



# GREEN LIVING WORKSHOPS

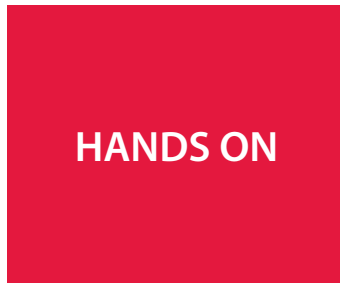
at the **UTILITY EXPLORATION CENTER**

September 2009 - May 2010

**FUN**



**HANDS ON**



**FOR THE  
WHOLE FAMILY**



(916) 746-1550  
[www.roseville.ca.us/explore](http://www.roseville.ca.us/explore)

CITY OF  
**ROSEVILLE**  
CALIFORNIA



Roseville Utility Exploration Center  
and the Martha Riley Library  
LEED **Gold** Certified in August 2009

*"where the building is a green living exhibit."*



1501 Pleasant Grove Blvd. Roseville, CA

# Welcome

Join us on a journey of discovery and sustainability; where some of the region's best minds in green gardening, solar design, water and energy conservation, recycled art and waste reduction provide interactive workshops and events here at the Roseville Utility Exploration Center.

Opened in January 2008, the Utility Exploration Center is an environmental learning center sponsored by the city's two utility departments – Environmental Utilities and Roseville Electric – to offer exhibits, classes, workshops, and special events to help you save money, save water, save energy and save the Earth.

As you will find in this program guide, we offer classes and events for all ages and skill levels. Some classes and camps are designed specifically for children while others are appropriate for mixed age groups. In most cases, our program fees are one price for families, to keep costs low and to encourage your participation with other family members.

Begin your journey now by selecting the courses that are right for you and your family.

**Register early - space is limited!**




Visit **[www.roseville.ca.us/explore](http://www.roseville.ca.us/explore)** or call (916) 746-1550

The Roseville Utility Exploration Center is located at  
1501 Pleasant Grove Blvd. in Mahany Regional Park.














## SEPT.

- 5  Composting
- 5  Vermicomposting
- 12  Create Your Own Unique School Book Bag
- 12  Lighting Conservation Basics
- 19  Sustainable Lawn Care
- 19  Going Native: California's Beauty in Your Garden
- 26  Green Shopping Tips




## OCT.

- 3  Water-Smart Landscape Design
- 10  Winter Home Tune-Up (Heaters, Thermostats & Insulation)
- 14  Cheap, Healthy Living
- 17  Composting
- 17  Drip Irrigation Basics
- 24  Worms, Guts & Pumpkin Carving
- 24  Trick or Treat Bag Making
- 31  Worms, Guts & Pumpkin Carving

## NOV.

- 7  Vermicomposting: Worms in the Kitchen?
- 7  Choosing and Growing Great Trees
- 14  **Placer Recycles Day**
- 21  Thanksgiving Art for & from Our Earth
- 21  Selecting and Growing Fruit Trees
- 24  Thanksgiving Art for & from Our Earth
- 28  Green Shopping Tips for the Holidays

## DEC.

- 5  Living Christmas Trees & Holiday Plants
- 12  Holiday Green Gift Making
- 19  Holiday Green Gift Making



Gardening, Landscaping and Irrigation



Green Shopping



Composting and Vermicomposting



Children's Programs







Energy Efficiency








Events @ the Utility Exploration Center








**JAN.**

- 9  Lighting Conservation Basics
-  Bring Back the Natives: Create Your Own Bluebird Nest Box
- 16  Shade Tree Pruning
- 30  Solar Power Options







**FEB.**

- 6  Composting
-  Irrigation System Installation Basics
- 13  Valentine's Day Gift Making
- 20  Earth Friendly Weed & Pest Management
-  Vegetable Gardening: Soil Health & Preparation






**MAR.**

- 6  Drip Irrigation Basics
-  Sprinkler System Tune-Up
- 13  Wearing of the Green for St. Patrick's Day
- 20  Water-Smart Landscape Design
-  Going Native: California's Beauty in Your Garden
- 27  Swimming Pool Basics: Energy and Water Conservation Tips
-  Choosing & Growing Great Trees

**APR.**

- 3  Composting
-  Vegetable Gardening: Planning & Pest Management
- 10  Vermicomposting: Worms in the Kitchen?
-  Catch Spring Fever: Create Your Own Herb Garden
- 17  **Celebrate the Earth Festival**
- 24  Summer Home Tune-Up (Air Conditioners, Shading and Insulation)

