

LYTLE CREEK WATERSHED MANAGEMENT PLAN



STELLAR BLUE TEAM
OCTOBER 20, 2006

LYTLE CREEK WATERSHED MANAGEMENT PLAN

STELLAR BLUE TEAM
OCTOBER 20, 2006

PREPARED BY:

TAKETHA DILLARD
LOS ANGELES NEIGHBORHOOD LAND TRUST
ANNE DOVE
NATIONAL PARK SERVICE RIVERS, TRAILS & CONSERVATION ASSISTANCE
CRAIG FICENEC
ALBA FARMERS
KIM KOEPPEN
ORANGE COUNTY LOCAL AGENCY FORMATION COMMISSION (LAFCO)
KURT MALCHOW
CALIFORNIA DEPARTMENT OF WATER RESOURCES
ELLEN POLLEMA
LYTLE CREEK FIRE SAFE COUNCIL
BILL RICE
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

This document was prepared as a case study project during the October, 2006 Watershed Partnership Seminar sponsored by the CALFED Bay-Delta Program.

■ PURPOSE STATEMENT

This plan is intended to set in motion a process whereby stakeholders come together, generate ideas, plans and action that enhance the vitality and integrity of the watershed while preserving the diversity of its use.

■ INTRODUCTION

The Lytle Creek watershed is a diverse community of trees, shrubs, fish, birds, reptiles, mammals, humans, businesses, and public agencies. Their residences are scattered throughout Lytle Creek Canyon, Lytle Creek Wash, and beyond into the surrounding slopes and alluvial fans.

While there are many challenges, we are presented with a great opportunity to link the destinies of all together to ensure that each will both be a benefit to and benefit from the creation of a healthy watershed.

A partnership formed of these stakeholders and their human supporters can create a concert of consensual voices seeking not to control the river, but to allow it to join as another member of the broader Lytle Creek Watershed community.

■ BACKGROUND

Climate and Geography

The area has a Mediterranean climate with hot, dry summers and cool, moist winters. Daytime temperatures in the summer months frequently exceed 100 degrees in the lower watershed and are about 10-15 degrees cooler in the upper watershed. Winter temperatures can fall below freezing throughout the entire watershed. The lower watershed averages 15-20 inches of rain annually while the upper watershed averages 35 inches annually.

Planning & Regulatory Framework

There are two entities managing the upper portion of Lytle Creek. The public lands are within the boundaries of the San Bernardino National Forest, administered by the U. S. Forest Service. The community of approximately 350 homes is an unincorporated area of San Bernardino County.



Lytle Creek Watershed can generally be described as including the upper, mountainous area, the upper alluvial fan area, and the lower, more urbanized alluvial fan area.

