

# **Homeowners Beware**



Asian Citrus Psyllid adults feed with their heads down, almost touching the surface of the leaf.

If you are a resident with citrus trees on your property, California needs your help:

- ▶ look for a dangerous pest: the Asian Citrus Psyllid (ACP), an invasive pest that causes serious damage to citrus and related plants, and
- ▶ do not remove fruit from your property.

Virtually all of western Riverside County west of the Coachella Valley is under quarantine following detections of the ACP. The pest is of grave concern because it can carry the disease Huanglongbing (HLB) also known as citrus greening disease. Citrus greening is one of the most serious citrus plant diseases in the world, and it is now a serious threat to the U.S. citrus industry because it greatly reduces production, destroys the economic value of fruit and eventually kills trees. Although the disease poses no threat to humans or animals, it has devastated citrus crops in Asia, Africa, the Arabian Peninsula and Brazil.



## The Riverside-Corona Resource Conservation District

RCRCD provides resource management assistance to private and public landusers and conducts land treatment, education, and volunteer programs to steward natural resources. RCRCD fosters the sustainable use of natural resources for each land-use, including native habitats, urban/suburban areas and agriculture.

RCRCD serves parts of western Riverside & San Bernardino Counties; areas surrounding and portions of: Riverside Corona Norco Grand Terrace Colton Reche Canyon Temescal Canyon Gavilan Hills Highgrove Woodcrest



Asian Citrus Psyllid adults are small (3-4 mm or 1/8-1/6 inch), brownish insects that are similar in size to an aphid.

Once a tree is infected, there is no cure. Infected trees produce fruit that are green, misshapen, bitter, and unsuitable for sale as fresh fruit or for juice. Most infected trees die within a few years. Once the Asian Citrus Psyllid picks up the disease, it carries it for the rest of its life. Moving infected plant material, such as potted plants, bud wood and leaves, can spread HLB.

ACPs are most likely to be found on new shoots, and the insect population increases during periods of active plant growth. Their eggs are almond-shaped and range from yellow to orange in color. See photos at—http://www.aphis.usda.gov/hungrypests/photoGallery.shtml

If you think you may have seen the pest or need more information, please call the Pest Hotline at 1-800-491-1899 or visit "Report a Pest" online:

California Department of Food and Agriculture – http://www.cdfa.ca.gov/plant/ReportaPest/index.html

USDA – www.saveourcitrus.org

Citrus Research Board – www.californiacitrusthreat.org



## **Native Seed Production Training**

Eighty-five people learned about farm production of southern California native seed for use in conservation projects, including habitat resoration, hedgerows, and cover crops September 20-21, 2011. Topics included field planting, cultivation and harvesting techniques, seed processing, storage, collection standards, certification and more. The Riverside-Corona Resource Conservation District, Irvine Ranch Conservancy, Bureau of Land Management, and USDA Forest Service sponsored and assisted with the workshop. Sixteen presenters represented agencies, organizations and seed companies. Dr. Arlee Montalvo, RCRCD plant restoration ecologist was the primary organizer of the training.

## **Waterway Conservation**

A joint Riverside County/City Arroyo-Watershed Committee (CCAC) worked from 2003-2011 to protect local waterways, adjoining wildlife habitat and water quality. The committee, comprised of city and county volunteers, sought to improve coordination between the City and County,



reviewed development standards, and worked to educate the community about the value and care of watercourses (streams, creeks, washes, arroyos and the Santa Ana River). CCAC became a standing committee of the City of Riverside and Riverside County in 2004. At the request of elected officials, the committee developed the Riverside Arroyo Watershed Policy Study and Recommendations, which was provided to the County Board of Supervisors and Riverside City Council. Many of the policy recommendations were voted into policy. Main contributors to the study included Dr. Arlee Montalvo, Rick Thomas, and Dr. Cindy Nance.

Supervisor Bob Buster initiated the unique joint County–City committee and provided support from his staff, Robert Caliva and Debbie Walsh. Jerry Jolliffe (now retired) served as a Cochair and the County liaison and worked to incorporate changes into the General Plan. Scott Barber was the City's Co-chair and sought to improve the City's planning process. Jane Block and Frank Heyming took turns serving as citizen Co-chairs.