**MAY**

- 1  Composting
-  Vermicomposting
- 8  **Water Awareness Day**
- 15  Create a Character
-  Solar Power for the Garden

**JUNE**

- 19  **All Things Solar Day**



**Garden, Landscape  
and Irrigation**

**let's plant  
something  
together**



## Sustainable Lawn Care

**Saturday, September 19, 2009 | 10:00am–11:30am | Course #46963**

instructor: Master Gardeners

Traditional lawns use more water and take more chemicals than other landscaping options, and replacing them with drought-tolerant plants is often the best answer. But if you want to keep your turf, there are ways to care for it that are kinder to the planet. In this class, you'll learn which grasses are best for our region, how to irrigate properly and organic ways to fertilize and control pests.

**Family Fee: \$8/\$6 Resident Discount**

## Going Native - California's Beauty in Your Garden

**Saturday, September 19, 2009 | 2:00pm–4:00pm | Course #46964**

instructor: Elaine Applebaum

**Saturday, March 20, 2010 | 2:30pm–4:30pm | Course #46965**

instructor: Bob Garrison

California native plants offer a diverse and beautiful array of choices for the home garden. Many thrive on little summer water and require little, if any, chemical fertilizers or pesticides. In this workshop, you'll be introduced to those species well suited to our Central Valley and Sierra Foothill climates and soil types, and learn tips for successfully integrating them into your home landscape.

**Family Fee: \$10/\$7 Resident Discount**

## Water-Smart Landscape Design

**Saturday, October 3, 2009 | 9:30am–2:00pm | Course #46967**

instructors: Applebaum,

**Saturday, March 20, 2010 | 9:30am–2:00pm | Course #46968**

Buckwalter, and Palmquist

If you want to create a landscape that saves water, time, money, and our environment, join us for this information-packed workshop. You'll learn three essential components for developing your ideas and achieving the functional, beautiful, and water-efficient landscape you desire: Planning, Plants, and Irrigation.

Part 1: The "Master Plan" for Your Landscape

- River-Friendly landscape guidelines and design principles
- How to determine your goals and needs
- How to assess site conditions and "zones"
- Steps for creating the plan
- Materials, features, color and more
- Plant form, function, and preferences

Part 2: The Right Plant in the Right Place

- Selection of healthy and water-wise plants
- How to group plants by water and solar needs
- Placing plants for optimum health and form
- Proper planting techniques for plant health, structure, and longevity

Part 3: Efficient Irrigation

- Components of an irrigation system
- Irrigation design basics
- How to determine and control water pressure and flow
- Latest technology in water-conserving components
- How to create irrigation "hydrozones"
- How to schedule the system to provide the amount of water each plant needs

**Family Fee: \$20/\$16 Resident Discount**

## Drip Irrigation Basics

**Saturday, October 17, 2009 | noon–2:00pm | Course #46970**

instructor: Lori Palmquist

**Saturday, March 6, 2010 | 10:00am–noon | Course #46971**

This workshop will teach you the ABC's and even the XYZ's of drip (or low volume) irrigation. Find out why drip is such a great solution for water conservation, and why it is considered the most efficient mode of delivering water to your plants. You'll also learn how to determine how many emitters each plant requires, how to schedule the system and how to make regular adjustments as the weather changes. There will be a hands-on component to this class as well.

**Family Fee: \$10/\$7 Resident Discount**

## Choosing and Growing Great Trees

**Saturday, November 7, 2009 | noon–1:30pm | Course #46972**

instructor: Lani Houck

**Saturday, March 27, 2010 | 1:00pm - 2:30pm | Course #47022**

A properly placed deciduous tree will cool your home in the summer and allow the sun's rays to warm your house in the winter. In this workshop, you'll learn which shade trees grow well in Roseville, how to place them to shade your home, proper planting techniques and how to receive rebates for planting shade trees.

**Family Fee: \$8/\$6 Resident Discount**

## Selecting and Growing Fruit Trees

**Saturday, November 21, 2009 | 2:00pm–3:30pm | Course #46973**

instructor: Lani Houck

Eating locally grown food cuts down on energy use and carbon emissions and there's nothing more local than fruit grown in your own back yard. This class will teach you which varieties of fruit trees are suited to our area, how and when to plant them, pruning techniques and tips for managing pests.

