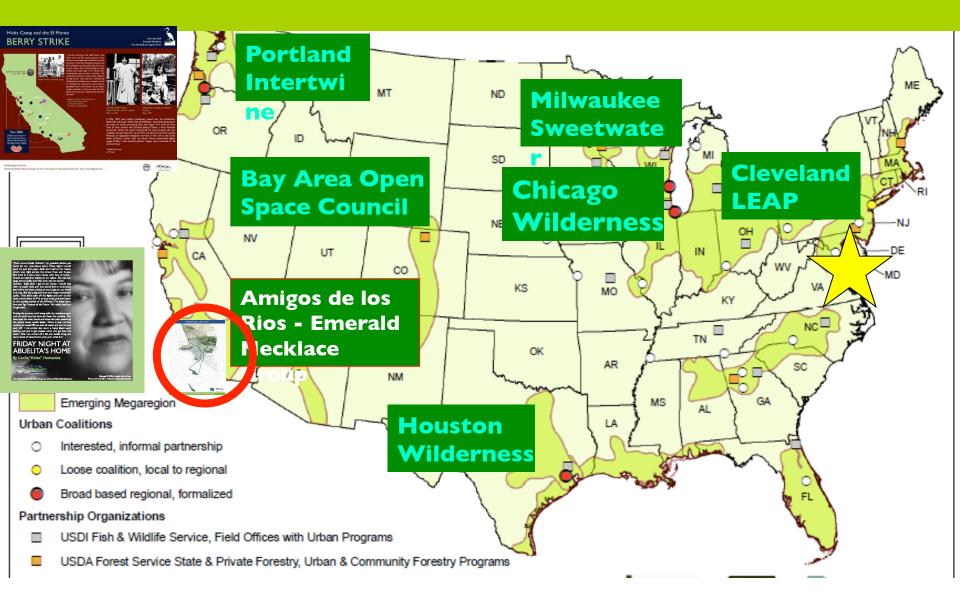
GREEN INFRASTRUCTURE PANEL

CITIES "Metropolitan Areas" AS ECOSYSTEMS

Recognizing that cities are ecosystems – w/
interacting human, structural & ecological
components – creates great potential for
urban forests & green infrastructure to
improve life in urban areas.



METROPOLITAN GREENSPACE ALLIANCE



GREEN INFRASTRUCTURE PROJECTS ACROSS THE COUNTRY

METROPOLITAN GREENSPACE ALLIANCE

URBAN WATERS FEDERAL PARTNERSHIP

- DOI/ EPA/USDA/DOA/DOC/Corp for National and Community Service,
 USDHHS, DHUD/White House Domestic Policy Council (2 of 7 pilot projects)
- URBAN RIVERS RESTORATION INITIATIVE EPA/
- Blueways Trails Initiative
 - (I of 7 Indiana River Initiative)
- NATIONAL RECREATION AREA DESIGNATIONS
 DOI
- Wilderness Protection Acts NPS
- Federal Clean Water Act Compliance
 - Green Infrastructure/Storm Water Rule EPA



Chicago

With 259 member organizations, the Chicago Wilderness Green Infrastructure Vision (GIV) paints a bold picture of the region - protection of the natural areas, corridors, open spaces critical to our quality of life.

Nearly 370,000 acres of natural areas that make up Chicago's Wilderness comprise our "green infrastructure," and are as critical to the people in this region as our built environment and transportation systems.

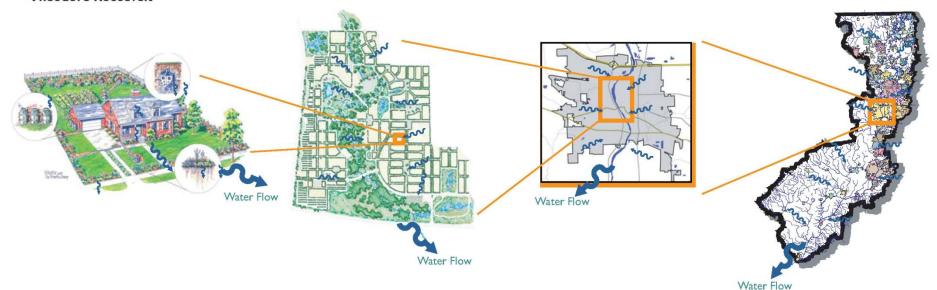
GIV identifies 1.8 million acres of prospective protection and restoration areas in the Chicago Wilderness region — spanning from southeast Wisconsin, through northeast Illinois into northwest Indiana and southwest Michigan.



Chicago Wilderness works to implement green infrastructure at multiple scales

"The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired in value."

- Theodore Roosevelt



Individual Building Lot Scale

Neighborhood or Campus Scale

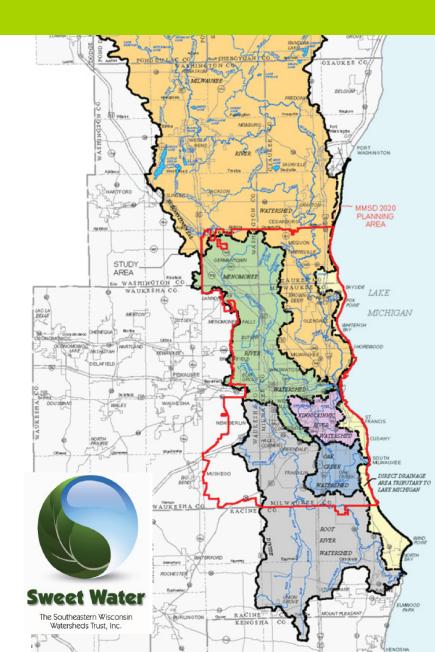
Municipal, Community, or County Scale

Watershed Scale

METROPOLITAN GREENSPACE ALLIANCE

Milwaukee

Sweet Water, the Southeastern Wisconsin Watersheds Trust, Inc., is an awardwinning nonprofit partnership established to achieve healthy water resources throughout the 1,100 square mile Greater Milwaukee watersheds. Recognizing that our rivers travel through the region irrespective of governmental boundaries, Sweet Water addresses the issues facing our five watersheds and near shore Lake Michigan through a cooperative, basinwide approach. Members include local governments, special purpose districts, non-profits, residents and representatives of business and academia.