Community volunteers were appointed to represent each city ward and western Riverside county district: Dave Wahlquist, Lee Cussins, Jennifer Becker, Dick and Hazel Frick, Terry Wold, Wendy Eads, Ann Turner McKibben, Kim Morgan-Davidson, Cathy Perring, Kalina Cox, Debbie Walsh, Richard Puckett, Arlee Montalvo, Rick Thomas, Cindy Nance, and Don Coon. Numerous partners provided support to the effort including Riverside County Flood Control and Water Conservation District, County and City Planning Departments, Riverside Land Conservancy and the Riverside-Corona Resource Conservation District.

On behalf of citizens and endangered habitats, the committee would like to thank our local leaders, especially Supervisor Buster for supporting a vision of wise use of our natural resources.

Read on to view the committee's educational brochure and learn about *Conserving Waterways: Preventing Impacts from Human Activity.* 

# Conserving Waterways Preventing Impacts from Human Activity

The purpose of this introductory guide is to help landowners who wish to use or develop property which includes a watercourse\* or wetland by providing a brief overview of coordinated planning, required permits and a directory of useful contact information.

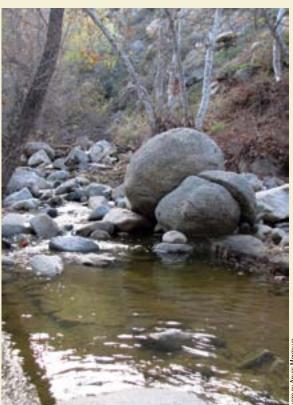
Local homeowners along with developers, planners, and agencies are working together to protect and restore creeks, washes, streams and arroyos\*\*. These waterways are important natural resources that are essential for the quality of our lives. They provide scenic beauty for people to enjoy; supply water, food and homes for native plants and animals; and perform a variety of important services, including:

- · filter and clean water
- minimize flooding
- · control erosion, and
- · percolate water into underground aquifers.

Many waterways have been forever lost where streams are confined to lifeless concrete channels or underground pipelines. Converting waterways to golf courses, roadways, utility corridors, plant nurseries, or farmland destroys the essence of riparian (streamside) habitat. Today we know that it's critical to preserve important habitat and a "green infrastructure" through cities for the healthy functioning of our ecosystems.

Many people are not aware of the activities that can harm waterways and water quality. For example, clearing vegetation or installing fence across a waterway may cause alterations in water flow, resulting in accelerated erosion with increased sedimentation.

The best way to protect a waterway is to avoid disturbance from grading, dumping, vegetation removal, drainage of chlorinated swimming pool water, off-road vehicle intrusion, domesticated animal waste, and more.



Riverside County is fortunate to still have many natural watercourses that provide homes, rest stops, and passageways for migrating wildlife. It's estimated that more than one-third of threatened and endangered species live solely in wetland habitats, while one-half use wetlands at some time.

Watercourse: an area in which water flows, usually with a defined channel, bed and banks; includes the course of any stream, river, creek, drainage way, gully, ravine or wash, whether permanent or seasonal and whether natural or

<sup>\*\*</sup> Arroyo: a water-carved gully, wash, channel or canyon containing a watercourse. Spanish for "brook".

# Steps to Success

## 1. Determine if you have a waterway or wetland on your property.

Often waterways are very apparent, however, not always, especially in dry southern California where many of our waterways do not have visible flowing water year-round. Some creeks and streams continue to flow underground, while others flow for a short time after a storm (ephemeral). These small and often dry washes are also important for native plants and animals. Look where water flows, ponds, or is present even part of the year. If your land includes vegetation which depends on a nearby fresh water source, it is likely that the area is a waterway, wetland or sensitive habitat.

## 2. Contact your city or county planning department (depending on the property location) for guidance through the planning, design and permitting process.

Ask your planner about setbacks (see drawing), grading, zoning, storm water pollution control, and fire safety requirements. There may be deed limitations to consider, so review Covenants, Conditions and Restrictions (C, C and Rs), especially before you purchase property.

