## Fred W. Beazley River Academy





• Solar power under generation on the roof – 20 photovoltaic solar panels each generate up to 300 watts of electricity. That's enough to power our estimated building needs through the year!

Passive solar power harnessed, too – The building is oriented to take advantage of prevailing breezes. Operable windows, roof overhang, ceiling fans and concrete floors also keep the building cool in summer and retain heat in winter. Lots of large windows provide natural light.

**Toilets conserve water** - "Dual flush" toilets use only half the water of traditional johns. This style toilet was selected because it's readily available in big-box stores at affordable prices.

• 100 % of rainfall stays on site – When rain falls on this roof, it's captured in 1,150 gallons of cisterns for re-use to water landscaping, as well as a 1,000 sq. ft. rain garden. Sidewalks approaching the building are up to 30 % "pervious," letting the rain soak in. Parking lots and the entry road are pervious too, all to prevent runoff pollution.

**O** Sustainable building materials – The birch plywood is certified by the Forest Stewardship Council as harvested from responsibly managed forests. The building was designed to minimize construction waste, avoid volatile organic compounds (VOCs) and demonstrate high-efficiency heating and cooling. The building also is sized as modestly as practical to limit the footprint.

• Native plantings – Native shrubs and trees surround this building and have been added throughout the park - more than 10,000 of them, to provide habitat for native wildlife and reduce reliance on water and fertilizer.



• A healthy environment for occupants - Abundant light, air, views to outside and an open atmosphere make this a healthy building for you, as well as for our staff!



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## Solar panels made possible by Dominion Energy Building made possible by Beazley Foundation