

State of Oregon Department of Environmental Quality

Appendix D, Green Project Reserve: Environmentally Innovative

Contact: Project Officer

Cite the categorical project number(s) that best correlate to the project objectives described in the Green Project Components section of your Clean Water State Revolving Fund loan application.

All projects or project components counted toward the GPR requirement must clearly advance one or more of the objectives articulated in the category discussed below.

Oregon DEQ is required to finance a certain percentage of projects that utilize green infrastructure, address water and energy efficiency, or implement other environmentally innovative activities. DEQ refers to this percentage as the Green Project Reserve.

4.0 ENVIRONMENTALLY INNOVATIVE

- 4.1 Definition: Environmentally innovative projects include those that demonstrate new and/or innovative approaches
- 4.2 Categorical Projects
- 4.2-1 Total/integrated water resources management planning likely to result in a capital project.
- 4.2-2 Utility Sustainability Plan consistent with EPA SRF"s sustainability policy.
- 4.2-3 Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry, such as Climate Leaders or Climate Registry.
- 4.3-3a Note: GHG Inventory and mitigation plan is eligible for CWSRF funding.
- 4.2-3b EPA Climate Leaders Climate Registry
- 4.2-4 Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.
- 4.2-4a Office of Water Climate Change and Water website: http://www.epa.gov/water/climatechange/
- 4.2.5 Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.
- 4.2-5a Any level of certification (Platinum, Gold, Silver, Certified).
- 4.2-5b All building costs are eligible, not just stormwater, water efficiency and energy efficiency related costs. Costs are not limited to the incremental additional costs associated with LEED certified buildings.

- 4.2-5c U.S. Green Building Council website: http://www.usgbc.org/displaypage.aspx?CategoryID=19
- 4.2-6 Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.
- 4.2-6a Decentralized wastewater systems include individual onsite and/or cluster wastewater systems used to collect, treat and disperse relatively small volumes of wastewater. An individual onsite wastewater treatment system is a system relying on natural processes and/or mechanical components, that is used to collect, treat and disperse or reclaim wastewater from a single dwelling or building.

A cluster system is a wastewater collection and treatment system under some form of common ownership that collects wastewater from two or more dwellings or buildings and conveys it to a treatment and dispersal system located on a suitable site near the dwellings or buildings.

Decentralized projects may include a combination of these systems. EPA recommends that decentralized systems be managed under a central management entity with enforceable program requirements, as stated in the *EPA Voluntary Management Guidelines*.

4.2-6b Treatment and Collection Options: A variety of treatment and collection options are available when implementing decentralized wastewater systems. They typically include a septic tank, although many configurations include additional treatment components following or in place of the septic tank, which provide for advanced treatment solutions. Most disperse treated effluent to the soil where further treatment occurs, utilizing either conventional soil absorption fields or alternative soil dispersal methods which provide advanced treatment. Those that discharge to streams, lakes, tributaries, and other water bodies require federal or state discharge permits (see below). Some systems promote water reuse/recycling, evaporation or wastewater uptake by plants.

Some decentralized systems, particularly cluster or community systems, often utilize alternative methods of collection with small diameter pipes which can flow via gravity, pump, or siphon, including pressure sewers, vacuum sewers and small diameter gravity sewers. Alternative collection systems generally utilize piping that is less than 8 inches in diameter, or the minimum diameter allowed by the state if greater than 8 inches, with shallow burial and do not require manholes or lift stations. Septic tanks are typically installed at each building served or another location upstream of the final treatment and dispersal site. Collection systems can transport raw sewage or septic tank effluent. Another popular dispersal option used today is subsurface drip infiltration. Package plants that discharge to the soil are generally considered decentralized, depending on the situation in which they are used.

While not entirely inclusive, information on treatment and collection processes is described in the "Onsite Wastewater Treatment Technology Fact Sheets" section of the EPA Onsite

Manual and on EPA's septic system website under Technology Fact Sheets.

4.2-6c For the purposes of the CWSRF, decentralized systems are considered to be section 319 projects and Davis-Bacon does not apply.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.