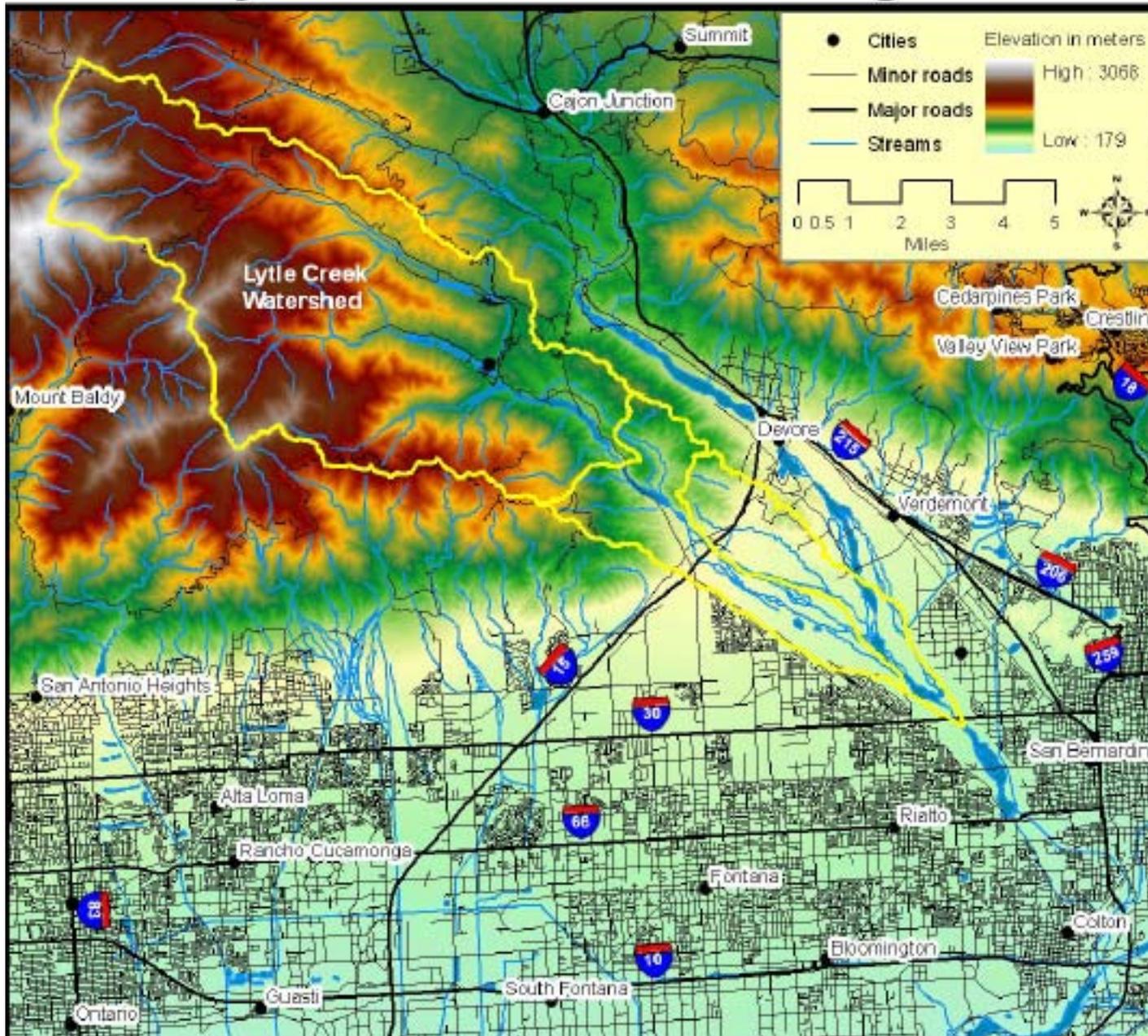
The San Bernardino National Forest manages the upper reaches of the Watershed and is guided by their Forest Management Plan, as well as a variety of Federal Laws and Regulations, Forest Policies and Directives.

The lower portion of Lytle Creek, to the east of Interstate 15 flows through four cities: Fontana, Rialto, San Bernardino and Colton and through unincorporated areas of San Bernardino County. Each area has the potential for new development or redevelopment along Lytle Creek.

Open space planning and recreation are addressed within each entity's General Plan but there are no specific plans to create any parks or greenbelt along the banks of Lytle Creek.

The two major water suppliers that draw from the waters of Lytle Creek are the West San Bernardino County Water District (WSBCWD) and the Fontana Union Water Company (Fontana Union), serving a total of

Lytle Creek Watershed Region



nearly 180,000 customers. Both companies depend primarily upon groundwater supplies from a number of groundwater basins. Additional sources include imported water from the state water project and surface water from Lytle Creek. In some cases surplus water supply is exchanged among contiguous water agencies.

Upper Watershed Description

Lytle Creek itself has three main tributaries, running in separate side canyons: North Fork, Middle Fork, and South Fork. The canyon is approximately 15 miles long, trending northwest-southeast. The creek surfaces in a meadow above the homes and returns underground towards the bottom of the canyon. In addition, there are small streams, springs and waterfalls throughout the area.

Lower Watershed Description

Lytle Creek changes into an intermittent stream with a dry wash below Interstate 15. Its alluvial fan spreads north to the Glen Helen area, southwest to Rancho Cucamonga and southeast to Colton. A small portion at the lower edge of the wash is in a concrete channel.



The upper watershed is characterized by steep slopes dominated by chaparral with big-cone Douglas fir occurring in limited north-facing sloped areas. The wash areas contain limited riparian vegetation along the margins of the creek and alluvial sage scrub on the banks and terraces.

Demographics

Most of California's projected population growth will occur through new births. Net migration, which accounted for more than half of the State's population growth during the 1980s, is expected to account for a significantly smaller share of 1997-2020 statewide population growth (California Department of Finance, 1998). All but 5 percent of California's projected population growth will occur in metropolitan areas.

Further to the east, Riverside and San Bernardino counties are expected to add 570,000 new residents between 1997 and 2010, and 1.1 million new residents by 2020.

The age groups projected to grow the most will be those under 18 and those over 65. Between 1990 and 2020, the number of California



The lower watershed is highly urbanized. In the lower reaches, Lytle Creek has been channelized to provide for flood protection.

children (those 18 and under) is projected to increase by 4.6 million. Children will account for almost 30 percent of the State's population growth between 1990 and 2020, and comprise 27.4 percent of the state's population by 2020. At the other end of the age spectrum, California's senior population (those 65 and older) is projected to increase by 3.2 million persons between 1990 and 2020. Seniors will account for 21 percent of the State's 1990-2020 population growth, and 14 percent of its 2020 population (CA Department of Housing & Community Development).