If your activities would alter streams or wetlands, you will likely follow the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process. HANS requires that all projects avoid riparian\*, riverine\*\* and vernal pool resources. If 100% avoidance is not feasible, the applicant must submit an analysis supporting a Determination of Biologically Equivalent or Superior Preservation (DBESP). In this case, the County Planning Department will submit the DBESP to the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) for a 60-day review period before the County makes a final determination. There is also an Expedited Review Process (ERP) for single-family home developments.

### Design your project to reduce as many potential environmental impacts as possible.

Through careful design, applicants may be able to avoid impacts to a waterway, and thus reduce permit requirements. For example, a landowner might install a freespanning bridge, rather than a culvert for a road crossing, thus avoiding earth movement and vegetation removal from a waterway. Streamside vegetation helps control erosion. provides habitat, and removes pollutants from water. Preserving vegetation saves the cost of erosion control and habitat restoration.



Improperly designed home sites do not provide a buffer to protect homes, water quality and arroyo habitat.

<sup>\*</sup>Riparian: along a watercourse; the interface between land and a river or stream.

<sup>\*\*</sup>Riverine: of or pertaining to a river.

If you are planning to develop property, consider using "Low Impact Development" (LID) methods. See the Low Impact Development Manual for Southern California at http://www.casqa.org/LID/SoCalLID/tabid/218/Default.aspx.

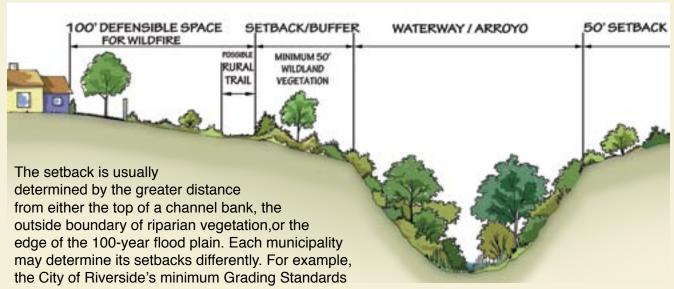
#### **Buffers**

A setback provides a buffer between human activities and wildlife homes plus wildfire hazards. If you plan to build adjacent to a waterway, create a buffer between the watercourse and your human habitat, the area for graded pads, structures, and ornamental landscaping. Wildlife habitat land includes areas beyond buildings, yards, and defensible space (fire safety zones), generally to be left undisturbed. Wildlife depend on habitat for food, nesting sites, water and sanctuary for survival. A buffer provides necessary habitat, escape-cover during high water, and protects homes from flooding.



Endangered Least Bell's Vireo nestlings.

Local municipalities require that buildings and structures be setback from a watercourse, including septic systems, which could leach polluted water into a waterway.



(Municipal Code 17.28) precludes grading or development within 50 feet of the mapped edge of certain waterways and their tributaries. Also, grading of arroyos, "blue line" streams, and for private crossings is not allowed. (http://www.riversideca.gov/municode/pdf/17/17-28.pdf)

#### Fire Safety

The State of California advises that buildings have 100 feet of "defensible space" for protection from wildfires. To learn more about fuel modification and ways to maintain defensible space without damaging habitat, see the publication *Living on the Edge of the Urban-Wildlands Interface* available from the Riverside-Corona Resource Conservation District or at http://www.rcrcd.com/Publications/LivingOnTheEdge.pdf

## Get permits.

Each municipality may handle its process differently, however, each requires permits, such as for land grading. In addition, any activity that would alter streams or wetlands also requires permits by federal and state agencies. Even projects aimed at improving the quality of waterways, such as habitat restoration and stream bank stabilization are subject to permits.

If possible, invite all agencies to the project site at one time. Agency reviewers are sensitive to the concerns of landowners



Encroachment too close to a waterway compromises its ability to function properly.

and will consider alternative designs to try and meet the needs of applicants while still protecting the natural functions of a waterway. Agency representatives will help you determine if and how their agency regulates the watercourse or wetland, as the defined area of the waterway differs among agencies. Factors unique to a project, such as location, biology, project size, timing, and proposed work may trigger permit requirements.

