

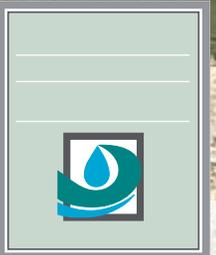
Water

EDUCATION PROGRAM

2016-2017



FREE FIELD TRIPS | MATERIALS | CONTESTS | MAPS & POSTERS | TEACHER WORKSHOPS



Highlights 2016 – 2017

Bring water education into your classroom by utilizing our **FREE** education materials and instructional programs.

- **FREE** TK and kindergarten program
- **FREE** Classroom instructional series for grade three
- **FREE** Field study opportunities for grade five (includes bus transportation)
- **FREE** Secondary education program
- **FREE** Adopt a Creek program
- **FREE** School-wide musical assembly program
- **FREE** Curriculum materials for grades K-12
- **FREE** Water awareness contests
- **FREE** Teacher trainings and workshops
- **FREE** Lending library materials including videos, interactive models, books, and printed materials



Dear Teachers,

The Water Education Program is a comprehensive approach to helping educators teach students the value of water as an important natural resource. Water use efficiency and stewardship of our local watersheds are promoted throughout the program. Students are encouraged to use water wisely and make environmentally sustainable choices to help secure a reliable source of freshwater now and in the future.

Our programs and materials are FREE to teachers in our service area and are made possible through the Sonoma County Water Agency and your local water provider. We provide engaging lessons on water use efficiency, the treatment of wastewater, pollution prevention, ecology, and the Water Agency's water transmission system. The curriculum materials and instructional visits listed in this packet have been developed to support the Common Core and the Next Generation Science Standards.

For the 2016-2017 academic year our program includes classroom instructional presentations, field study opportunities, curriculum materials for grades K-12, sponsorship of the Musical Watershed Assembly Program, staff development workshops for teachers, the Hydro Herald Newsletter, and a lending library of books, videos, and interactive models.

For TK and kindergarten students we are offering a program called *Splish Splash! Water's Journey to Your Class*. Students will learn about the importance of water, where their water comes from, and how to use water wisely.

For third grade students we are offering, *Be a Water Hero!*, a two-lesson sequence held at your school site that covers water use efficiency and pollution prevention. All lessons are hands-on and designed to be developmentally appropriate.

We are very excited to offer our **fifth grade program, *Healthy Water Comes from Healthy Watersheds***, at our Westside Water Education Center located in Forestville. This program focuses on the source of the students' drinking water, water quality, salmonids, watershed dynamics, and

water use efficiency. Our new fish ladder viewing chamber will be opening this Fall!

We are offering two secondary programs: ***Understanding Your Drinking Water Supply*** is an interactive presentation held in your classroom. The ***Adopt a Creek*** program includes classroom and field components.

FREE curriculum materials and student incentives are available for grades K-12, including student workbooks, maps, and folders.

This year we have two **water awareness contests**: the calendar poster contest and the Russian River Watershed Association's High School Video Contest.

Once again we are sponsoring *The Musical Watershed*, a school-wide assembly program that includes segments on students' connection to their drinking water source, ways to save water, storm water pollution prevention, and Russian River ecology.

To assist you as educators we have planned some exciting **workshops** specifically designed around local topics of interest. We have scheduled an Aquatic WILD and Steelhead in the Classroom workshop and a Project WET (Water Education for Teachers) workshop that addresses local water issues and aligns with Common Core Standards, Next Generation Science Standards, and the Environmental Education Initiative.

Our **Lending Library** has a wide variety of books covering multiple subjects for grades K-12. We also have interactive models and a collection of DVDs and VHS. The Lending Library is open Monday through Friday from 8 am to 5 pm and is located at 404 Aviation Boulevard in Santa Rosa.

We hope that you will **look to us as a resource for water education**, whether it is teacher workshops, supplemental materials or directly working with your students.