Stakeholders in the Upper Watershed

- Apx. 1,200 Residents
- Apx. 35,000 Day-Use Visitors Annually
- United States Forest Service
- San Bernardino County Fire Department
- San Bernardino County Public Works

- Southern California Edison
- City of Los Angeles Department of Water and Power
- Verizon (cell towers and switching station)
- Lytle Springs Water Co.
- Fontana Union Water Co.
- Lytle Creek Land Resources Co.
- Lytle Creek Water Conservation Assn.
- Rancho Cucamonga Resource Conservation District
- Mountain Lakes – 100 employees & 10,000 members
- Green Mountain RV Park
- Columbia Real Estate
- Melody's Place
- Scotland Store
- Animal Crackers
- Local Yokel Art Gallery
- Green Mountain (weddings & fishing)
- Bonita Ranch Campground
- Hitching Ranch (Boulder Ranch)
- American Gas
- Shell Gas
- AM/PM Gas & Market
- Jack in the Box Restaurant
- McDonald's Restaurant
- Environmental Groups

Stakeholders in the Lower Watershed

- San Bernardino County
- San Bernardino Associated Governments
- West San Bernardino Valley Water District
- San Bernardino Valley Municipal Water District
- San Bernardino Valley Water Conservation District
- LAFCO for San Bernardino County
- Regional Water Quality Control Board
- City of Fontana
- City of Rialto
- City of Bloomington
- City of Colton

- City of San Bernardino
- California Department of Transportation
- California Highway Patrol
- Eagle Roofing/Burlingame Industries
- Cemex USA
- Vulcan Materials Co.
- Building Industry Association
- San Manuel Band of Mission Indians
- Businesses
- Residents
- Chambers of Commerce
- Business Associations
- Environmental Groups
- Chambers of Commerce
- Special Districts
- Unidentified Stakeholders

■ STAKEHOLDER INTERESTS

In understanding the Lytle Creek Watershed, a key task was not only to identify a broad range of stakeholders, but their range of interests, which include:

- Protect the beneficial uses of the waters of the state.
- Maintain use of Lytle Creek surface water for hydroelectric generation.
- Minimize maintenance of electrical power lines and easements.
- Maintain Lytle Creek as a natural appearing landscape that functions as a location for family-oriented, day-use and dispersed and developed recreation. The valued landscape attributes to be preserved over time are scattered riparian-area vegetation, the presence of mature stands of mixed conifer and big-cone Douglas-fir, the presence of sugar pines, coastal sage scrub, and an age class mosaic in chaparral.
- Manage chaparral and forested areas to provide fire protection for adjacent communities, recreation areas, and wildlife habitat.
- Improve habitat conditions for threatened, endangered and sensitive species over time.

- Identify and protect heritage properties and Native American gathering areas
- Maintain access to the Cucamonga Wilderness
- Limit new and expanded winter sports areas.
- Minimize unauthorized activities and conflicts.
- Minimize costs for taxpayers and ratepayers.
- Provide for a wide range of recreational opportunities in the watershed.
- Provide wildlife corridors and linkages, and ensure landscape connectivity.
- Protect special status species.
- Protect and enhance the biodiversity in the watershed.
- Protect the ecosystem function of the watershed.
- Ensure adequate water supply for all stakeholders.
- Ensure public safety.
- Ensure adequate infrastructure and public services.
- Enhance and promote economic prosperity of stakeholders.
- Retain existing character of mountain communities.
- Provide educational opportunities.
- Preserve significant historical sites and structures.
- Promote and ensure high quality of life for stakeholders.
- Support and enhance wide range of vibrant social and cultural interactions and opportunities.
- Ensure and promote access for all stakeholders to watershed opportunities.
- Develop and maintain a sense of watershed place and ownership for stakeholders.

■ KEY ISSUES

In attempting to develop a portrait of the Lytle Creek Watershed, some specific key issues were identified:

Growth

Over the next 20 years, the estimated population of California will have increased from 36 to 50 million. Much of this growth will take place in the Los Angeles basin, all within a 2 hour drive to the Lytle