Our Southeastern Wisconsin Watersheds

Area:

Watershed: (in sq. miles)

Kinnickinnic River 24.7

Menomonee River 135.8

Milwaukee River 700.0

Oak Creek 28.2

Root River 197.6

Lake Michigan Direct

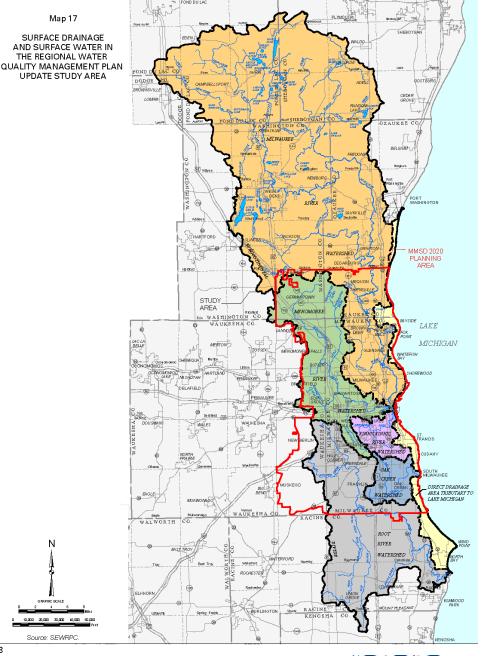
Drainage Area 40.7

Total Square Miles: 1,127.0

Total Perennial River Miles: 600+

Number of Counties: 9

Number of Local Municipalities: 83



















More than 17,000 SOLD

Since 2002

METROPOLITAN GREENSPACE ALLIANCE

Portland Intertwine

is our connected network of parks, trails, natural areas in Portland, Oregon, Vancouver, Washington region.

Intertwine provides unparalleled opportunities to preserve natural areas, open spaces, water and wildlife habitat.

Intertwine reflects region's passion for quality of life encouraging recreation, connection to nature, and active transportation: walking, running and biking.



As urban areas grow denser, Intertwine promotes the health & happiness we so dearly value





California Academy of Sciences: The Living Roof







BioTray®

Releasing the Heat

Above the Museum

 Renzo Piano's masterstroke of design lies in making the park's environment such a visible part of the building itself. The rooftop's seven undulating green hillocks pay homage to the iconic topography of San Francisco and blurs the boundary between building and parkland.

METROPOLITAN GREENSPACE ALLIANCE

Los Angeles County

The Emerald Necklace is a regional Green Infrastructure plan for a 68 mile-long interconnected loop of multi benefit parks and greenways. The network will serve 62 cities in the region and over 2.5 million residents of the Rio Hondo and San Gabriel River Watersheds in East Los Angeles County. Nestled in the heart the San Gabriel Valley and extending from the Angeles National Forest down to the Pacific Ocean, the necklace will provide desperately needed recreation areas for communities suffer from health challenges and social issues associat with a lack of open space and recreation opportunities. The Emerald Necklace will provi alternative transportation corridors, habitat restoration areas, improve air and water quality and celebrate local cultural heritage

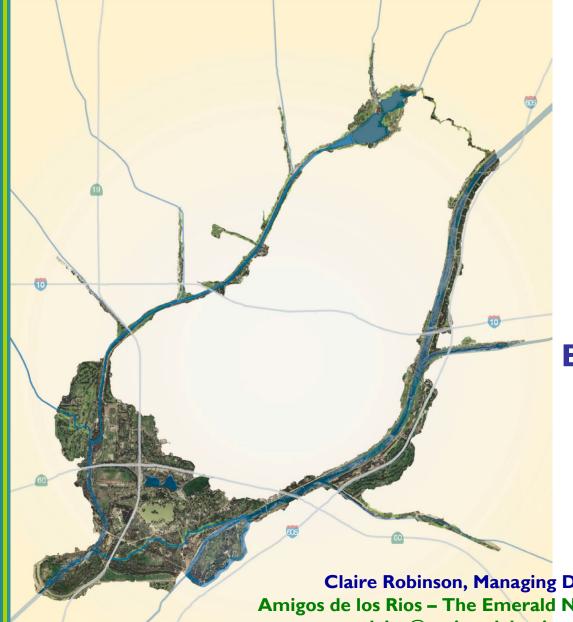
 Serving 62 cities in East County Los **Angeles**

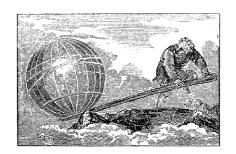
- 5000 plus Acres of Land
- **68 Miles of Multi-Benefit River Trails**











San Gabriel Emerald Necklace

East Los Angeles County

EPA URBAN WATERS
NATIONAL TRAINING

OCTOBER 25,2012

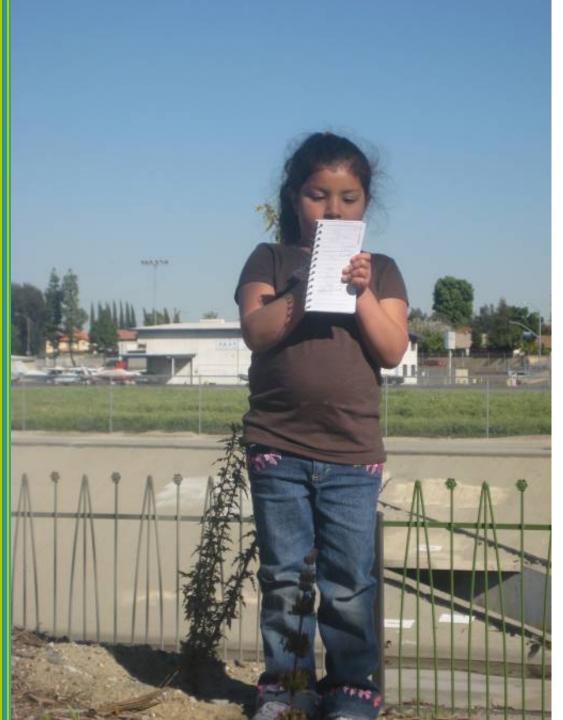
Claire Robinson, Managing Director

Amigos de los Rios - The Emerald Necklace Group

claire@amigosdelosrios.org

626 676 5027





Necessity of

Green Infrastructure:

Majority of the population live in urban areas:

PUBLIC HEALTH

- Access to Recreation
- •Social Equity/Environmental Justice
- Nature Deficit Disorder

•ENVIRONMENTAL HEALTH

- Air & Water Quality
- •Greenhouse Gas Uptake
- •Heat Island Mitigation

•COMPLIANCE FEDERAL & STATE MANDATES

- •Clean Water & Air Acts
- •Ms4 Permits, SB375...