— Sonoma County Water Agency Education Staff

INSTRUCTIONAL PRESENTATIONS & CLASSROOM MATERIALS

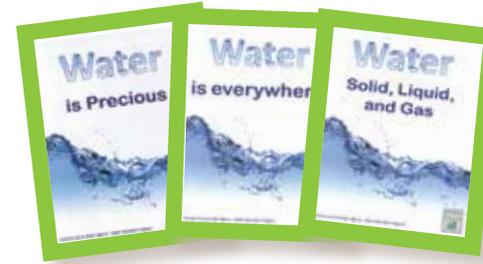
"I loved the content, the energy, the approach, and how fun it was! After the presentation, my students became much more aware of their water use and they were coming up with many ways to save water." — teacher in Santa Rosa



Transitional Kindergarten and Kindergarten Classroom Program

This exciting program, *Splish Splash! Water's Journey to Your Class*, teaches young students about the importance of water, where their water comes from, and how to use water wisely. A water agency instructor will come to your class to conduct a 30-minute interactive lesson with your students.

To schedule your presentation, please visit our website at: www.sonomacountywater.org



Kindergarten & 1st Grade Picture Books

(You will receive one copy of each.)

Water is Precious: This book discusses uses of water, where our water comes from, and water conservation.

Water is Everywhere: This book examines different places on earth where water is found, providing an introduction to the three forms of water.

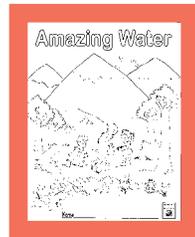
Water Solid, Liquid, and Gas: This book investigates the three forms of water and gives an introduction to water cycle concepts.



Kindergarten

Water is Everywhere Workbook

This 16 page activity book was created by Sonoma County Water Agency educators to help local kindergarteners understand where their water comes from, why water is important, and how to use water wisely. It addresses concepts such as the ability of water to be a liquid or a solid, characteristics of local landforms, and that the earth is composed of land, water, and air. (one per student)



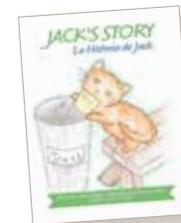
First Grade

Amazing Water Workbook

This 16 page activity book was created by Sonoma County Water Agency educators to help local first graders understand where their water comes from, why water is important, and how to use water wisely. It addresses concepts such as all living things need water to survive, the basic parts of plants and their functions, and that water can be a liquid, solid, or gas. (one per student)

K-2nd Grade Picture Books

Written and illustrated by middle school students, these stories are printed in both English and Spanish. Perfect additions for your classroom library.



Jack's Story, La Historia de Jack

2015 Write with Might! Book Contest Winner

Winning Books from 2014

- *Phelipe Stops Storm Drain Pollution*
- *Bartholomew Learns About Water*



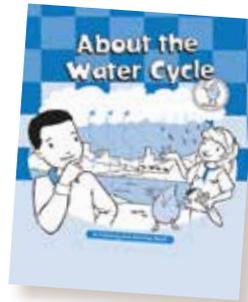
CLASSROOM MATERIALS

 To view sample pages and order, please visit our website at: www.sonomacountywater.org

Second Grade

About the Water Cycle

Using puzzles, games, and coloring activities, students learn how water cycles through the environment and what they can do to help keep water clean and use it wisely. *(one per student)*



Third Grade

Water Play

A colorful activity book about water. Includes messages to be decoded, puzzles, crosswords, and mazes. *(one per student)*

GRADE 3: CLASSROOM INSTRUCTIONAL SERIES



Be a Water Hero!

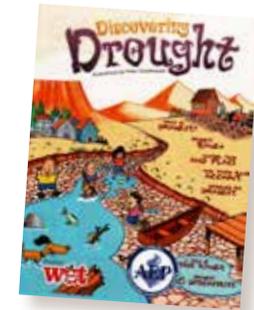
This program includes two 60-minute lessons conducted by Water Agency educators in your classroom. Through hands-on experiments and interactive activities, students explore how their daily habits impact our water supply source.