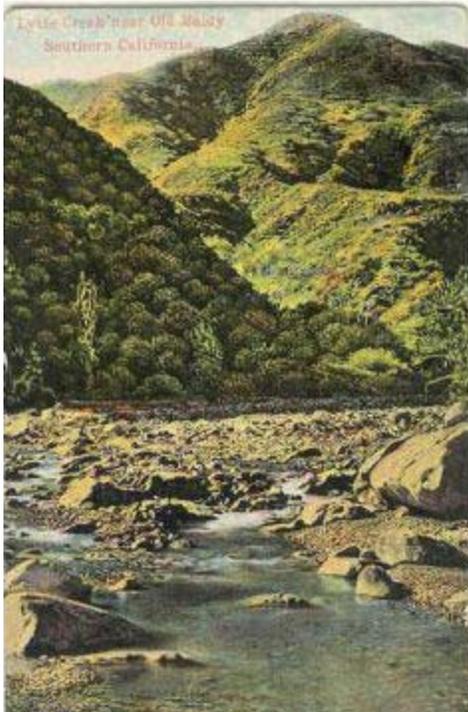
Creek canyon. This level of Growth will impact the watershed area dramatically, as open recreational space is already scarce. Areas dangerously close to the Lytle Creek alluvial fan are under heavy development pressure. These growth and development trends will place a heavy burden on the natural processes that characterize the Lytle Creek watershed. Growth need not be an inevitable threat; but how that growth takes place will affect the long term condition of the watershed.

The Lytle Creek watershed is adjacent to and immediately accessible by 17 million people within the Los Angeles Metropolitan area, with the canyons and cooler climate offering a refuge from the urban landscape during hot weather. Currently, there are no use-capacity guidelines for the forest area. There is no perceived increase of a particular usage mode in the forest area (hiking, shooting, picnic), just a steady increase of all uses. If offered a larger budget, USFS would prefer to install more amenities and interpretive signage (pers com, USFS staff). There is a tremendous challenge with balancing the steadily increasing public use of the area with sustainably managing the watershed's natural resources in the face of budget restrictions.

Human Communities

The Lytle Creek watershed's history and proximity to the Los Angeles area provides an unexplored yet excellent potential to celebrate the area's rich cultural diversity. There is a great opportunity to link the people and resources in the cities representing the lower part of the Lytle Creek watershed to the Lytle Creek canyon community itself. Visitors will appreciate and protect the canyon to the degree that they understand watershed processes and issues that give the area its unique natural heritage. Currently, there is no organization that is specifically directed to reach out to park users and the local community to raise watershed-level awareness of the Lytle Creek canyon.

The lower, urbanized portion of the Lytle Creek watershed currently has insufficient recreational opportunities for citizens. This can be a contributing factor to increased crime, vandalism, and gang



Lytle Creek has long been a recreational destination as evidenced by this antique souvenir postcard.

activity. These conditions could potentially be a concern to surrounding communities since crime does not necessarily recognize jurisdictional or other boundaries.

Water

Adequate water resource supply and quality are required to comply with State and local regulations and ultimately, to sustain life. The State Regional Water Board is committing significant resources to address perchlorate contamination of local groundwater. Grant funding is being sought to address this issue.

Groundwater levels in the Lytle Creek basin fluctuate rapidly in

response to seasonal rainfall. The infiltration rate into the Lytle Creek groundwater basin is high in comparison to surrounding groundwater basins.

Both WSBCWD and FWC expect to be able to meet the growing water demand of rapid development into at least the year 2020. The primary source of future supply is additional extraction of groundwater. Water recycling and customer conservation are also major components of future supply. The agencies also intend to reduce their dependence on imported water, while increasing conservation measures by their water among them to balance needs.

The San Bernardino Valley Municipal Water District's Integrated Regional Groundwater Management Plan includes conveyance, recycling, groundwater recharge, and habitat restoration.



A wide range of recreation activities takes place throughout the National Forest, including target shooting, camping, hiking and off-highway vehicle use. Picnicking in the canyon is particularly popular as is swimming in the creek during the hot summer months.

Upper Watershed Health and Balance

The entire upper watershed of Lytle Creek is managed by the USFS. The current management framework focuses on conservation for sustained recreational use of the watershed's resources.

The USFS is currently looking at a Pass Plan, where forest management activities would be linked between the San Gabriel and San Bernardino mountains. Expansion of facilities are being planned to prepare Lytle Creek for the effects of rapid and inevitable development of the lower watershed. USFS is considering drawing a management "box" around the canyon from Highway 215 to the San Antonio canyon to develop a fireshed rotation structure. Differing area treatments would be employed to restrict fuel loads in ways that suppress fires by diffusing their behavior. This has been an open planning process with local community input. The middle fork of Lytle Creek may soon be designated as Wild and Scenic River habitat. Sustainable managing the resources of the Lytle Creek watershed in the face of budget constraints and the needs of a rapidly growing population in the lower watershed is and will continue to be a tremendous challenge.

Water company demand – the West San Bernardino County Water District and the Fontana Water Company will be seeking additional water supply from the Lytle Creek watershed to accommodate development near the lower watershed.