BEAUTY...CULTURE

Olmsted Bartholomew 1929 Green Infrastructure Vision

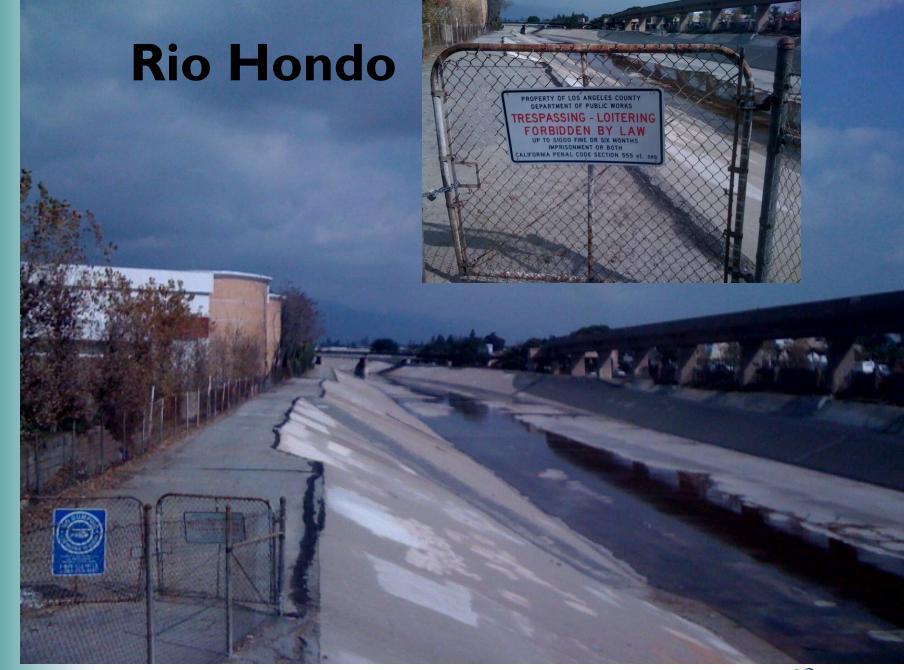




San Gabriel Mountains





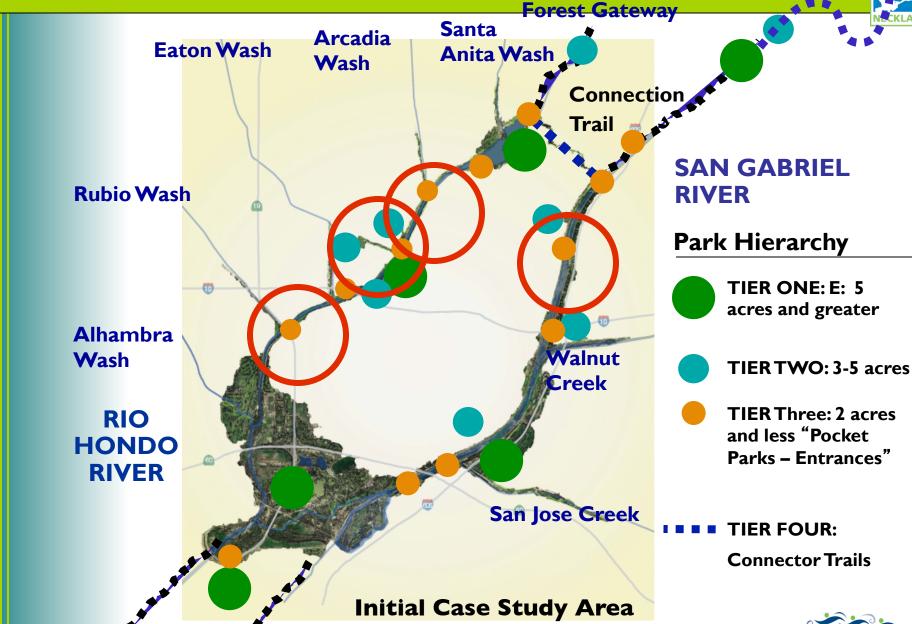




Catalina Island



Emerald Necklace Park Network



'Multi Benefit' Project Components

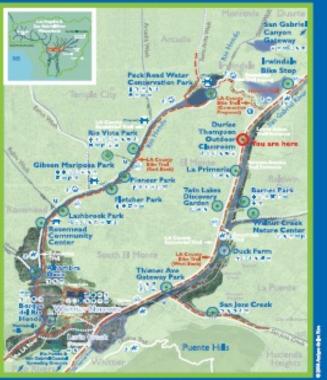
Amigos de Los Rios needs your help!

We have volunteer opportunities at various parks and sites along the Emerald Necklace. Be a part of making the Emerald Greenway a reality. This would be a great opportunity for families to get outside to do some good for the environment and their communities. If you have questions, we'd like to hear from you.





EMERALD NECKLACE





Disting
Nation Plants
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Oncolor-Ohuman
Oncolor-Ohuman

Parkerens D Parker D My Spaperers

> National State Streets

G Tell () Underpas

SAN GABRIEL RIVER



Sign up by contacting us by phone or email: 626.444.8665 volunteer@amigosdelosrios.org



El Collar Esmeralda

El Collar Esmeralda es una visión de una 17 milla cadena de interconectados senderos, parques y caminos verdes tocando a 17 ciudades y casi la mitad de un millón de residentes a lo largo de los Río Hondo y San Gabriel Ríos. La cadena de senderos va conectar 1,500 acres de parques, terrenos abiertos y corredores de hábitat, al mismo tiempo históricamente conectando los ríos de Río Hondo y San Gabriel. El multi-beneficial sistema de parques y senderos va ofrecer crítica oportunidades recreacional y fomentar la salud del público.