Please coordinate with other teachers at your site before signing up at www.sonomacountywater.org.

Fourth Grade

Discovering Drought

A drought is a period of water shortage when lack of precipitation produces dry conditions lasting as long as several years. Many students have heard of the term drought, but don't really understand what it means. This colorful 16 page booklet explores droughts, the consequences of a drought, and teaches students how we can work together to use our water wisely. *(one per student)*



GRADE 5: FIELD STUDY PROGRAM

Recycled Water and Wetlands

(Sonoma Valley Schools Only)



This program includes a one hour classroom lesson, a tour of the Sonoma Valley Wastewater Treatment Plant, and an ecology based field trip at Hudeman Slough. Students will learn how recycled water from the treatment plant is used for wetlands enhancement and

restoration. Emphasis is placed on what makes a wetland ecosystem distinctive and why wetlands are important. Students will investigate wetland plants and soils and will be provided with binoculars to observe the diverse wildlife living and foraging in this habitat.

Students will gain a better understanding of:

- where their water goes when it goes "down the drain"
- positive uses of recycled water
- interconnectedness of the water and our environment
- the sustainability of water resources in the area
- wetland habitat ecology

Healthy Water Comes from Healthy Watersheds

Located along the river adjacent to a spectacular redwood grove, your class will have the opportunity to tour the Water Agency’s groundwater pumping facilities and experience firsthand the source of their drinking water. The program consists of a one hour presite visit to your classroom by Water Agency staff and a follow-up field trip to the Russian River. The lesson focuses on the Sonoma County Water Agency’s water supply and transmission system, water quality testing, and the natural history of salmon and steelhead in the Russian River Watershed. Students practice their lab skills by collecting water samples and performing hands-on water quality testing. They use microscopes to observe the variety of aquatic macroinvertebrates that provide food for larger animals throughout the river ecosystem.

Please coordinate with other teachers at your site before signing up at www.sonomacountywater.org. This field study program supports the Next Generation Science Standards.



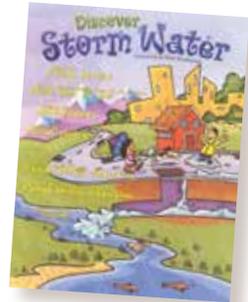
Our new fish ladder viewing chamber will be opening this Fall!



Fifth Grade

Discover Storm Water

This full color 16 page activity booklet features informative text and activities designed to teach students about where storm water comes from, where it goes, and its impact on our environment. *(one per student)*



Sixth Grade

Give Water a Second Chance... Recycle It!

This 14 page booklet teaches students about where water goes when it goes down the drain. It explains how wastewater treatment facilities work and how recycled water can help our communities. It includes a decoding game about the parts of the water recycle, activities to identify uses for treated wastewater, and an experiment about salts dissolved in water. *(one per student)*



GRADE 7 TO 12: FIELD & CLASSROOM PROGRAMS

Understanding Your Drinking Water Supply

Water Agency staff will visit your classroom and explain the source of our region’s drinking water, how it is cleaned, and delivered to homes. This 45-minute interactive power point presentation includes maps and striking visuals of our current reservoir levels.



Adopt a Creek Program

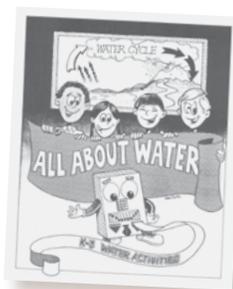
This program includes classroom visits and field work days. If your school is near a creek, students can collect water quality data, assess vegetation cover, and remove invasive species and trash. Students will develop a sense of environmental stewardship by learning about their local creek and becoming part of the solution. This program teaches students the value of creeks by studying wildlife, plant life, and interconnections in a riparian ecosystem.

CURRICULUM GUIDES

These guides are designed to provide lessons and background information for teachers. Some guides include reproducible pages for student use.