If you need technical assistance with erosion control, such as stream bank stabilization, contact your local Resource Conservation District and/or the Natural Resources Conservation Service.

#### Why Permits?

Permits provide a means to balance use and conservation. They allow agencies to monitor activities and to determine how impacts might affect protected wildlife and plant populations.

#### Permits, Plans and Authorizations You May Need

US Army Corps of Engineers	Section 404 Clean Water Act Permit
Regional Water Quality Control Board	Section 401 Water Quality Standards Certification
	Construction Storm Water Pollution Prevention Plan
California Department of Fish and Game	1602 Streambed Alteration Agreement
US Fish and Wildlife Service	Authorization under the Endangered Species Act
County or City	Grading, Building Permits
California Natural Resources Agency	CEQA Review: Environmental Impact Report
	or Negative Declaration

#### Agency Guide

Use this chart as a guide only. Regulations and laws change, so consult with the agencies and/or with a qualified biologist.

Does your project involve the following?	Agencies you may need to contact regarding a waterway project.					
	City/County Planning Dept. & CEQA Review	US Army Corps of Engineers	Regional Water Quality Control Board	California Department of Fish & Game	US Fish & Wildlife	
Involve bank stabilization or bank erosion control?	•	•	•	•	•	
Require the removal of trees or riparian (in or along a waterway) vegetation?	•		•	•	•	
Affect native plants, wildlife or fisheries?	•		•	•	•	
Result in stormwater discharge into a waterway? Require grading permits?	•		•	•	•	
Divert or obstruct the natural flow or change the natural bed or bank of a waterway?	•	•	•	•	•	
Involve repair, rehabilitation or replacement of any structure or fill adjacent to a waterway?	•	•	•	•	•	
Involve utility pipe lines or building any structure adjacent to a waterway?	•	•	•	•	•	
Use or remove materials from a streambed (including but not limited to boulders, gravel, sand and wood debris)?	•	•	•	•	•	
Involve the addition of any materials, grading or fill near a waterway?	•	•	•	•	•	
Require a water well or involve a septic leach field near a waterway?	•		•	•	•	
Involve a bridge or culvert which crosses a waterway?	•	•	•	•	•	

#### Tips

It's a good idea to start the permit process early in planning. Keep detailed records, date your notes and get everything in writing. When in doubt, ask. Moving ahead without the proper permits or without following all the conditions of approval will very likely cost time, money and goodwill. If a project changes after being permitted, the landowner may be required to amend permits. Each permit has an expiration date and associated costs.



## **DIRECTORY**

If your property is located within city limits, contact your city's planning department, otherwise, contact Riverside County Planning Department.

#### **Riverside County Planning Department**

4080 Lemon St., 12th Floor, Riverside, CA 92501 (951) 955-6097

http://www.tlma.co.riverside.ca.us/planning/index.html

#### **Environmental Programs**

http://www.tlma.co.riverside.ca.us/epd/default.aspx

Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process:

http://www.tlma.co.riverside.ca.us/epd/hans.aspx

Any waterway that contributes to the function and value of one of Riverside County's Multiple Species Habitat Conservation Plan (MSHCP) areas is subject to the HANS process. A MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan focusing on conservation of species and their associated habitats. It allows Riverside County and its cities to better control land-use decisions, while maintaining biological diversity and addressing the requirements of the state and federal Endangered Species Acts.

MSHCP Section 6.1.2: http://www.wrc-rca.org/ Permit\_Docs/MSHCP\_Docs/volume1/Vol1-Sec6.pdf

#### **City of Riverside Planning Department**

3900 Main Street, Third Floor, Riverside, CA 92522 (951) 826-5371 http://www.riversideca.gov/planning/

#### California Natural Resources Agency / CERES

1416 Ninth Street, Suite 1311, Sacramento, CA 95814 (916) 322-3485 http://ceres.ca.gov/

The California Environmental Quality Act (CEQA) requires state and local agencies to follow a protocol of analysis and public disclosure of potential environmental impacts from development projects. For projects with potentially significant environmental impacts, agencies must identify mitigation measures and alternatives via an Environmental Impact Report (EIR). The lead agency is normally the agency with general governing powers, such as a city or county.