Proyecto Detalles: (A un vistazo)

Herencia de Naturaleza y Cultura: Con restauración de hábitat, el carácter original de la tierra y las comunidades del pasado regresan a vida. Las historias de los Latinos, los barrios y los Americanos Nativos están presentes. Esto ofrece a generaciones del pasado y futuro una vislumbre del pasado.

Oportunidades de Recreación y la Salud Publica: El collar Esmeralda ofrece muy importante y necesario oportunidades de recreación para residentes sufriendo de enfermedades crónicas como hipertensión, asma, diabetes y obesidad. También crea alternativas corredores de transportación con oportunidades para caminar y andar en bicicleta para trabajo o la escuela.

La Salud y Restauración del Medio Ambiente: La restauración del medio ambiente y la salud del medio ambiente van mano y mano. Limpiando áreas afectados con quemadura y haciendo restauración de hábitat ayuda a mejorar la salud de los ecosistemas biológicos interconectados.

Biodiversidad Urbana y Hábitat Restauración: Restauración de hábitat ofrece una plataforma para el desarrollo de Biodiversidad Urbana, reforzando el nativo flora y fauna.

Acceso a Naturaleza/Multi Modal Aprendiendo para Jóvenes Margi-

Pados: Escenas naturales forman lugares muy dinámicos donde podemos aprender y esto se ha conectado muy fuerte con mejor funcionamiento en la escuela. Salones de la escuela afuera crean una conexión dentro de los jóvenes de la a cuidad y la naturalaza.

Instrucción de Trabajo Para Jóvenes: El Amigos de los Ríos 'Green Jobs Corp' programa no solamente es para crear trabajos en una economía que lo necesita, pero también da a los jóvenes las habilidades y experiencia para entrar a los trabajos del nuevo y creciendo verde economía. Gestión de Recursos de Agua: El plantando de árboles a lo largo de la Collar Esmeralda ofrece un viable sistema de la gestión de tempestad agua—un árbol intercepta 3,000 galones de lluvia cada año. Además, los proyectos a lo largo de la Collar Esmeralda mejoran la calidad de agua, y también animan conservación por utilizando practicas sostenibles de panorama.



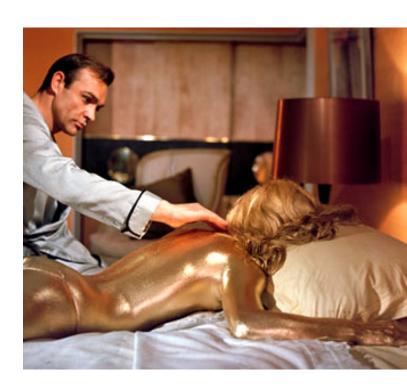
Water Resources

Land Use /Infrastructure

- Parks & Parkways
- Contours and Topography
- Porosity & Permeability
- Matching Sources & Uses of Water

California Friendly Plants

- Knowledge of Native Soils
- Interest in Native Habitat
- Cultural & Natural History



SWALE CULTURE

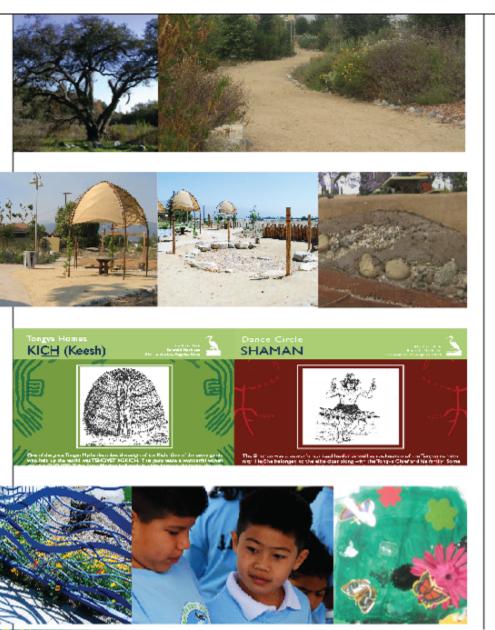
Amigos de los Rios – The Emerald Necklace

