correction projects that save energy
 - I/I correction projects where excessive groundwater infiltration is requiring unnecessary treatment processes
 - Replacing pre-Energy Policy Act of 1992 motors with NEMA premium efficiency motors
 - Upgrade of POTW lighting to energy efficient sources
 - Metal halide pulse start technologies
 - Compact fluorescent
 - Light emitting diode (LED)
 - SCADA systems
 - Variable Frequency Drives

- Projects that cost effectively eliminate pumps or pumping stations

- Treatment works projects or unit process projects that achieve less than a 20% energy efficiency improvement
- (Non-categorical) projects implementing recommendations from an energy audit
- Projects that cost effectively eliminate pumps or pumping stations
- Infiltration/inflow correction projects that save energy
- I/I correction projects where excessive groundwater infiltration is requiring unnecessary treatment processes
- Replacing pre-Energy Policy Act of 1992 motors with NEMA premium efficiency motors
- Upgrade of treatment works lighting to energy efficient sources
 - Metal halide pulse start technologies
 - Compact fluorescent
 - Light emitting diode (LED)
- SCADA systems
- Variable Frequency Drives

Categorically Eligible

- Publicly Owned:**
- Renewable energy source for a POTW
 - Wind
 - Solar
 - Geothermal
 - Micro-hydroelectric
 - Biogas combined heat and power (CHP)
 - Projects that achieve 20% reduction in energy consumption
 - Collection system I/I detection equipment
 - POTW energy management planning (reasonably expected to result in a capital project)
 - Energy assessments
 - Energy audits
 - Optimization studies
 - Sub-metering individual processes

- Projects that achieve 20% reduction in energy consumption

- Renewable energy source for a treatment works
 - Wind
 - Solar
 - Geothermal
 - Micro-hydroelectric
 - Biogas combined heat and power (CHP)
- Projects that achieve 20% reduction in energy consumption
- Collection system I/I detection equipment
- Treatment works energy management planning (reasonably expected to result in a capital project)
 - Energy assessments
 - Energy audits
 - Optimization studies
 - Sub-metering individual processes

CWSRF GPR Ineligible

- Privately owned renewable energy generation
- The portion of a publicly owned renewable energy facility that does not provide power to a POTW
- Simply replacing a piece of equipment that is at the end of its useful life with something of average efficiency
- Facultative lagoons
- Hydroelectric facilities

- The portion of a renewable energy facility that does not provide power to a treatment works
- Simply replacing a piece of equipment that is at the end of its useful life with something of average efficiency
- Facultative lagoons
- Hydroelectric facilities

Water Efficiency

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Business Case Required	<p>Publicly Owned:</p> <ul style="list-style-type: none"> • Water meter replacement with traditional water meters • Projects that result from a water audit • Storage tank replacement/rehabilitation • New water efficient landscape irrigation 	<ul style="list-style-type: none"> • Projects that result from a water audit • New water efficient landscape irrigation • New water efficient agricultural irrigation 	<ul style="list-style-type: none"> • Water meter replacement with traditional water meters • Projects that result from a water audit • Storage tank replacement/rehabilitation • New water efficient landscape irrigation • New water efficient agricultural irrigation
Categorically Eligible	<p>Publicly Owned:</p> <ul style="list-style-type: none"> • Install or retrofit water efficient devices <ul style="list-style-type: none"> • Plumbing fixtures • Appliances • Water conservation incentive programs <ul style="list-style-type: none"> • Rebates • Install water meters in previously unmetered areas (if rate structure is based on metered use) <ul style="list-style-type: none"> • Backflow prevention devices (installed in conjunction with meter replacement) • Replace broken water meters or upgrade existing meters with: <ul style="list-style-type: none"> • Automatic meter reading systems • Advanced metering infrastructure • Smart meters • Meters with built-in leak detection • Backflow prevention devices (installed in conjunction with meter replacement) • Retrofit existing meters to add AMR capability or leak detection equipment • Water audit and water conservation plans • Recycling and water reuse projects that replace potable sources with non-potable <ul style="list-style-type: none"> • Gray water/condensate/wastewater effluent reuse systems • Extra treatment costs and distribution pipes associated with water reuse • Retrofit or replace landscape irrigation systems with more efficient systems <ul style="list-style-type: none"> • Moisture and rain sensing controllers 	<ul style="list-style-type: none"> • Water audit and water conservation plans • Recycling and water reuse projects that replace potable sources with non-potable <ul style="list-style-type: none"> • Gray water/condensate/wastewater effluent reuse systems • Retrofit or replace landscape irrigation systems with more efficient systems <ul style="list-style-type: none"> • Moisture and rain sensing controllers • Replace or retrofit existing agricultural irrigation systems with more efficient systems 	<ul style="list-style-type: none"> • Install or retrofit water efficient devices <ul style="list-style-type: none"> • Plumbing fixtures • Appliances • Water conservation incentive programs <ul style="list-style-type: none"> • Rebates • Install water meters in previously unmetered areas (if rate structure is based on metered use) <ul style="list-style-type: none"> • Backflow prevention devices (installed in conjunction with meter replacement) • Replace broken water meters or upgrade existing meters with: <ul style="list-style-type: none"> • Automatic meter reading systems • Advanced metering infrastructure • Smart meters • Meters with built-in leak detection • Backflow prevention devices (installed in conjunction with meter replacement) • Retrofit existing meters to add AMR capability or leak detection equipment • Water audit and water conservation plans • Recycling and water reuse projects that replace potable sources with non-potable <ul style="list-style-type: none"> • Gray water/condensate/wastewater effluent reuse systems • Extra treatment costs and distribution pipes associated with water reuse • Retrofit or replace landscape irrigation systems with more efficient systems <ul style="list-style-type: none"> • Moisture and rain sensing controllers • Replace or retrofit existing agricultural irrigation systems with more efficient systems
CWSRF GPR Ineligible	<ul style="list-style-type: none"> • Replacing drinking water distribution lines • Leak detection equipment for drinking water distribution systems (except reuse) 	<ul style="list-style-type: none"> • Agricultural flood irrigation • Lining of canals to reduce water loss 	<ul style="list-style-type: none"> • Agricultural flood irrigation • Lining of canals to reduce water loss • Replacing drinking water distribution lines • Leak detection equipment for drinking water distribution systems (except reuse)