The Regional Board's designation or re-designation of Lytle Creek could potentially affect Southern California Edison's interest in maintaining its use of Lytle Creek surface water for hydroelectric generation.

To balance the growing needs of recreation, flood management, fire protection, water supply and community development, continuing partnerships are needed between the USFS, San Bernardino County, water districts, community leaders, cities, and citizen's groups to foster a strong leadership capacity for multi-objective watershed management & planning.



Southern California Edison diverts water for use in their hydropower facility in Lytle Creek Canyon at Millers Narrows.

Habitat Loss, Degradation & Fragmentation

Although much of the upper Lytle Creek watershed is protected as part of the San Bernardino National Forest, the lower portion of the Middle Fork canyon and most of the South Fork remain unprotected. The USFS considers both the Middle and the South Forks to be eligible for National Wild & Scenic River designation status for their scenic, fish and wildlife values. There is also an effort to increase protected area for mountain sheep, but this conflicts with efforts to develop a skiing resort.

Ecosystems along Lytle Creek are impacted by the extensive recreational use by visitors. This situation will worsen as surrounding communities continue to grow in population. Riparian habitat corridors are fragmented, lacking the continuity needed to provide critical migration for fish and wildlife. The Santa Ana Speckled Dace population is fragmented and in danger of extirpation. Without habitat continuity, each sub-population will become more delicate in the face of higher disturbance by more human use of the creek for

recreation (USFS staff comment). Such riparian habitat continuity is also needed for other listed species such as the San Bernardino kangaroo rat and the southwestern willow flycatcher (Draft Economical Analysis of Critical Habitat Designation for the San Bernardino Kangaroo Rat, Aug 2001).

Balancing Public Safety and Natural Processes

A tension in the watershed exists between the need to protect life and property while protecting habitat and ecosystem function. The traditional approach to resolving tensions has been to confine and stabilize what are inherently dynamic systems. This is particularly evident with a few key systems, the flow of water, sediment, and fire.

Rapid development is taking place in the alluvial fan portion of the Watershed, which is estimated to offer protection at only the 25-year flood level. The Corps of Engineers, which designed and completed the basin in 1983, maintains the basin can hold back a 100-year flood. Santa Ana Watershed Project Authority officials are mediating the dispute between residents and flood control. Homes in the past have repetitively been destroyed by flooding and debris flows. Continuing to develop directly adjacent to the alluvial fan is creating a protection/construction/destruction cycle that leads to damaged property, lost lives and litigation. Water supply agencies are concerned about a decrease in infiltration due to impermeable surfaces along the alluvial fan from increased development.

Like most chaparral habitats, this is a fire active area. Fires burn with such notoriety that the larger instances have names (i.e. "Grand Prix Fire") and are well remembered by fire crews and residents. Fires are also very common to the point where routine fires accidentally started at picnic areas and the shooting range are welcomed as practice for USFS and CDF fire crews. The threat of post-fire flooding becomes immediate as the summer monsoon season approaches, and flood control officials prepare for the worst with limited personnel and resources. When storms strike, they are capable of producing devastating debris flows from Highland to Upland. The Inland region has weathered some of the most intense rains in U.S. records. The



Lytle Creek watershed is home to some rare vegetation communities including Riversidean alluvial sage scrub which is dependent on flood disturbance. Several special status species such as the Santa Ana speckled dace can also be found in the watershed. In addition to habitat loss and fragmentation, issues such as invasive species such as tree-of-heaven can threaten ecological health.



Disturbances such as fire, erosion, flood and debris flows are an inherent part of the ecological systems of Lytle Creek watershed. The challenges arise when these systems come into conflict with human settlement and goals.

biggest daily rainstorm on record was Jan. 24, 1969, when a Lytle Creek gauge measured 24.92 inches of rain in a 24-hour period. The floods of 1862, 1938 and 1969 remain benchmarks. The Army Corps of Engineers considers the Santa Ana watershed, with its headwaters in the San Bernardino and San Gabriel mountains, the nation's greatest flood threat west of the Mississippi. All organizations and individuals with infrastructure or property within the watershed have a concern for fire protection.

Understanding of watershed issues can help agencies and the public better address erosion.

Funding

The USFS is on a very limited budget, and the rural local population can provide only a limited funding base. Additional funding sources are needed to implement optimum solutions in watershed for providing recreational infrastructure and restoring habitat.



Lytle Creek watershed landscape following the Grand Prix fire.

In the more urbanized areas of the watershed, a broad range of competing goals can make channeling resources toward watershed efforts challenging.

VISION

Based on a cursory analysis of background information, stakeholders and watershed issues, a vision statement was drafted to describe a possible long term vision for the watershed:

“The Lytle Creek Watershed sustainably meets the needs and interests of its stakeholders.”