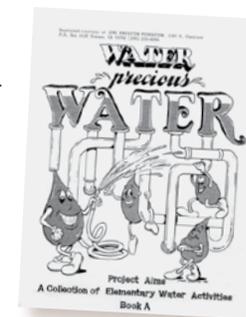
All About Water – Grades K-3

This 100 page reproducible curriculum guide contains 26 water-related activities and science experiments that involve students in observing, communicating, and comparing. The activities are interdisciplinary and can be used with science, art, math, social studies, music, and language arts. Topics include water quality, the water cycle, fresh water and salt water, water efficiency, and water distribution. *(one per classroom)*



Water Precious Water – Grades 2-6

An AIMS booklet with hands-on water projects for the classroom. Students uncover a variety of interesting facts about water by conducting a series of four activities that focus on the properties of water. *(one per classroom)*



THE LENDING LIBRARY

*Looking for science books or models related to water?
We invite you to visit our lending library.*



Let us assemble a bag of books organized by theme and grade level for your class. We have a wide range of book styles including picture books, activity guides, books of poetry, and non-fiction texts. Our lending library is organized by topic and grade level. Subjects covered include the water cycle, ponds, wetlands and river ecosystems, watersheds, salmon, wastewater treatment and more. Lending library materials are available for grades K-12. We also have some titles in Spanish.

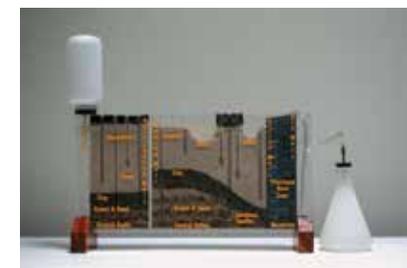
The Lending Library is open Monday through Friday from 8 am to 5 pm and is located at 404 Aviation Boulevard in Santa Rosa.

FREE Lending library materials including videos, interactive models, books and printed materials



Enviroscape Model • Grades 3-Adult

This tabletop watershed model provides a hands-on, interactive demonstration of the sources and effects of water pollution. Teach your students how storm water runoff can carry pollutants through the watershed to the ocean and how to prevent this type of pollution from occurring.



Groundwater Model • Grades 5-Adult

This interactive sand-tank model is designed to simulate some of the groundwater conditions common throughout California.

CONTESTS

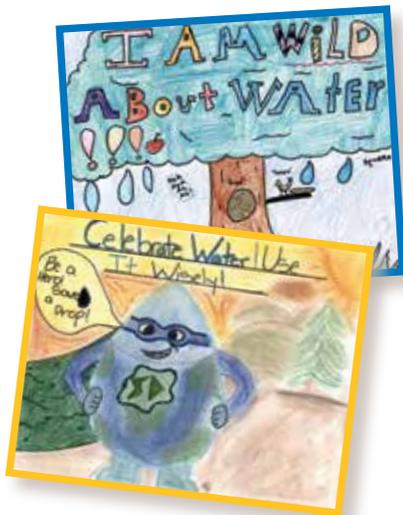
Poster Contest for 3rd, 4th & 5th Graders

The Sonoma County Water Agency, in partnership with local water suppliers, holds an annual Water Awareness Poster Contest. This contest invites 3rd, 4th, and 5th grade students within our service area, to create a poster illustrating ways to use water wisely.

Winners of the poster contest are featured in the following year's Water Awareness Calendar. To view winning posters from previous years and to sign up please go to:

www.scwa.ca.gov/poster-contest

Additional information will be coming to your school with contest rules and submission deadlines.



RRWA Video Contest for High School Students



The Russian River Watershed Association sponsors an annual video contest for high school students. Cash awards are split between the students who create the winning video and the high school they attend. Winning videos are used as public service announcements and can be seen at local movie theaters, aired on local community media channels, on the Water Agency website, and YouTube.

The theme for the 2016-2017 contest is **Ditch the Plastic, Your Water is Fantastic!** High school students are invited to create a video about how choosing tap water can help reduce waste, protect our resources, and save money.