**Family Fee: \$8/\$6 Resident Discount**

## Shade Tree Pruning

**Saturday, January 16, 2010 | 1:00pm–3:00pm | Course #46976**

instructor: Lani Houck

Learn how to train young trees to encourage fast growth, good structure and health. We'll also cover how to prune your shade trees safely from the ground. Bring warm clothes for outdoor pruning demonstrations.

**Family Fee: \$10/\$7 Resident Discount**

## Irrigation System Installation Basics

**Saturday, February 6, 2010 | 1:00pm–3:00pm | Course #46978**

instructor: Lori Palmquist

In this workshop, we'll cover all the steps of installing a home irrigation system, including how to connect to the water source, and how to determine the amount of pressure needed. You'll learn about the essential components, where to buy them, how to make a materials list, and learn the ins and outs of putting it all together. To end, we will put together a functioning sprinkler system for the lawn, to see how the finished product works.

**Family Fee: \$10/\$7 Resident Discount**



## Organic Vegetable Gardening from the Ground Up: Soil Health & Preparation

**Saturday, February 20, 2010 | 1:00pm–3:00pm | Course #46980**

instructor: Elaine Applebaum

The success of any garden begins with the soil: its fertility will provide the nutrients needed for healthy plant growth and its texture will determine how best to irrigate. Bring a sample of your garden soil. You'll learn how to test it and how best to amend it for optimum performance. We'll also cover the construction of raised beds. Though we'll be talking specifically about vegetable gardening, many of the concepts can be applied to the ornamental landscape as well.

**Family Fee: \$10/\$7 Resident Discount**

## Earth-Friendly Weed and Pest Management

**Saturday, February 20, 2010 | 10:00am–noon | Course #46979**

instructor: Master Gardeners

Weeds and harmful insects are common nuisances in every garden, but it is possible to keep them controlled by practicing Integrated Pest Management (IPM). IPM considers the garden as part of a larger ecosystem and provides strategies for managing pests with the least negative impact on our environment. In this class, you'll learn about beneficial insects and practical, non-toxic weed control methods.

**Family Fee: \$10/\$7 Resident Discount**

## Sprinkler System Tune-Up

**Saturday, March 6, 2010 | 1:00am–2:30pm | Course #46981**

instructor: Lori Palmquist

Learn how to assess and optimize your irrigation system. We'll cover upgrading and updating existing systems with the latest technology in water conserving irrigation components. We'll show how you can use some of the same processes employed by landscape water managers and auditors to determine how to get your system running as efficiently as possible. We'll also cover converting your existing sprinkler system to a drip system. If you have questions about, or problems with your system, please bring photos.

**Family Fee: \$8/\$6 Resident Discount**

## Organic Vegetable Gardening: Planning and Pest Management

**Saturday, April 3, 2010 | 1:00pm–3:00pm | Course #46986**

instructor: Elaine Applebaum

This class is all about what to plant, where, when and how. We'll cover topics such as seeds vs. transplants, crop rotation, companion planting, seasonal sequencing, and techniques for maximizing production in small spaces. We'll also cover non-chemical ways to control weeds and pests so that your vegetables will be the healthiest for you and our planet.

**Family Fee: \$10/\$7 Resident Discount**

**REGISTER @ [www.roseville.ca.us/explore](http://www.roseville.ca.us/explore) or by calling (916) 746-1550**

## Composting and Vermicomposting

**let's get  
our hands  
dirty**



## Green Waste into Gardener's Gold

**Saturday, September 5, 2009 | 10:00am–11:00am | Course #46953**

**Saturday, October 17, 2009 | 10:00am–11:00am | Course #46954**

**Saturday, February 6, 2010 | 11:00am–noon | Course #46956**

**Saturday, April 3, 2010 | 10:00am–11:00am | Course #46957**

**Saturday, May 1, 2010 | 10:00am–11:00am | Course #46958**

instructor: Master Gardeners

In this workshop, you'll learn how to turn kitchen scraps and yard waste into a free, natural amendment that will improve your soil, improve the productivity of your gardens and increase the beauty of your landscape. Composting yard waste at home saves the cost and energy of transporting it to the landfill, reducing pollution and keeping the biomass and nutrients in your yard. Each participating family will go home with a compost bin\* and all the information they need to create this "gardener's gold."