RECOMMENDATIONS

The following goals and corresponding suggestions for implementation projects, potential partnerships and funding possibilities are a result of one team of seven people collaborating on a very worthwhile project challenge. We acknowledge up front that none of us is an expert in the field of watershed planning or in



The San Gabriel Mountains are the fastest growing mountains in the United States, which result in significant erosion, both in dry and wet weather conditions.



Following intense fire events, hillsides are more prone to erosion. When a post-fire condition is combined with a large storm event, significant flows of water and debris can occur, as was the case following the Grand Prix Fire of 2003. Writer John McPhee in his book *The Control of Nature* described a debris flow in the San Gabriel Mountains: "the dark material...was not only full of boulders; it was so full of automobiles, it was like bread dough mixed with raisens."



Efforts to tame and manage the flow of Lytle Creek in the upper watershed include creating berms along the margins of the creek, which naturally shifts and braids between the walls of the canyons.

understanding the Lytle Creek Watershed in particular. The thread that linked us together initially was the task of completing a watershed plan for Lytle Creek; the glue that solidified us was the potential idea of actually creating some level of a plan that will be useful, informative and a starting point for entities willing and interested in completing a watershed plan for Lytle Creek.

During our two-week watershed partnership seminar our team heard from a pool of tremendously qualified scientists, practitioners and educators with expertise in areas relevant to watershed management. We conducted research and analysis of a vast amount of data and information and completed a brief one-day field study of the majority upper, middle and lower portions of the Lytle Creek watershed. Walking the wash was a key factor in bringing all the “classroom” information into perspective.

At this point in this document we feel it is appropriate to underscore the need to complete an assessment as the critical first step in a community-based planning effort. One mantra recited repeatedly in the CALFED Watershed Partnership Seminar seems to be particularly applicable to community-based projects:

“Seek first to understand, then to be understood”
Stephen Covey, *The 7 Habits of Highly Effective People; Powerful Lessons in Personal Change*

This team is acutely aware of how limited this document is from the perspective of fully understanding the stakeholders, interests, issues and needs of this watershed. We encourage anyone who takes on the effort to develop a watershed plan for Lytle Creek to start with a comprehensive assessment of the subject watershed.

Goal #1: Integrated and optimized groundwater recharge, stormwater management, habitat, restoration and urban recreation.

Water users, urban citizens, and wildlife can simultaneously benefit from projects that combine stormwater infiltration with urban

greening, outdoor recreation and native re-vegetation along the Lytle Creek corridor. Existing developed properties in the historical riparian zone should be considered for redevelopment to re-charge groundwater, provide outdoor recreation for local citizens, and expand habitat for native species. Developing such combined-use physical spaces also provides opportunities to achieve the education and outreach objectives of goal #3. Multi-objective approaches can also increase funding opportunities by providing greater returns on capital investments.

Implementation Opportunities/Options

In the Urbanized Alluvial Fan Area

- Inventory properties near the lower Lytle Creek channel with simultaneous potential for infiltration and urban recreation, and pursue options for their use as parks, sports, or educational facilities.
- Where possible, retrofit hardened channels into a naturalized channel.
- Along natural or re-vegetated drainage channels, create secure and accessible greenways that connect neighborhoods, provide for recreation, and enhance natural habitat.
- Beyond the riparian zone, design and implement a neighborhood retrofit program for watershed BMPs focusing on stormwater recharge

In the Alluvial Fan/Mountain Interface Area:

- Establish ecological buffer zones at the alluvial fan margins for water quality enhancement, storm water retention, and habitat protection and enhancement.
- For undeveloped areas with the highest habitat and water resource management value, explore land conservation opportunities and strategies including acquisition, mitigation and transfer of development rights.
- Research and develop incentive programs for watershed-sensitive development

Upper Watershed Area:

- Explore management of Lytle Creek in the upper watershed as a contiguous riparian habitat corridor. Focus limited resources for restoration efforts along the most degraded sections of the creek in a manner that provides potential habitat for special status species. Riparian corridors offer the highest quality habitat for wildlife to seek food, water, shelter, and necessary migration.
- Develop a planning framework to utilize the recreational areas of upper Lytle Creek sustainably in the face of possible future overuse from nearby rapidly developing communities. While the forest designated areas will not be further developed, the rising surrounding population will have a significant impact on natural resources, most notably the riparian corridor. The USFS could coordinate with the cities of Rialto and Fontana, and San Bernardino County to address this issue.

Watershed-wide:

- Transform drainage channels into locally-accessible greenways that connect the San Bernardino National Forest to urban communities to provide for recreational trails, habitat enhancement, urban greening and water quality enhancement.
- Protect, enhance and restore habitat and open space connectivity.

