

SUMMARY OF GREEN TECHNOLOGIES

(From EPA Green Infrastructure Guidance)

*All projects must be principally for water quality/public health purposes and be cost-effective.

Categories	Categorically Green Projects	Non-Categorically Green Projects (require Business Case)
Green Infrastructure	<p>Street & parking areas:</p> <ul style="list-style-type: none"> • permeable pavement • bio-retention • trees • green roofs <p>Stormwater use Downspout disconnection Riparian buffers Most agricultural BMP's (See PENNVEST NPS Program Guidance)</p>	<p>CWSRF (NPS)</p> <ul style="list-style-type: none"> • Livestock fencing • Stream buffers <p>DWSRF No common examples in drinking water</p>
Water Efficiency	<p>CWSRF Wastewater reuse</p> <p>DWSRF</p> <ul style="list-style-type: none"> • Meters in previously unmetered areas • Replacement of broken meters with AMR meters • Adding AMR capability or leak detection to existing meters • Recycling that replaces potable water with non-potable water • Leak detection equipment • PRV's 	<p>CWSRF No common examples in wastewater</p> <p>DWSRF Pipe replacement/rehab to:</p> <ul style="list-style-type: none"> • Save large amounts of water and energy from reduced pumping • Prevent breaks • Water meter replacement with traditional water meters
Energy Efficiency	<p>CWSRF & DWSRF Renewable energy generation to serve POTW needs:</p> <ul style="list-style-type: none"> • wind • solar • geothermal • biogas <p>Projects that achieve a 20% reduction in energy consumption. Collection system Infiltration/Inflow (I&I) detection equipment</p>	<p>CWSRF</p> <ul style="list-style-type: none"> • Projects which save less than 20% energy but have short pay-back periods <p>DWSRF</p> <ul style="list-style-type: none"> • Energy-efficient retrofits (including VFD's) • Upgrade to energy-efficient lights • SCADA that saves significant energy
Innovative Infrastructure	<p>CWSRF Decentralized wastewater treatment solutions (systems which serve a small number of homes usually with small-diameter piping and local treatment often with a communal septic system).</p> <p>DWSRF No common examples in drinking water</p>	<p>CWSRF</p> <ul style="list-style-type: none"> • Wastewater treatment using constructed wetlands • Technologies which reduce residual volume or reduce chemicals in residuals • Other technologies which have not yet been demonstrated in Pennsylvania <p>DWSRF Technologies which reduce chemical use, residual volume or reduce chemicals in residuals</p>