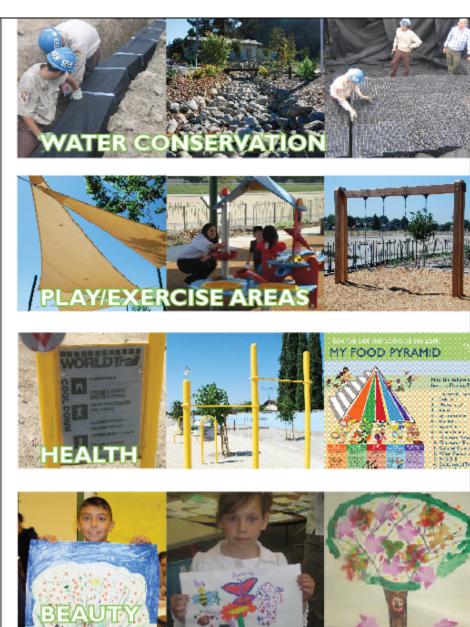






NEXUS STORM WATER MANAGEMENT & CULTURAL/NATURAL HISTORY

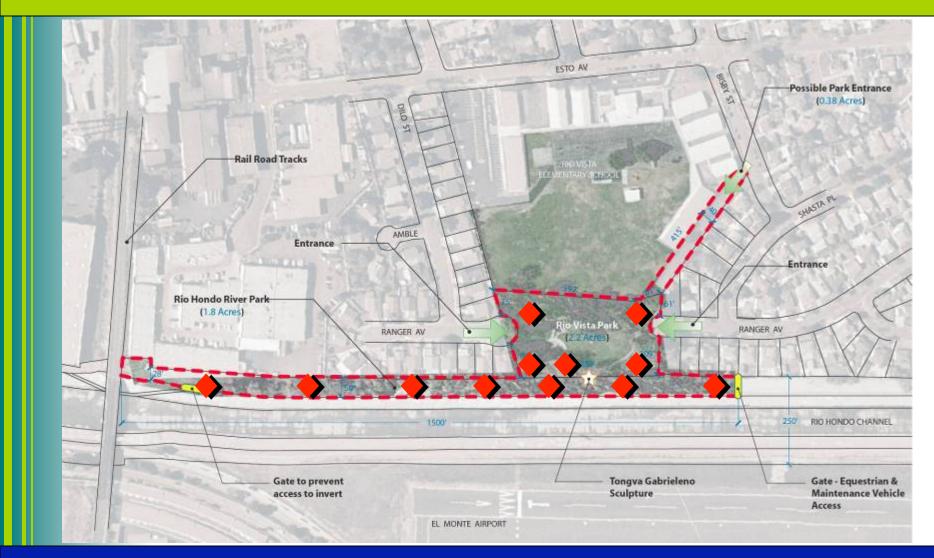




Rio Vista Park







Water Resources: Conservation, Infiltration



Tongva Gabrielino Tribe

KICH (Keesh)





One of the great Tongra Myths describes the origin of the Kigh. One of the seven game who held up the world was TEHOVET NEKICH. This gant wore a wonderful wover on that CHEHOOTT, the Earth Mother had made for him because she fowed him very much. When TEHOVET NEKICH realized that people needed to have shear from the sun and a warm place to go at night, he took off the wonderful woven cap and placed it on the ground and invited people inside. This became the first Kigh or Tongra home. Birds and squirels came and mude an opening for people could enter the giant's cas and swell in their new shelter.

This decorated dome structure exemplifies the typical Tongra Kigh (home). Family as friends helped build thisse structures made from willow and other natural construction materials. The homes were built to be thirty five feet in diameter and twelve to four team feet high. Extended family members shared sections of the homes. One could come into the home by crouching through a low entrance that faced east. Moveme within the home was counter dockwise in reference to the cycle of the sun.

Life along the River **TONGVA**





The Tongva/Gabrielino lived, for thousands of grass to make the different items they years, in the area that is now covered by Los Angeles County and parts of Orange County. dome shaped, and were made by bending They started each day with a prayer to bring out the sun and bathed in the waters of the river. Food was abundant and men chanted then attached as thatching. The domes while fishing and hunting, women sang while they gathered plants, seeds, and shell fish, and the ceiling to let out the smoke from the children laughed while playing in the river. The the small fire that was used for light and sound of Shamans chanting in their sacred house was ever present. If you listen closely, you can still hear the Shamans' chants in the wind and their whispers in the water.

in great red wood and pine blank canoes called were hummed to ensure the goodness Te-ott and fished along the shore using large of the food and to maintain the all important tule canoes. They also crossed to the island balance and connection in nature. areas to trade with their fellow Tongva who chose to inhabit the island areas.

They spent the months from spring to fall gathering food and preparing it for the rest of significance will forever be present. the year. They also gathered reeds and

needed for daily life. Their houses were and tying willow branches into the shape needed and river reeds and grasses were had one entrance and a "smoke hole" in

Plants and animals could not be collected or hunted unless prayers were made to ask the permission of the plant and animal Tongval Gabrielino hunted and fished the sea people. Songs were sung and melodies

> Tongva/Gabrielino, through their culture and rituals, have marked an important era in the history of this area and their



Emerald Necklace Rio Hondo/Los Angeles River

Hunting Tools and













Re- Vegetation of Asphalt Quilt - Global Climate Action/Heat Island Mitig

EMERALD



regional signage system





"Every celebration, every futieral,

every event, we all knew that it

was for everyone,"

We went to school barefoot.

© 2006 Amigos de los Rios. Photos © La Histor a Historical Society. For more information on the history of the Rio Humbo, was a www.LaHisto

"Our playground was the riverbed and all open sp around Hicks Camp."

'Vve didn't have much, the

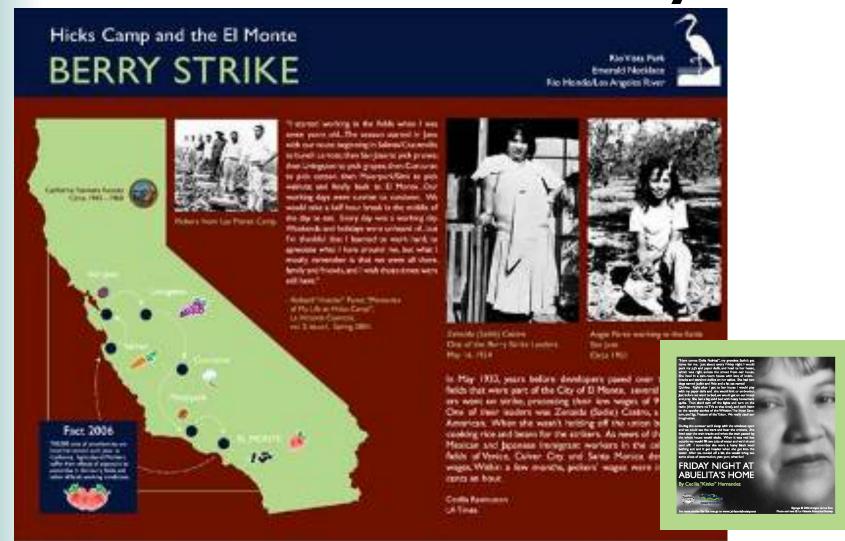
we were all one family.

roads were dirt, some homes

were made of cardboard, but

CELEBRATE Natural & Cultural HISTO

Natural & Cultural History



Green Infrastructure -- Nexus of Natural & Cultural Hi



La Historia Society

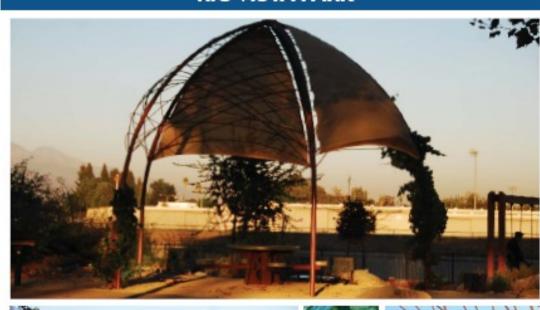


















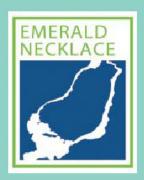




Emerald Necklace Green Infrastructure | Los Angeles County

NEW PARKS

-QUARRY REDEVELOPED





www.amigosdelosrios.org | 3244 Santa Anita Ave | Altadena, CA 91001 | t: [626] 676.5027 | f: [626] 798.2835