Potential Partners:

- Federal & State: USFS, CDF, UC Riverside, CSUSB, legislative representatives
- Regional/County: Regional Water Quality Control Board (RWQCB), San Bernardino County, Riverside County, LAFCO
- Cities: Rialto, Colton, Fontana, San Bernardino
- Businesses/Water use entities: Southern CA Edison, Fontana Union Water Co, West San Bernardino Valley Water District, San Bernardino Valley Municipal Water District and San Bernardino Valley Water Conservation District
- Community: Non-profits, Habitat for Humanity, neighborhood residents
- Media (marketing)
- Lytle Creek Watershed Council (LCWC)

Goal #2: A comprehensive, multiple stakeholder-focused community outreach and education program focused on preserving, protecting and enhancing the diverse regional watershed footprint

This watershed plan recommends a community education and outreach plan that attempts to access and integrate stakeholders of the upper and lower regions of the Lytle Creek Watershed. There is a great diversity of physical, social and environmental conditions between the upper and lower sections of the watershed. We see education and community outreach as a tool to unify the watershed. The upper part of the watershed has a population of 1,258 persons living a very rural mountain existence while those 1,709,434 residents living in the lower section live in a highly urbanized environment. Although both populations share the same watershed resources, particularly for recreation, their watershed awareness level may be different. Those that reside in the lower portion of the alluvial fan may not be aware that they are part of the same watershed as their upstream neighbors. If implemented, we believe these education and outreach objectives may help increase awareness and create connections within the entire Lytle Creek watershed community.

Implementation Opportunities/Objectives

- Develop a new non-profit that facilitates linkages bridging the gap between geographic and socio-economic boundaries within the watershed. The groups from the upper and lower portions of the watershed with focus on developing community outreach and education programs and restoration projects.
 - Capacity building program for leadership in community engagement. Target audience would be agency representatives, youth
 - Implementation Strategy could include identifying community partnerships that would focus on programs and projects that bridge the watershed community.
- Deliver watershed awareness outreach to Lytle Creek water consumers
- Design Watershed Education K-12 curriculum that corresponds with California Standards.

- Create “Kids for the Creeks” program that targets kids hands on, in field and classroom environmental education programs on Lytle Creek watershed management in your own backyard. Perhaps bring together youth from diverse socio-economic backgrounds and communities.
- Develop a comprehensive interagency/stakeholder outreach/marketing plan with branding that includes logo, mascot flora & fauna, etc. for all-agency use. Potential mascots could include “Barney the Burned Manzanita” and “Scottie the Speckled Dace”.
- Develop a community-based, participatory program for developing parks/open space/trails plan

Potential Partners:

- Federal & State: USFS, CDF
- Regional/County: RWQCB, SAWPA, LAFCO
- Cities of Rialto, Colton, Fontana, San Bernardino
- Businesses/Water use entities: Southern California Edison, Fontana Union Water Co, West San Bernardino Valley Water District, San Bernardino Valley Municipal Water District, Burlingame Industries, Cemex, Vulcan
- K-12 School Districts
- Community: Non-profits, Habitat for humanity, neighborhood residents/landowners
- Media (marketing)
- Lytle Creek Watershed Council
- Sierra Club
- Friends of the River
- Faith-based organizations
- American Waterworks Association
- PTA California Congress of Parents, Teachers and Students
- Kiwanis International
- University of California, Riverside
- California State University, San Bernardino
- University of Redlands
- Lytle Creek Community Center
- Lytle Creek Senior Center
- Lytle Creek Fire Safe Council

Goal #3: A coordinated network of policies, regulatory oversight and funding opportunities to achieve the stated vision for the Lytle Creek watershed

In creating this watershed plan for Lytle Creek, it became clear that there may be potential opportunities for local policy and regulatory agencies to have a more positive affect on the health and vitality of the watershed. We make the following goal and implementation suggestions to help facilitate moving towards achieving a long-term vision for the watershed.

Implementation Opportunities/Objectives:

- Form a watershed council that coordinates stakeholder communication, provides a proactive presence in the region, and focuses on optimum health, function and preservation of the LC watershed.
- Develop a new non-profit that facilitates development of a watershed council and development and implementation of a watershed plan.
- Seek commitment from Santa Ana Watershed Project Authority (SAWPA) to include a proposal in Integrated Regional Watershed Management Plan (IRWMP) to develop a watershed plan for Lytle Creek watershed.
- Conduct an area-wide review of development policies and seek consistency for properties adjacent to Lytle Creek.
- Where possible, seek consistency in federal, state, regional and local planning and regulatory agency policies and practices within and adjacent to the Lytle Creek Watershed.
- Integrate community wildfire protection programs as a part of watershed planning.
- Seek commitment from Regional Water Quality Control Board (RWQCB) to include an item on its watershed management chapter priority list for development of a Lytle Creek watershed plan.
- Identify and prioritize recharge opportunity areas in watershed and designate “watershed overlay zones” where building and development codes and standards require groundwater recharge BMPs.
- Develop water rate structures that penalize overuse; apply extra

revenue towards development of groundwater recharge projects/ stormwater BMPs.