Environmentally Innovative

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Business Case Required

Categorically Eligible

CWSRF GPR Ineligible

<p>Publicly Owned:</p> <ul style="list-style-type: none"> • Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal • Projects or project components resulting from total/integrated water resource management planning • Projects that facilitate POTW adaptation to climate change identified by a carbon footprint analysis or climate adaptation study • POTW upgrades or retrofits that remove phosphorus for biofuel production • Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment • Treatment technologies or approaches that significantly reduce the volume of residuals or lower chemical volume in residuals • Educational activities and demonstration projects for water or energy efficiency • Projects that achieve the goals of utility asset management plans • Sub-surface land application of effluent and other means for ground water recharge such as spray irrigation and overland flow 	<ul style="list-style-type: none"> • Projects or project components resulting from total/integrated water resource management planning • Educational activities and demonstration projects for water or energy efficiency 	<ul style="list-style-type: none"> • Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal • Projects or project components resulting from total/integrated water resource management planning • Projects that facilitate treatment works adaptation to climate change identified by a carbon footprint analysis or climate adaptation study • Treatment works upgrades or retrofits that remove phosphorus for biofuel production • Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment • Treatment technologies or approaches that significantly reduce the volume of residuals or lower chemical volume in residuals • Educational activities and demonstration projects for water or energy efficiency • Projects that achieve the goals of utility asset management plans • Sub-surface land application of effluent and other means for ground water recharge such as spray irrigation and overland flow
<p>Publicly Owned:</p> <ul style="list-style-type: none"> • Total/integrated water resources management planning likely to result in a capital project • Utility Sustainability Plan • Greenhouse gas (GHG) inventory or mitigation plan • POTW planning activities to adapt to long-term effects of climate change and/or extreme weather • Construction of LEED certified buildings or renovation of an existing building on POTW facilities • Decentralized wastewater treatment solutions <ul style="list-style-type: none"> • Individual onsite systems • Cluster systems 	<ul style="list-style-type: none"> • Total/integrated water resources management planning likely to result in a capital project • Construction of LEED certified buildings 	<ul style="list-style-type: none"> • Total/integrated water resources management planning likely to result in a capital project • Utility Sustainability Plan • Greenhouse gas (GHG) inventory or mitigation plan • Treatment works planning activities to adapt to long-term effects of climate change and/or extreme weather • Construction of LEED certified buildings or renovation of an existing building on treatment works facilities • Decentralized wastewater treatment solutions <ul style="list-style-type: none"> • Individual onsite systems • Cluster systems
<ul style="list-style-type: none"> • Air scrubbers to prevent nonpoint source deposition • Facultative lagoons • Surface discharging decentralized wastewater systems • Higher seawalls to protect POTWs from rising sea levels • Reflective roofs at POTW 	<ul style="list-style-type: none"> • Air scrubbers to prevent nonpoint source deposition 	<ul style="list-style-type: none"> • Air scrubbers to prevent nonpoint source deposition • Facultative lagoons • Surface discharging decentralized wastewater systems • Higher seawalls to protect treatment works from rising sea levels • Reflective roofs at treatment works