\*Compost bins are made from recycled trash cans and require a large vehicle for transport home.

**Family Fee: \$5/\$4 Resident Discount**

## Vermicomposting: Worms in the Kitchen?

**Saturday, September 5, 2009 | 11:00am–noon | Course #46959**

**Saturday, November 7, 2009 | 10:00am–11:00am | Course #46955**

**Saturday, April 10, 2010 | 11:00am–noon | Course #46992**

**Saturday, May 1, 2010 | 11:00am–noon | Course #46960**

instructor: Christy Bigley

If you don't have the room or enough green waste to have an outdoor compost bin, but want to create a nutrient-rich natural fertilizer and soil amendment at home, vermicomposting is the answer. Learn how to set up and maintain a worm bin to recycle your food scraps and used paper. During this family workshop you will create your own worm bin to take home, complete with enough red worms to get you started. Soon you'll be harvesting worm castings to feed your houseplants and gardens.

**Family Fee: \$25/\$24 Resident Discount (includes cost of worms and bin)**

Don't delay, register for workshops today!  
Register by logging on to our website at  
[www.roseville.ca.us/explore](http://www.roseville.ca.us/explore)  
or by calling (916) 746-1550.

Bring the whole family! The convenient Family Fee option is the price you'll pay to bring along the entire family. See you all at the next workshop!





**Energy Efficiency**

**efficiency,  
now that's a  
bright idea**





## Lighting Basics

**Saturday, September 12, 2009 | 11:00am–noon | Course #46961**

instructor: Bob Garrison

**Saturday, January 9, 2010 | 11:00am–noon | Course #46962**

Lighting accounts for about 20 percent of a home's electric bill, so changing your light bulbs can make a big difference. In this workshop, you'll learn about the advantages and disadvantages of incandescent, fluorescent, halogen and LED lighting. Lighting technology is changing rapidly and there are options out there to meet every lighting need. Come learn what will work best for you.

**Family Fee: \$5/\$4 Resident Discount**

## Winter Home Tune-Up (Heaters, Thermostats and Insulation)

**Saturday, October 10, 2009 | 10:00am–11:30am | Course #46969**

instructor: Patrick Morrison

Is your home ready for winter? Learn ways to efficiently heat your home, how to insulate to keep cold out and warmth in, and how a programmable thermostat can save energy costs.

**Family Fee: \$8/\$6 Resident Discount**

## Solar Power Options

**Saturday, January 30, 2010 | 11:00am–noon | Course #46977**

instructor: Patrick Morrison

Is Solar Power an option for your home? In this workshop, we'll discuss how Photo Voltaic (PV) systems work, how to select the right system for your home, and rebate and funding options.

**Family Fee: \$5/\$4 Resident Discount**

## Swimming Pool Basics: Energy and Water Conservation Tips

**Saturday, March 27, 2010 | 11:00am–12:30pm | Course #46982**

instructor: TBD

Learn how to save water, energy and money by changing how you operate and maintain your pool. Information will be available on city rebates for pool pump replacements and pool covers.

**Family Fee: \$8/\$6 Resident Discount**

## Summer Home Tune-Up (Air Conditioners, Shading and Insulation)

**Saturday, April 24, 2010 | 10:00am–11:30am | Course #47031**

instructor: Patrick Morrison

Is your home ready for summer? Learn ways to efficiently cool your home, how to insulate to keep the heat out, and how shading and blinds can save energy costs.

**Family Fee: \$8/\$6 Resident Discount**

## Solar Power for the Garden (Lighting and Fountains)

**Saturday, May 15, 2010 | 1:00pm–2:30pm | Course #46987**

instructor: Bob Garrison

Starting with the basics of how a photo voltaic solar panel works, we will check out some of the latest solar lighting systems and build a garden fountain during the class to teach you how to incorporate this technology into your garden.

**Family Fee: \$8/\$6 Resident Discount**

**Green Shopping**

**reduce your  
impact in  
style**



## Green Shopping Tips

**Saturday, September 26, 2009 | 11:00am–noon | Course #46966**

instructor: Kallie Arroyo

Every dollar you spend is a vote for the world you want to live in, as Ellis Jones points out in *The Better World Shopping Guide*. In this class we will discuss strategies that can help you reduce your impact on the earth while shopping for the items we need. Learn about labels and certifications that let you know if an item is truly green or just green washed. Discover local resources and how to save money while going green. Copies of Jones' book will be available for purchase at the workshop.