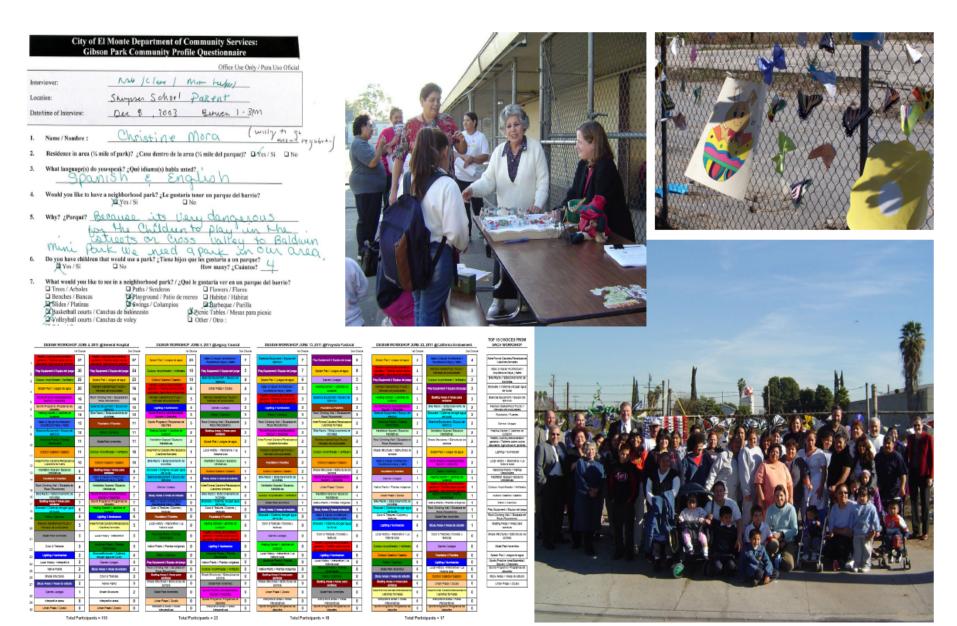


- Sustainably designed parks
- Recreation opportunities & public health
- Cultural & natural heritage
- Air quality & stormwater management
- Habitat restoration
- Environmental education
- Wayfinding & interpretive signage



>peck park water conservation park



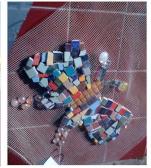


























COMMUNITY BASED DESIGN PROCESS

The fluttering of a butterfly's wings can effect planet.

Climate changes on the other side of the planet.



Amigos de los Rios





Pollinators of Flowers

Butterflies can travel longer distances, ensuring coverage of equal amounts of flowering plants in a larger area. Butterflies pollinate a wide variety of flowers that open during the day. They frequent big, beautiful, brightly colored blooms. Butterflies have superior color vision, sensing more "wavelengths" than either humans or bees.

IN DANGER OF EXTINCTION

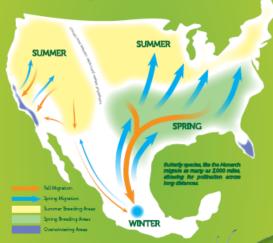
The numbers of these pollinators are being reduced in alarming rates by habitat loss, through urbanization and the overuse of pesticides.

COLLECTING POLLEN



The Amazing Migration

Monarchs are especially noted for their lengthy annual migration, which can take up to three gerenations to complete. The migration cycle of the monarch presents numerous obstacles in which many lose their lives.

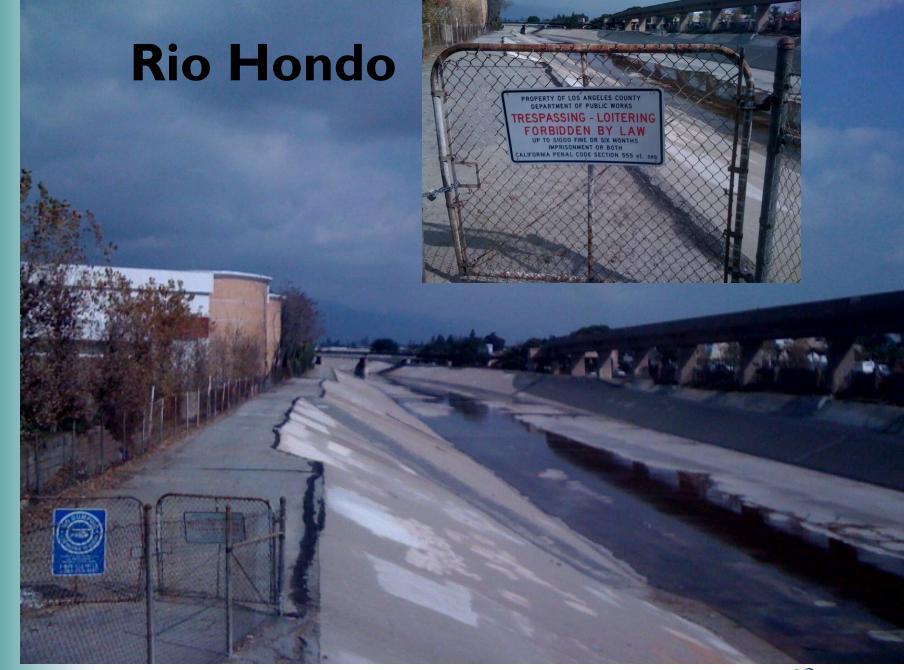


The migrational pattern presently observed originated in the distant past when the monarchs were following the milkweed species which were spreading westward.

ENDANGERMENT

Rising climate changes threaten to disrupt this annual migratory pattern on which the Monarch's existence depends by affecting weather conditions in both wintering and breeding grounds. Colder and wetter winters could be lethal; hotter, drier summers could shift suitable habitats north.