For more information and to view past winning videos, please visit:
www.scwa.ca.gov/video-contests



FREE ZUNZUN INTERACTIVE PERFORMANCE



Musical Watershed Assembly Program

ZunZun is back, bringing a new Musical Watershed Assembly to schools in Sonoma and Marin counties. This 45-minute assembly program engages students with musical segments focused on where your water comes from, climate change, storm drain pollution, and water and energy conservation. Your students will learn how the choices they make, can positively impact the Russian River Watershed and its biodiversity.

Students and teachers are active participants in the program—getting up on stage, singing, dancing, and playing a variety of folkloric instruments. ZunZun's programs are always lively, participatory, and multilingual (Spanish, Portuguese, English).

This highly acclaimed group has performed in 14 countries throughout the Americas and have appeared on regional, national, and international radio and television. This assembly program is sponsored by the Sonoma County Water Agency and is FREE to participating schools.

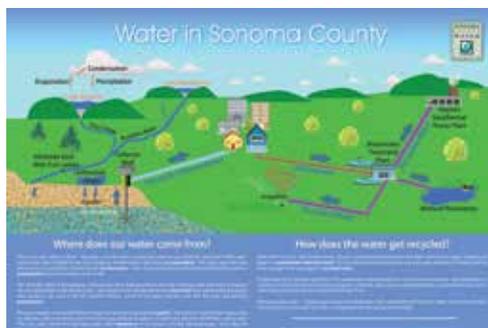
► To book a ZunZun Assembly—please call ZunZun directly at (831) 426-0684 or contact them by email at zunzun@zunzuntunes.com

FREE MAPS & POSTERS for your classroom



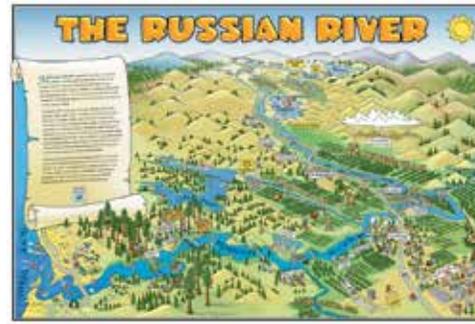
Do Your Part to Be Water Smart/Daily Water Use Around the World Poster – All Ages

This colorful double sided poster measures 25.5" x 23.5." Each side of the poster illustrates different ways to conserve water inside and outside your home.



Water in Sonoma County Poster – All Ages

This schematic illustrates both how we get our water in Sonoma County and the different ways we reuse it. 24" x 36"



Russian River Cartoon Map – All Ages

This colorful animated map shows the Russian River and its water users. 24" x 36"



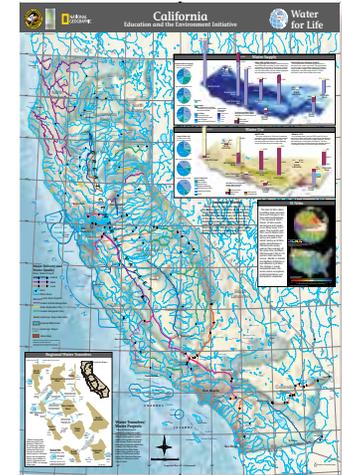
Water Cycle Poster – All Ages

The water cycle is the movement of water on, in, and above the Earth. This 24" x 36" colorful poster includes water cycle vocabulary with definitions.



Life Cycle of the Russian River Salmon Poster – All Ages

This 12" x 34" colorful poster describes the life cycle of Russian River salmon.



Water For Life Map EEI and National Geographic Grades 5 and up

Designed by National Geographic for EEI, this 24" x 36" map graphically displays water supply, water use, and water transfers in California.