**Family Fee: \$5/\$4 Resident Discount**

## Cheap, Healthy Living

**Wednesday, October 14, 2009 | 6:00pm–8:00pm | Course #46685**

instructor: Kallie Arroyo

This course is designed to teach you how to live with less impact on the environment. Also, get tips on alternative fitness and library resources. Gift bag with money-saving coupons valued at more than \$50 included.

**Family Fee: \$14/\$12 Resident Discount**

## Green Shopping Tips for the Holidays

**Saturday, November 28, 2009 | 11:00am–noon | Course #46974**

instructor: Kallie Arroyo

This year give a gift that helps the earth. Learn about products that are not only good for the earth but better for the person receiving them. Learn about eco-friendly materials and waste reducing wrapping methods. Get information about local resources, as well as online merchandisers. You will get lots of tips on saving green while going green. Gift ideas for ages 0-100 years.

**Family Fee: \$5/\$4 Resident Discount**

## Living Christmas Trees and Other Holiday Plants

**Saturday, December 5, 2009 | 1:00pm–2:00pm | Course #46975**

instructor: Elaine Applebaum

Christmas trees, poinsettias, Christmas cactus, holly and other greenery—plants have a special place in decking our halls during the holidays. A living Christmas tree will delight you now and clean our air when planted outside after the holidays. In this class, you'll learn the traditions behind holiday plants, how to care for your living decorations while they're in your home, and how to keep them alive to give you pleasure for many years to come.

**Family Fee: \$5/\$4 Resident Discount**

**REGISTER @ [www.roseville.ca.us/explore](http://www.roseville.ca.us/explore) or by calling (916) 746-1550**



A close-up portrait of a young girl with curly hair, smiling, with a red banner at the top and text at the bottom.

**Children's Programs**

**ready,  
set,  
fun!**



## Create Your Own Unique School Book Bag

**Saturday, September 12, 2009 | 1:00pm–3:00pm | Course #47027**

instructor: Sally Jones

Have a t-shirt that you love that Mom won't let you wear anymore? Bring it to our class and learn how to turn that old tee into a reusable bag to carry home those extra books from school. Make sure to bring your strong cotton t-shirt on the day of the workshop. [AGES 8-12]

**Family Fee: \$10/\$7 Resident Discount**

## Worms, Guts and Pumpkin Carving

**Saturday, October 24, 2009 | 11:00am–12:30pm | Course #46704**

instructor: Christy Bigley

**Saturday, October 31, 2009 | 11:00am–12:30pm | Course #46709**

Carve a pumpkin and make a home worm bin to recycle the guts and your jack-o'-lantern after Halloween. Parent chaperone required for children under 9 years of age. Includes a pumpkin and worm bin complete with red worms to get you started. [AGES 7-12]

**Participant Fee: \$35/\$32 Resident Discount**

## Trick or Treat Bag Making

**Saturday, October 24, 2009 | 1:00pm–4:00pm | Course #46705**

instructor: Sally Jones

Create a trick or treat bag and other spooky items out of recycled materials for Halloween fun. [AGES 5-10]

**Participant Fee: \$15/\$12 Resident Discount**

## Thanksgiving Art for and from Our Earth

**Saturday, November 21, 2009 | 9:00am–noon | Course #46706**

instructor: Sally Jones

**Tuesday, November 24, 2009 | 10:00am–noon | Course #46739**

Create Thanksgiving decorations from nature's bounty using acorns, pinecones, colorful leaves and other natural objects to give thanks to Mother Earth for the bounty she provides. *The November 21 class is for ages 8-10 and the November 24 class is for ages 5-7.*

**Participant Fee: \$15/\$12 Resident Discount**

## Holiday Green Gift Making Workshop

Design and construct holiday gifts and cards for family and friends using repurposed materials. Fee includes all materials and snacks.