The Green Collar

Environmental Certification Program

WORKING IN THE WATERSHED.

be part of the



Apply through: Felicia Vann Recruitment and Training Los Angeles Conservation Corns 3655 South Grand Avenue, Suite 280 Los Angeles, CA 90007 Tel. 213.747.1872

Fill out an application and mail to:

Amigos de los Rios Altadena, CA 91001

Applications are available online at:

www.amigosdelosrios.org

1st Term 11.1.2006 - 1.30.2007 2nd Term 3.12.2007 - 6.12.2007

* LIMITED AVAILABILITY

Information will be provided on continuing education and job opportunity in the environmental secto

Offers exposure to a broad spectrum of professions in the environmental sector TRAINING PROVIDED IN

atershed Management **Urban Planning** Park Design **Public Art Park Construction** Community Outreach **Park Maintenance Computer Training**



Corps Members who have built Lashbrook Park for the benefit of current and future generations:

Axire Dunmpusi Advantageous Althorn Commons Albert Dates Alexandro, Corora Aire Carponia. Alfiedo Gousso Allegeo Severage Andre De Li Chamme Anther Curtin Assista Ambiene

Anthrie Carrie Angel Dipole Androny Deignals Anthony French I Arrest Taylor & Aris Hartony Million Agricon Tevler Street Parking Carence Green WHIP, Fire! Cetar Courts

Chris Hersenbel Christan Harris Christian Pers. Christia Chees Christopher Einbarn David Graves Donat Lyyes Denai Porce Davin Haliss

Divel banks

for the Supplemental

Ers. Garren Erthe minter Folian Bolerago Surpandy Davores Fernanda Rass Cary Souther Geory Salary Calvery District Gardania Olygonia Guidenno Lossa PARKETON PROFE

Hibran bains Jennal Charm. lones Mortines Jerosty Maja. been Galarda toxics Weller. process Jackiese's Indika Vept. Imve Zivera money Palent per Merjai.

Jane Sulmon mission fevers ass Divory loves til a minima DATE LAPER Instruction SUPPLIES TRAVERS OHER GHTSS.P. SAVERT PROTECTION. Sean Pleases

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Larry Physolians Level Deversors Last Map. List Kp. der Monal Duris Morph Chains PROFITA ANGO Negaras praxido Mathew Halten PROBLET GATES.

Physical hearing

Name Transa Garner - Rathy Trapito III Nichella Fer Navin Stronger Consense Asm 9 Neter Thursmanager Phillip Zissiets Rashel Phylipsesi-Region Roos Rational Physics

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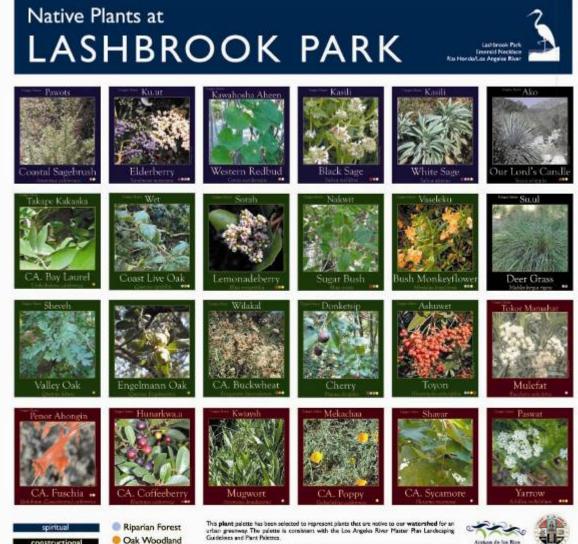
SOLPHOT Divisor

Naphune Heat

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Habitat Creation/Biodiversity





Amigos de los Rios

>lashbrook park









benefits & opportunities

> Water Conservation



>Health



>Play & Exercise Areas



>Beauty



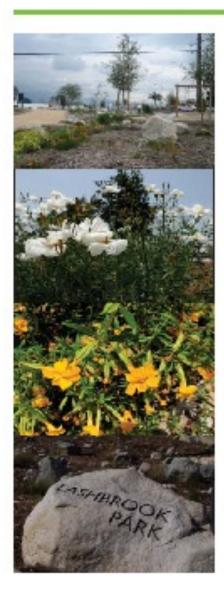
Project Team: Bob Perry, San Gabriel Valley, Los Angeles County

Consultant 3, cost analysis; Consultant 4, signage and graphics.

Funder: Supervisor Gloria Molina, Prop A & RMC and California Conservation Corps, Storm Water Solutions

El Monte, California

Lashbrook Fark

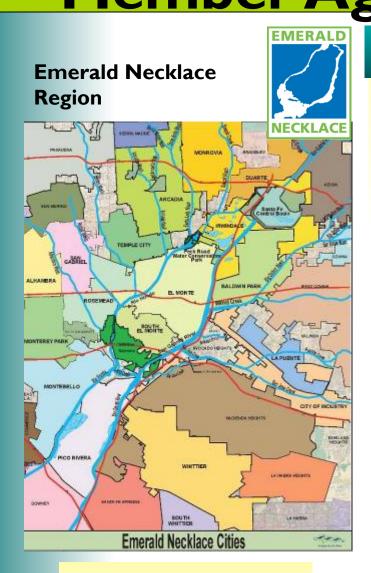






Emerald Necklace Coalition Member Agencies





Local Cities

- · City of Azusa
- City of Bell
- City of Downey
- City of Duarte
- City of Irwindale
- City of Baldwin Park
- City of El Monte
- City of South El **M**onte
- City of San Gabriel
- City of South Gate
- City of Whittier
- City of Monrovia
- City of Montebello
- City of La Puente
- Gateway Authority:
 - 20 Cities

Unincorporated **Areas**

- Hacienda Heights Homeowners' Association
- · Workman Mill Road Homeowners' Association

