

Oklahoma Drinking Water State Revolving Fund Green Project Reserve Checklist

Applicant: Stroud Utilities Authority

Project Number: P40-1020705-01

Date: 5/21/12

The Green Project Reserve (GPR) includes four types of projects: Green Infrastructure, Water Efficiency, Energy Efficiency and Environmentally Innovative. All GPR projects must meet DWSRF eligibility requirements. Please check all green components or activities that are applicable to your project. Additional information concerning categorically green and business cases is available in the Oklahoma DWSRF Green Project Reserve Guidance Document (DW-621). Please submit this checklist and all applicable attachments (business case, cost estimate with each green component highlighted, etc.) to your DWSRF Project Engineer.

Green Infrastructure

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements and cisterns.

<input type="checkbox"/>	Pervious or porous pavement	Categorically Green
<input type="checkbox"/>	Bioretention	Categorically Green
<input type="checkbox"/>	Green roofs	Categorically Green
<input type="checkbox"/>	Rainwater harvesting/cisterns	Categorically Green
<input type="checkbox"/>	Gray water use	Categorically Green
<input type="checkbox"/>	Xeriscape	Categorically Green
<input type="checkbox"/>	Landscape conversion programs	Categorically Green
<input type="checkbox"/>	Retrofitting or replacing existing irrigation systems with moisture and rain sensing equipment	Categorically Green
<input type="checkbox"/>	Other green infrastructure	Business Case Required

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WATER QUALITY DIVISION

Water Efficiency

EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.

<input type="checkbox"/>	Installing or retrofitting water efficient devices such as plumbing fixtures and appliances	Categorically Green
<input type="checkbox"/>	Installing any type of water meter in previously unmetered areas, if rate structures are based on metered use	Categorically Green
<input checked="" type="checkbox"/>	Replacing existing broken/malfunctioning water meters with Advanced Meter Reading systems (AMR)	Categorically Green
<input type="checkbox"/>	Retrofitting/adding AMR capabilities or leak equipment to existing meters (not replacing the meter itself).	Categorically Green
<input type="checkbox"/>	Recycling and water reuse projects that replace potable sources with non-potable sources,	Categorically Green
<input type="checkbox"/>	Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems, including moisture and rain sensing controllers	Categorically Green
<input type="checkbox"/>	Projects that result from a water efficiency related assessments (such as water audits, leak detection studies, conservation plans, etc) as long as the assessments adhered to the standard industry practices referenced above	Categorically Green
<input type="checkbox"/>	Distribution system leak detection equipment, portable or permanent.	Categorically Green
<input type="checkbox"/>	Automatic flushing systems (portable or permanent).	Categorically Green
<input type="checkbox"/>	Pressure reducing valves (PRVs).	Categorically Green
<input type="checkbox"/>	Internal plant water reuse (such as backwash water recycling).	Categorically Green
<input type="checkbox"/>	Water meter replacement with traditional water meters	Business Case Required
<input type="checkbox"/>	Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks	Business Case Required
<input type="checkbox"/>	Storage tank replacement/rehabilitation to reduce water loss	Business Case Required
<input type="checkbox"/>	New water efficient landscape irrigation system (where there is currently not one)	Business Case Required

Energy Efficiency

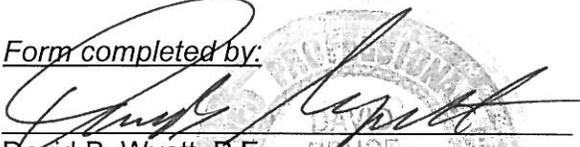
Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

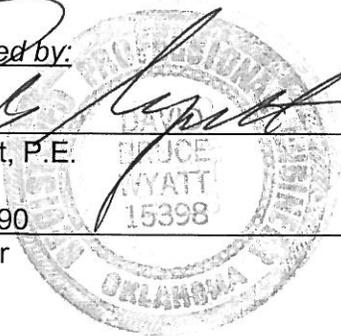
<input type="checkbox"/>	Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provide power to a utility (http://www.epa.gov/cleanenergy). Micro-hydroelectric projects involve capturing the energy from pipe flow.	Categorically Green
<input type="checkbox"/>	National Electric Manufacturers Association (NEMA) Premium energy efficiency motors	Categorically Green
<input type="checkbox"/>	Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)).	Business Case Required
<input type="checkbox"/>	Pump refurbishment to optimize pump efficiency (such as replacing or trimming impellers if pumps have too much capacity, replacing damaged or worn wearing rings/seals/bearings, etc.).	Business Case Required
<input type="checkbox"/>	Projects that result from an energy efficiency related assessments (such as energy audits, energy assessment studies, etc), that are not otherwise designated as categorical.	Business Case Required
<input type="checkbox"/>	Projects that cost effectively eliminate pumps or pumping stations.	Business Case Required
<input type="checkbox"/>	Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.	Business Case Required
<input type="checkbox"/>	Upgrade of lighting to energy efficient sources (such as metal halide pulse start technologies, compact fluorescent, light emitting diode, etc).	Business Case Required
<input type="checkbox"/>	Automated and remote control systems (SCADA) that achieve substantial energy savings	Business Case Required

Environmentally Innovative

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way.

<input type="checkbox"/>	Utility Sustainability Plan consistent with EPAs SRF sustainability policy	Categorically Green
<input type="checkbox"/>	Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry), as long as it is being done for a facility which is eligible for DWSRF assistance.	Categorically Green
<input type="checkbox"/>	Source Water Protection Implementation Projects	Categorically Green
<input type="checkbox"/>	Construction of US Building Council LEED certified buildings, or renovation of an existing building, owned by the utility, which is part of an eligible DWSRF project.	Categorically Green
<input type="checkbox"/>	Projects, or components of projects, that result from total/integrated water resources management planning (including climate change) consistent with the Decision Criteria for environmentally innovative projects and that are DWSRF eligible.	Business Case Required
<input type="checkbox"/>	Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects, such as projects that significantly reduce or eliminate the use of chemicals in water treatment; or treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals or lower the amount of chemicals in residuals; or trenchless or low impact construction technology; or use of recycled materials	Business Case Required
<input type="checkbox"/>	Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).	Business Case Required
<input type="checkbox"/>	Projects that achieve the goals/objectives of utility asset management plans	Business Case Required

Form completed by:

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 Engineer/Owner
 Title

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Attachments:

- Business Case(s)
- Project Cost Estimate with Green Components marked or highlighted
- Other _____