#### **US Army Corps of Engineers (ACOE)**

1451 Research Park Dr., Suite 100, Riverside, CA 92507 (951) 276-6624 www.spl.usace.army.mil/regulatory Clean Water Act Section 404 Permit

#### Regional Water Quality Control Board (RWQCB)

Santa Ana Region,

3737 Main Street, Suite 500, Riverside, CA 92501 (951) 782-4230 www.waterboards.ca.gov/santaana/

Do I need a permit?

http://www.waterboards.ca.gov/santaana/water\_issues/programs/permit/do i need.shtml

If your project requires a Clean Water Act Section 404 permit from the US Army Corps of Engineers, you must also obtain Clean Water Act Section 401 Water Quality Standards Certification from the RWQCB. Section 404 and Section 401 applications are often submitted concurrently. Discharges of fill to surface waters of the state that are not within US Army Corps jurisdiction, that is, projects that do not require a Section 404 permit, may require waste discharge requirements issued by the RWQCB.

#### Construction Storm Water Permit

http://www.waterboards.ca.gov/water\_issues/programs/stormwater/constpermits.shtml

For construction projects, the landowner may need a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) to keep storm water runoff clean and free of sediment and other pollutants.

#### California Department of Fish and Game (CDFG)

3602 Inland Empire Blvd, Suite C-220, Ontario, CA 91764 (909) 484-0459

1602 Lake and Streambed Alteration Agreement http://www.dfg.ca.gov/habcon/1600/

Incidental Take Permit: California Endangered
Species Act http://www.dfg.ca.gov/habcon/cesa/

#### **US Fish and Wildlife Service (USFWS)**

6010 Hidden Valley Rd., Suite 101, Carlsbad, CA 92011 (760) 431-9440

How to Obtain a Permit:

http://www.fws.gov/permits/instructions/ObtainPermit.html

## **Helpful Resources**

If a regulatory agency requires mitigation for habitat impacts, a landowner may be required to contract with a non-regulatory entity, such as a Resource Conservation District or Land Trust, to restore and manage habitat.

# Riverside-Corona Resource Conservation District (RCRCD) or contact your local Resource Conservation District

4500 Glenwood Dr., Bldg. A, Riverside, CA 92501 (951) 683-7691

www.RCRCD.com

RCRCD is a non-regulatory local agency that helps private landowners sustain their natural resources. Learn more about habitat restoration and conservation easements from the publication Conserving Critical Habitat at: http://RCRCD.com/Publications/ConservingCricitalHabitat.pdf.

#### **Riverside Land Conservancy (RLC)**

A non-profit land trust.

4075 Mission Inn Avenue, Riverside, CA 92501 (951) 788-0670

www.riversidelandconservancy.org

# Natural Resources Conservation Service (USDA-NRCS)

For Western Riverside (951) 654-7139 www.nrcs.usda.gov

NRCS works with landowners providing erosion control, stream stabilization, and natural resource conservation information.

Field Office Technical Guides

http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg

#### **Low Impact Development Portal**

http://www.casqa.org/LID/tabid/186/Default.aspx

#### **USGS National Hydrography Dataset maps**

http://nhd.usgs.gov/ or http:nationalmap.gov/viewers.html

#### **Riverside County**

Ordinances: Index at: http://rivcocob.com/ords.htm

754: Storm Water/Urban Runoff Management 458: Regulating Flood Hazard Areas (No fencing

across waterways.)

457: Grading and the California Building Code

541: Relating to removal of rubbish

#### Oak Tree Guidelines

http://www.tlma.co.riverside.ca.us/planning/content/devproc/guidelines/oak trees/oak trees.html

#### **Biological Reports**

http://www.rctlma.org/epd/documents BiologicalPoliciesProcedures.pdf

Report illegal dumping in the County (888)782-6263.

#### **City of Riverside**

Municipal Code 17.28.020 Hillside/Arroyo Grading (Minimum Grading Standards)

Code Enforcement (951) 826-2422 Report illegal dumping, call 311.