State & County Agencies

- Rivers & Mountains Conservancy
- Los Angeles County **Board of Supervisors**

Community Based Organizations

- Charro Equestrian Joint Council
- Park El Monte Improvement **Association**

School Districts

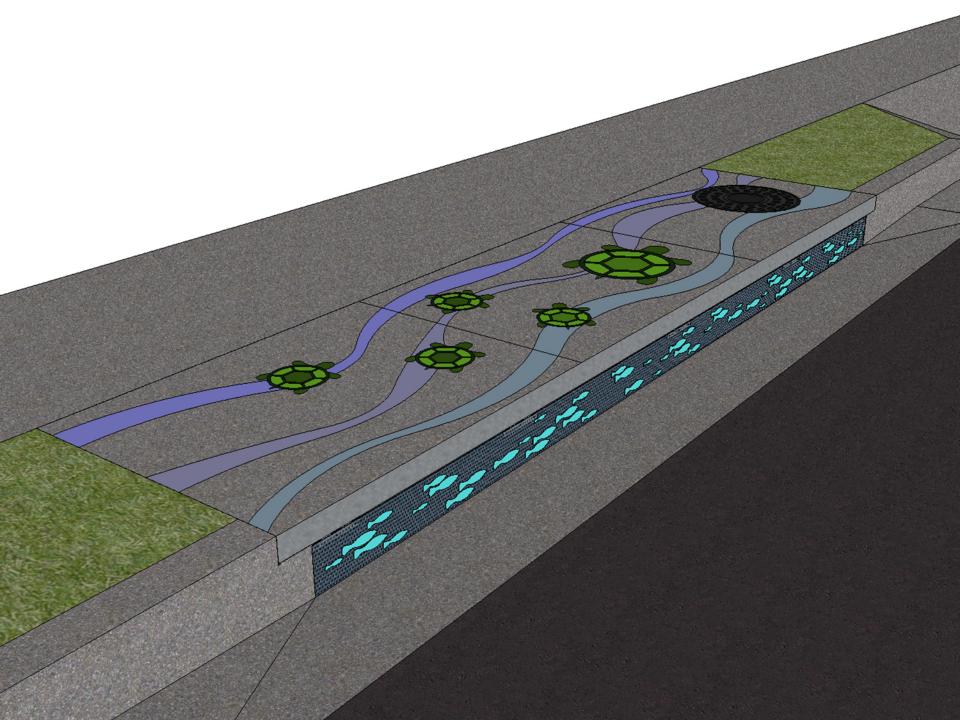
- •El Rancho Unified Pico River
- •El Monte Union
- •El Monte City
- Rosemead
- Mountain View





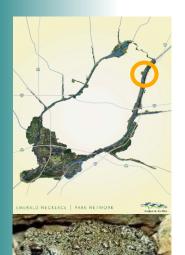
Green Infrastructure – Multi Modal Learning – Green Civitas





Durfee/Thompson School







•State-of-the-art: Sports Field and Perime

Nature Trail

• Outdoor Interpretive Area / Re Connec Nature







City of El Monte

school joint use trail

>Outdoor Classroom



>Educational Signage



>Therapy Area



> Nature Trail





Main - tenir

Hand = To Hold













VOLUNTEER

PARK RESTORATION EVENTS!

SPEND SOME TIME OUTDOORS!

We will be caring for native plants & habitat restoration areas and for park amenitites & interpretive signage.

We will supply the materials, work gloves and tools.

ALL YOU NEED TO BRING IS ELBOW GREASE!





SUPPORT THE EMERALD NECKLACE!

December 17, 2011	Durfee Thompson School 12233 Star St. El Monte, CA 91732
January 7, 2012	Peck Water Conservation Park 5401 N. Peck Rd Arcadia, CA 91006
January 14, 2012	Columbia Elementary School 3400 California Ave, El Monte, CA 91731
February 4, 2012	Peck Water Conservation Park 5401 N. Peck Rd Arcadia, CA 91006
February 18, 2012	Rio Vista Park 4275 RAnger Ave, El Monte, CA 91732
March 3, 2012	Peck Water Conservation Park 5401 N. Peck Rd Arcadia, CA 91006
March 17, 2012	Lashbrook Park 3141 Lashbrook Ave, El Monte, CA 91733



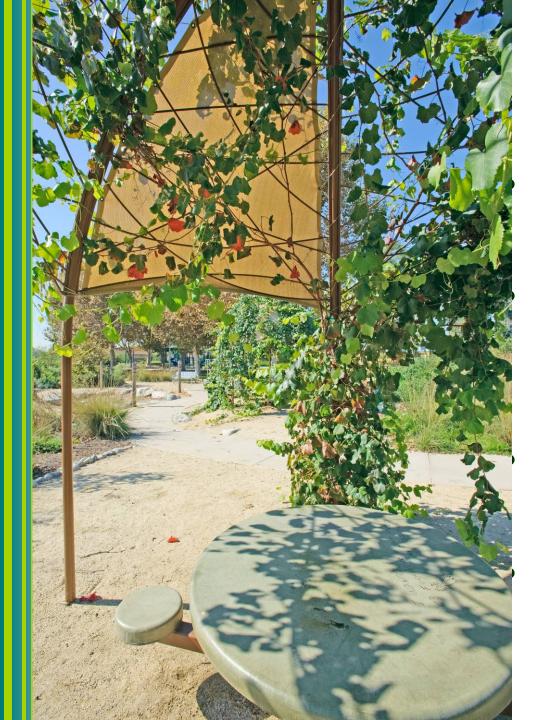
COMMUNITY ENGAGEMENT & STEWARDSHIP

GREEN INFRASTRUCTURE

EMERALD

- Multi Jurisdictional Re-purpose & Adaptive Re-use
- Public Health & Environmental Health
- Water & Air Resources Protection AB375
- Urban "Green Collar Economy"/Project Implementation
- Recreation Opportunities in Underserved Communities
- Urban Biodiversity Protection & Habitat Creation
- Access to Nature/Multi Modal Learning Cultural History
- Embody Identity as a State Local Natural & Cultural Heritage
- Alternative "Non Vehicular" Transportation
- Energy Savings

Global Climate Action/Heat Island Mitigation



Claire Robinson, **President** Amigos de los Rios -The Emerald **Necklace Group** claire@amigosdelos rios.org 626 676 5027