**Saturday, December 12, 2009 | 9:00am–noon | Course #46757**

instructor: Sally Jones

**Saturday, December 19, 2009 | 9:00am–noon | Course #46711**

**[AGES 8-12] Participant Fee: \$25/\$22 Resident Discount**

**Saturday, December 12, 2009 | 1:00pm–3:00pm | Course #46712**

instructor: Sally Jones

**Saturday, December 19, 2009 | 1:00pm–3:00pm | Course #46761**

**[AGES 4-7] Participant Fee: \$20/\$16 Resident Discount**

## Bring Back the Natives - Create Your Own Bluebird Nest Box

**Saturday, January 9, 2010 | 1:00pm–3:00pm | Course #47030**

instructor: Sally Jones

Create a new home for our native western bluebirds using recycled lumber. Take the nest box home and mount it in your backyard and watch to see if it is used in the spring or donate your box to Mahany Park and come visit your bluebirds every spring. [AGES 5-8]

**Participant Fee: \$10/\$7 Resident Discount**

## Valentine's Day Gift Making

**Saturday, February 15, 2010 | 10:00am–noon | Course #46988**

instructor: Sally Jones

Come join us as we celebrate a "World of Sharing & Caring" in honor of Valentine's Day at the Roseville Utility Exploration Center. You will be given a wide variety of recycled materials to create Valentine Cards and gifts for those you love. [AGES 5-7]

**Participant Fee: \$10/\$7 Resident Discount**

## Wearing of the Green for St. Patrick's Day

**Saturday, March 13, 2010 | 10:00am–noon | Course #46989**

instructor: Sally Jones

Come join us as we celebrate "Wearing of the Green" in honor of St. Patrick's Day at the Roseville Utility Exploration Center. Be creative as you design your own Leprechaun Trap, St. Patrick's Day Card, or unique Clover Good Luck charm, using recycled materials. [AGES 5-7]

**Participant Fee: \$10/\$7 Resident Discount**

## Catch Spring Fever - Create Your Own Herb Garden

**Saturday, April 10, 2010 | 1:00pm - 3:00pm | Course #47029**

instructor: Sally Jones

Build a green herb garden from recycled containers and enjoy fresh herbs at home. [AGES 5-8]

**Participant Fee: \$10/\$7 Resident Discount**

## Create a Character

**Saturday, May 15, 2010 | 10:00am–noon | Course #47028**

instructor: Sally Jones

Bring your imagination to this workshop and create a fun art project. You will take empty cans, smash them flat, and paint them to look like silly characters to take home. [AGES 5-8]

**Participant Fee: \$10/\$7 Resident Discount**

# WORKSHOP ADMINISTRATION | meet the instructors



**Elaine Applebaum**

Placer County Master Gardener and Utility Exploration Center staff member



**Kallie Arroyo**

Green lifestyles advocate and Roseville Utility Exploration Center volunteer



**Christy Bigley**

Vermicomposting expert and Roseville Utility Exploration Center volunteer



**Cheryl Buckwater**

Landscape designer and water conservation specialist



**Bob Garrison**

Director of the Roseville Utility Exploration Center



**Sally Jones**

Early childhood educator and Roseville Utility Exploration Center staff member



**Lani Houck**

Horticulturist and Certified Arborist with the Roseville Urban Forest Foundation



**Patrick Morrison**

Energy efficiency and solar programs manager for Roseville Electric



**Lori Palmquist**

Certified Water Manager and landscape irrigation contractor



**University of California Cooperative Extension (UCCE) Placer County Master Gardeners**

Volunteers trained by the University of California to bring research-based information to home gardeners

## EVENTS @ THE UTILITY EXPLORATION CENTER

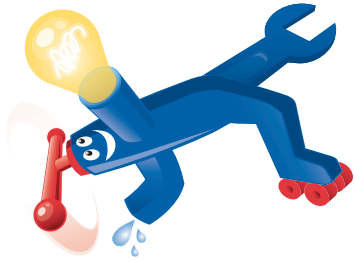
**Placer Recycles Day** | Saturday, Nov. 14, 2009 - 11:00am - 2:00pm

**Celebrate the Earth Day Event** | Saturday April 17, 2010 - 10:00am - 3:00pm

**Water Awareness Day** | Saturday May 8, 2010 - 11:00am - 2:00pm

**All Things Solar Day** | Saturday June 19, 2010 - 11:00am - 2:00 pm

2009 & 2010



## **Roseville Utility Exploration Center**

1501 Pleasant Grove Blvd.

Roseville, California 95747

(916) 746-1550

[www.roseville.ca.us/explore](http://www.roseville.ca.us/explore)

### **Hours**

Tuesday - Thursday 10 a.m. - 7 p.m.

Friday and Saturday 10 a.m. - 5 p.m.

Closed Sunday and Monday