- Engage the regional agencies such as LAFCO and/or San Bernardino Associated Governments to facilitate discussions addressing regionalizing watershed issues.

Potential Partners:

- Federal & State: US Forest Service (USGS), California Department of Forestry (CDF), CalTrans, legislative representatives
- Regional/County: RWQCB, SAWPA, San Bernardino County, Riverside County, LAFCO
- Cities of Rialto, Colton, Fontana, San Bernardino
- Businesses/Water use entities: Southern California Edison, Fontana Union Water Co, West San Bernardino Valley Water District, San Bernardino Valley Municipal Water District, Burlingame Industries, Cemex, Vulcan
- Community: Non-profits
- Media (marketing)
- Lytle Creek Watershed Council

Potential Funding Sources

Grant funds may be available from the agencies and organizations listed below to develop plans, and design and implement projects. These funding agencies and organizations usually, but don't always, require matching funds. These matching funds may be provided in the form of in-kind services or direct monetary contributions. Please note that is not a complete and comprehensive list of potential funding sources.

- State Bonds Funding (Props. 13, 40, 50, and 84)
 - State Water Resources Control Board
 - Department of Water Resources
 - Department of Parks and Recreation
 - Department of Health Services
- Metropolitan Water District (MWD)
- Nature Conservancy
- The Wildlands Conservancy
- San Bernardino and Riverside Counties

- CALFED
- Cities of:
 - San Bernardino
 - Rialto
 - Colton
 - Fontana
 - Rancho Cucamonga
 - Ontario
 - Riverside
 - Loma Linda
- US Environmental Protection Agency
- Southern California Edison
- Burlingame Industries
- Cemex
- Vulcan
- Habitat for Humanity
- Private Grants

MEASURES OF SUCCESS

As a living roadmap, a Watershed Plan needs stewardship to remain vibrant and alive. In this context, it is recommended that the Plan be re-evaluated periodically to assess the extent to which progress has and has not been made as part of an adaptive implementation process. Some measures of success might include:

Administrative

Year one:

- Has a watershed council been formed?
- Has a non-profit been established?

Within five years:

- Has a watershed plan been developed?

Economic

Year one:

- Have funding sources been identified?
- Have partners budgeted money for programs/projects?
- Have cost effective projects been identified/implemented?

Within five years:

- Is watershed plan included in strategic plans of affected agencies?

Bio Physical

Year one:

- Create baseline data as a point of reference for future progress
- Get geomorphic and biomorphic data

Within five years:

- Measure population change in target species against the baseline data to measure impacts
- Has there been any net recovery of or reestablishment of special status species?

Social

Year one:

- Have community stakeholders been identified?
- Have projects been created, developed, funded?
- Has a baseline survey been created and distributed?
- Baseline awareness of watershed

Within five years:

- Has watershed awareness survey been conducted?
- Has the knowledge/awareness of watershed issues increased?
- What is the percentage of participation in projects from diverse communities within the watershed?

■ CONCLUSION: MOVING FORWARD...

Successful watershed management includes not only the interactions between water, plants, wildlife, flood management structures and regulations, but the relationships between the watershed's stakeholders. The team that prepared this "plan" could only make informed assumptions about the watershed's stakeholders and their interests. With that in mind, the most important recommendation being proposed for moving forward is to encourage the watershed's stakeholders to begin this relationship and partnership-building process. It is only by bringing together the Lytle Creek watershed stakeholders in an open, honest, respectful and inclusive manner that these relationships can be cultivated and sustained.

To begin, someone within the watershed will have to take the lead in identifying and convening stakeholders. Some of these stakeholders will be obvious and easy to engage. Others will be reluctant and even suspicious. Many will be unexpected. While there may be a temptation to define and prioritize who is more appropriate to be at the table, anyone who thinks they are a stakeholder is a stakeholder and thus is entitled to be there. The path this group takes to figure out what their interests are, where they want to be in the future and how they get their will be an unique journey that they will need to define themselves.

A frequently cited quote about watersheds is that "A river is the report card for its watershed". However, it is just as likely that the quality of relationships between stakeholders is as important a metric for understanding watershed health and functionality. It's now in the hands of the stakeholders to determine their collective future.