Russian River Watershed Map All Ages

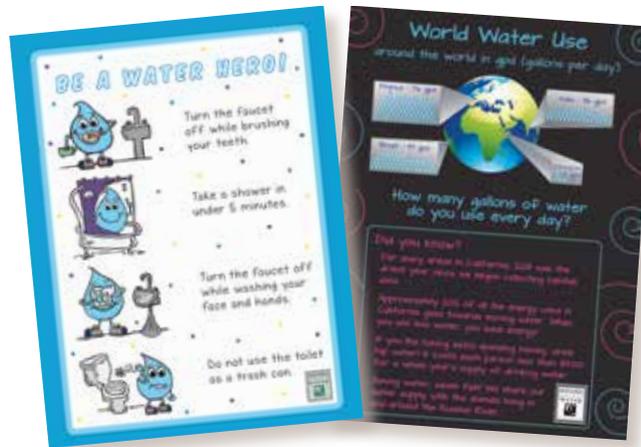
This three-color map highlights the major and minor waterways that flow through the Russian River Watershed. 24" x 36"

STUDENT INCENTIVES ARE AVAILABLE IN CLASS SETS



Water Hero Static Cling Stickers All Grades

Your students will love our animated Water Hero static cling stickers. These fun reusable stickers adhere to smooth surfaces like mirrors and windows. They will help your students and their families remember to only use water when they need it.



Water Conservation and Water Cycle Pocket Folders For K-5th grade

Help your students learn about water conservation and the water cycle with this fun animated pocket folder.

World Water Use Pocket Folders For 6th-12th grade

This colorful folder teaches students about world water use, water conservation, where their water comes from, and where their water goes when it goes down the drain.



Rain Gauge All Grades

Involve your students in water science by measuring, recording, and graphing rainfall. (one per classroom)



Pencils - All Grades

Imprinted pencils remind students of the importance of water.



Pencil Sharpeners All Grades

Keep your students sharp with our Water Agency pencil sharpener!

Rulers - All Grades

12" flexible vinyl ruler imprinted with water conservation tips; scaled in inches and centimeters.

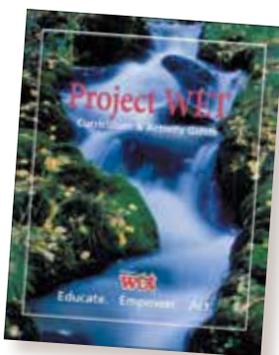


TEACHER WORKSHOP OPPORTUNITIES



**Recommended for
K-12 educators
Saturday, October 8, 2016
9:30 am – 3:30 pm**

**Teachers will receive
a free Project WET
curriculum guide.**



Let us help you teach your students about water issues by attending our locally-oriented Project WET workshop. The goal of Project WET is to promote awareness, appreciation and knowledge of California's precious water resources. We have tailored the workshop to our region with activities that highlight local water issues and concerns.

Project WET Curriculum and Activity Guide 2.0 includes over 64 hands-on activities

that have been correlated to the Common Core English Language Arts, Common Core Math, and Next Generation Science Standards as well as the EEI (Education and Environment Initiative) standards. All participants will receive a Project WET curriculum guide. Teachers can earn (.6) CEU credit for attending this workshop. This workshop will be held at the Sonoma County Water Agency Westside Water Education Center, 9703 Wohler Road, Forestville.

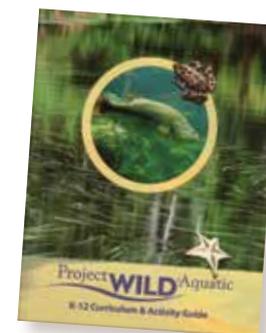


**Aquatic WILD and Steelhead
in the Classroom Workshop
Saturday, January 28, 2017
9:00 am – 4:00 pm**

**Teachers can raise steelhead
in their own classrooms after
attending this workshop.**

Learn about your local watershed, the fish that live here and how you can raise steelhead in your classroom. This workshop qualifies teachers to apply for a permit to receive fish eggs from the Warm Springs Hatchery at Lake Sonoma and hatch steelhead fish in their classroom.

By attending this workshop you will not only garner a greater understanding of your local watersheds and fisheries, but we will also provide activities and lessons focused on watersheds, water quality, river systems, and the habitat needs of salmonids. Project WILD Aquatic certification will be included in this workshop.



