



ENGINEERING/OPERATIONAL UNITS OF MEASURE

SERVICE	DEFINITION	UNITS
Climate Regulation – Incoming Solar Radiation Reduction	The potential for a map unit to reduce the amount of incoming solar radiation that reaches the ground surface through shading by vegetative canopy cover.	The area weighted site average reduction in incoming solar radiation in units of British Thermal Units (BTU) per square foot per hour (BTU/sf/hr) (area weighted average). <i>and</i> The sum of the reduction in incoming solar radiation from all map units in units of BTU per hour (BTU/hr) (site total).
Air Quality – Nitrogen-Oxygen (NOx) Removal	The potential for a map unit to sequester airborne nitrogen-oxygen compounds through interaction with the vegetative canopy cover of trees.	The sum of the predicted number of pounds of nitrogen-oxygen compounds that a site is capable of removing over the period of a single year (lbs/year) (total).
Air Quality – Particulate Matter (PM) Removal	The potential for a map unit to sequester airborne particulate matter in the PM ₁₀ range through interaction with vegetative canopy cover of trees.	The sum of the predicted number of pounds of PM ₁₀ that a site is capable of removing over the period of a single year (lbs/year) (total).
Water Provisioning	The amount of depressional surface storage capacity available on a site in which water could be housed and used for business purposes. Note – thresholds for viability (for site management purposes) have been set in the ESII Tool and must be met for scores to be generated: minimum total volume of storage space = 10,000 gallons; predominant depth = greater than 2 feet; and the storage area must be considered natural.	The area weighted average number of gallons per square foot that could be housed in existing depressional areas (where those areas meet the criteria above) if they were spread across the entire site (gallons/sf) (area weighted average)/ <i>and</i> The sum of all gallons that could be housed in existing depressional areas (where those areas meet the criteria above) (gallons) (site total).

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Water Quality – Nitrogen Removal	<p>The predicted actual removal of nitrogen compounds from water flowing over a site through vegetative and soil filtration processes given observed potential nitrogen sources.</p> <p style="text-align: center;"><i>and</i></p> <p>The predicted maximum potential removal of nitrogen compounds from water flowing over a site through vegetative and soil filtration processes assuming the presence of nitrogen sources for each map unit.</p>	<p>The predicted actual reduction in nitrogen loading in water as an area weighted averaged over the entire site. Units for nitrogen removal in water are milligrams per liter (mg/l) (area weighted average).</p> <p style="text-align: center;"><i>and</i></p> <p>The predicted maximum potential reduction in nitrogen loading in water as an area weighted averaged over the entire site. Units for nitrogen removal in water are milligrams per liter (mg/l) (area weighted average).</p>
Water Quality – Total Suspended Solids (TSS) Removal	<p>The predicted actual removal of total suspended solids from water flowing over a site through vegetative and soil filtration processes given observed potential sources of suspended solids.</p> <p style="text-align: center;"><i>and</i></p> <p>The predicted maximum potential removal of total suspended solids from water flowing over a site through vegetative and soil filtration processes assuming the presence of total suspended solids sources for each map unit.</p>	<p>The predicted actual reduction in total suspended solids loading in water as an area weighted averaged over the entire site. Units for TSS removal in water are milligrams per liter (mg/l) (area weighted average).</p> <p style="text-align: center;"><i>and</i></p> <p>The predicted maximum potential reduction in total suspended solids loading in water as an area weighted averaged over the entire site. Units for TSS removal in water are milligrams per liter (mg/l) (area weighted average).</p>
Water Quantity Runoff	<p>The amount of residual storm water on a site after Interception and Infiltration have retained their full potential capacity in a 25-year precipitation event.</p>	<p>The total area weighted average number of inches of runoff that would be expected to come from a site as the result of a 25 year precipitation event (inches of runoff across site).</p> <p style="text-align: center;"><i>and</i></p> <p>The total number of gallons of runoff that would be expected to come from a site as the result of a 25-year precipitation event (gal).</p>
Erosion Regulation	<p>The total area within a site that is performing below 35% in the model outputs.</p>	<p>The sum of all map unit acres for a site where those map units are performing less than 35% performance.</p>
Visual Screening	<p>The total area in which observers will not be able to see onsite man-made structures due to natural screening (trees, shrubs, hills)</p>	<p>The total number of acres that are screened from viewing on-site structures when looking toward those structures from off-site locations. Note - Calculation involves GIS modeling.</p>
Noise Screening	<p>The total area in which observers will not be able to hear onsite man-made activities due to natural screening (trees, shrubs, hills)</p>	<p>The total number of acres that are screened from hearing on-site man-made activities. Note - Calculation involves GIS modeling.</p>