Grading permits require Planning and Public Works approval www.riversideca.gov/pworks





#### **Project Timing**

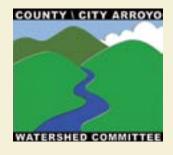
Timing of work is an important consideration in preventing disturbance during breeding and nesting seasons and to prevent erosion during the rainy season. A project's Storm Water Pollution Prevention Plan (SWPPP) will require that erosion control measures be installed prior to earth movement.



The purpose of this introductory guide is to provide an overview of information about legal requirements that may apply to activities that impact waterways and wetlands. Be advised that projects in and adjacent to waterways and wetlands require consultation with multiple agencies and may require permits from each regulatory agency. Due to the complexity of regulations, this guide provides only general information about the process. Each situation requires reviews by agencies with decisions based on applicable laws and site conditions.



Kildeer eggs



This publication is a project of the Riverside County and City Arroyo-Watershed Committee (CCAC) with the assistance of many organizations. The committee works to improve coordination, planning and education concerning local waterways, water quality, riparian habitat and the Santa Ana Watershed. The CCAC includes concerned citizens and representatives of the City and County of Riverside and natural resource agencies and organizations. In 2006, the CCAC prepared the Riverside Arroyo Watershed Policy Study with recommendations for the County Board of Supervisors and the Riverside City Council (http://www.rctlma.

org/planning/ content/geninfo/CCACPolicyStudy.pdf). Many of those recommendations have been, or are in the process of being incorporated into the City and County General Plans and/or procedures. Citizens are invited to join the collaboration.









This publication was developed for the CCAC by and with the Riverside-Corona Resource Conservation District. Thank you to the many partners who participated in its review. Comments and suggestions are welcome: (909) 238-8338, Ruiz@rcrcd.com.

## Waterways Exhibit

Waterways: We're All Connected was the theme of the educational exhibit that was created for the Stokoe Elementary School museum space. Approximately 1500 students visited the exhibit, which ran October 6 -December 16, 2011. Native plants and animals were on display with hands-on exhibits and interpretation about habitat restoration. A trail ran through the exhibit with a bridge crossing the "waterway". Fifteen trail signs taught about outdoor etiquette and waterway stewardship, for example: "Have fun walking alongside waterways, but stay out of the water and streambeds to protect aquatic life, especially fish and amphibians such as frogs. salamanders and toads."

RCRCD collaborated on the development of the exhibit with the Santa Ana Watershed Association (SAWA), Inland Empire Water Keeper (IEWK), and the Stokoe School museum committee including Principal Katherine Rizzo, teachers Dr. Madrienne Johnson, Kathleen Tejeda, and Elizabeth George, Jr. High representative Froukje Schaafsma-Smith, La Sierra High School art teachers Tina Naif and Angel Gomez, retired teacher Delores Hendricks, and volunteer Tom Johnson.











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Web site: http://www.rcrcd.com

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## Dates to Remember

**Urban Forest Management Plan Education Program**: a no-cost opportunity to develop a quality urban forest management plan. Workshops begin **January 25** and run through September. www.inlandurbanforestcouncil.org.

February 17-20 Great Backyard Bird Count www.birdcount.org

**February 22** California Native Plant Society (CNPS) meeting, 7:00 PM. at RCRCD. Sula Vanderplank and Ben Wilder will talk about botanical exploration in Baja California. *www.enceliacnps.org* 

**February 26–29** International Erosion Control Association's International Conference Las Vegas, Nevada <a href="https://www.ieca.org">www.ieca.org</a>

**March 7-14** Plant or maintain a tree during California Arbor Week <a href="http://arborweek.org/">http://arborweek.org/</a>



It's nesting season again, and we are seeking volunteers for the Bluebird Nest Box Monitoring Program. If you would like to check nest boxes and collect data once a week through the nesting season (approximately February through July), please contact Erin Snyder at

(951) 683-7691, ext. 207 or snyder@rcrcd.com. Training will be provided.

Over the past 10 years our Citizen Scientists have given homes to over 1,500 baby bluebirds and other native cavity-nesting birds.



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