Workshop attendees will receive:

- All aquarium equipment needed and instructions on how to set up your incubator
- Training on the permitting process for hatching fish in your classroom
- A copy of the new WILD About Trout multi-media program
- Project WILD curriculum guide
- Local watershed maps
- Posters on aquatic habitats and fish anatomy

This workshop is FREE, but space is limited.

This workshop is sponsored by the Water Agency, the California Department of Fish & Wildlife, and Redwood Empire Trout Unlimited.

Sign Up Details for Both Workshops

Register online at www.sonomacountywater.org. Once we receive your registration, a confirmation and location map will be mailed to you. Lunch and snacks will be provided at both workshops.



- Order free classroom materials
- Request classroom instruction
- Sign up for teachers' workshops

Go to our website www.sonomacountywater.org
(Hover over Community/select Water Education Program)

Write with Might! **Book Contest Winners** (one per classroom)

AVAILABLE FOR GRADES K-2

Jack's Story, La Historia de Jack
Phelipe Stops Storm Drain Pollution
Bartholomew Learns About Water

Student Workbooks (one per student)

KINDERGARTEN

Water Is Everywhere Workbook
Water is Precious, Water is Everywhere,
and Water Solid, Liquid, & Gas
(one copy of each per classroom)

FIRST GRADE

Amazing Water Workbook
Water is Precious, Water is Everywhere,
and Water Solid, Liquid, & Gas
(one copy of each per classroom)

SECOND GRADE

About the Water Cycle

THIRD GRADE

Water Play

FOURTH GRADE

Discovering Drought

FIFTH GRADE

Discover Storm Water

SIXTH GRADE

Give Water a Second Chance...Recycle It!

Curriculum Guides (one per classroom)

All About Water Grades K-3
Water Precious Water Grades 2-6

Posters and Maps (one per classroom)

Water For Life Map
Water Cycle Poster
Russian River Cartoon Map
Russian River Watershed Map
Do Your Part to Be Water Smart
Water in Sonoma County Poster
Life Cycle of the Russian River Salmon Poster

Student Incentives (one per student)

Rain Gauge (one per classroom)
Pencil Sharpeners
Rulers
Pencils
Water Hero Static Cling Stickers
Folders – Water Cycle/Conservation (TK-5th)
Folders – World Water Use (6th-12th)

Musical Watershed Assembly

To schedule, contact ZunZun directly at
(831) 426-0684 or zunzun@zunzuntunes.com

Student Contests

Poster Contest for 3rd, 4th, and 5th grades
RRWA High School Video Contest 2016 – 2017



Instructional Programs

TK/Kindergarten: Splish Spalsh! Water's Journey to Your Class

Grade 3: Be a Water Hero!

Grade 5: Recycled Water and Wetlands
(Sonoma Valley only)

Grade 5: Healthy Water Comes from Healthy Watersheds

Grades 7-12: Understanding Your Drinking Water Supply

Grades 7-12: Adopt a Creek Program

Teacher Workshops

Project WET (Water Education for Teachers)
Saturday, October 8, 2016 • 9:30 am – 3:30 pm

Project Aquatic WILD/Steelhead in the Classroom
Saturday, January 28, 2017 • 9:00 am – 4:00 pm



The program is made possible through the Sonoma-Marin Saving Water Partnership. The Partnership represents 11 water utilities in Sonoma and Marin counties who have joined together to provide a regional approach to water use efficiency. The utilities are: City of Santa Rosa, City of Petaluma, Marin Municipal Water District, North Marin Water District, City of Rohnert Park, Town of Windsor, City of Sonoma, City of Cotati, Valley of the Moon Water District, California-American Water (Larkfield-Wikiup), Sonoma County Water Agency



This brochure was printed using soy based inks on Endeavor Velvet 80# coated paper (30% Recycled, 30% PCW-Post-Consumer Waste, processed chlorine free, and Forest Stewardship Council® Certified). Please recycle this booklet at the end of the year.