

RAINWATER HARVESTING PROJECT PROPOSAL FOR SCHOOLS **September, 2014**

BLUEBARREL BACKGROUND:

Based in Sonoma County, BlueBarrel provides all the tools, materials, and educational resources for installing the BlueBarrel Rainwater Catchment System™. We can provide varying levels of support from materials and instructions for Do-It-Yourself projects, to integrated programs led by BlueBarrel's founder, Jesse Froehlich, that include a classroom component and a full-day hands-on installation workshop. Jesse can design custom programs for students of any age, working with teachers to emphasize aspects that reinforce core curriculum.

The BlueBarrel Rainwater Catchment System is a reliable, space-efficient, cost-effective design for rainwater harvesting to serve irrigation needs. Made from a series of recycled 55-gallon drums, barrels are daisy-chained together for maximum efficiency of flow and no limit to the amount of storage capacity that can be installed. Between materials recycling and smart use of water resources, the BlueBarrel System is a win-win for the environment and for students getting their hands on the project!

Rainwater Harvesting is a practical, hands-on solution that ties in to math, physical sciences, biological sciences, and earth sciences. A rainwater harvesting design and installation project is a great match for any math or science class, or for practical courses in landscaping, construction, gardening, agriculture, water systems, sustainable design/build, and other related fields. Once the system is installed, it's a wonderful addition to any school garden.

EXAMPLE PROGRAM OUTLINE FOR SCHOOLS:

STEP 1: PLANNING & BUDGETING

Jesse works with a representative of the school (teacher, parent, administrator, student, or team!) to discuss project needs and parameters. After an in-person site assessment at the school, Jesse and the school's team discuss ideal system size and placement based on the site's catchment potential, irrigation need, and the school's budget. We discuss costs up front, and because the BlueBarrel System is modular (can be large or small), we can design a program that fits most budgets. Jesse can suggest funding sources for public schools based on past projects, however it is the school's responsibility to provide the funds necessary to complete the project that the team agrees upon. (See next page for pricing structure).

STEP 2: INTRODUCTORY CLASSROOM SESSION

Working closely with the teacher, Jesse will develop a 1-to-2-hour lesson that emphasizes students' core curriculum in an introductory session about rainwater harvesting. Jesse leads students in an interactive dialogue about the principles and practices of rainwater harvesting, including environmental benefits, basic system anatomy, and hydraulic / hydrologic principles. The lesson concludes with the students sizing and siting a system to serve a garden or landscaped area on campus. Classroom lessons can be tailored for students of any age.

STEP 3: HANDS ON INSTALLATION WORKSHOP

Jesse leads students in a full day (or 2 partial day) hands-on workshop to install the system that the students designed (and that Jesse and the school's planning team pre-planned in Step 1!). The school benefits from its very own student-designed, student-installed BlueBarrel System.

Jesse Froehlich, Founder | BlueBarrel Rainwater Catchment Systems
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a lasting part of the school's infrastructure. Hands-on installations are for students in 6th grade and up.

PRICING STRUCTURE

Service	Full Price	Reduced Pricing for Public Schools & Non-Profits*
Initial Site Assessment	\$150	\$100
Jesse's rate	\$50/hour	\$35/hour
Assistant rate	\$25/hour	Cost can be eliminated if an agreed-upon number of teachers or parent volunteers can commit to assisting on hands-on installation day.
Basic System Materials	\$40 - \$75 per 55-gallon unit. The more barrels installed, the lower the price per unit.	10% discount on all BlueBarrel System materials
Foundation Materials	Cost varies depending on ground conditions and desired foundation height. Simple foundation consists of 2 cinder blocks under each barrel (~\$2.50ea).	
Barrel Transport	\$100 (local rate for up to 15 barrels)	Cost can be eliminated if the school can transport barrels from regional barrel supplier.
Travel	No travel charges apply for Sonoma County Schools. For out-of-county schools, mileage is charged at the current IRS rate (\$0.56/mile for 2014) for all site visits.	

**We gladly offer reduced pricing for public schools and non-profits, however in some cases "use-it-or-lose-it" funding sources allow schools and non-profits to pay BlueBarrel's full rates. Please communicate with us about the specifics of your project funding situation. We will work with you to make it work!*

Example school projects and budgets:

Santa Rosa Charter School for the Arts: 14-barrel system with 7th & 8th grade science classes

Project Budget: \$2,500

Scope: 2 classroom sessions, 1 full-day hands-on installation workshop, professional foundation installation, and all BlueBarrel System materials. Parent volunteers delivered barrels and provided support on workshop day.

Funding Source: PG&E's Bright Ideas Grant Program

School's Lead: Molly Dillon, Parent Volunteer, mdillon@srcity.org; (707) 321-3758

Healdsburg High School: 8-Barrel System with high school construction classes

Project Budget: \$1,350

Scope: 2 classroom sessions, 1 full-day hands-on installation workshop, and all BlueBarrel System materials (students/teacher built their own foundation, school transported barrels, teacher had skills to assist on workshop day)

Funding Sources: North Coast Builder's Exchange (\$350 for materials); SCOE (\$1000)

School's Lead: Tim Dimock, Instructor, Construction & Sustainability Academy, (707) 321-3450

Photos of school projects available at www.BlueBarrelSystems.com/Photo-Gallery



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