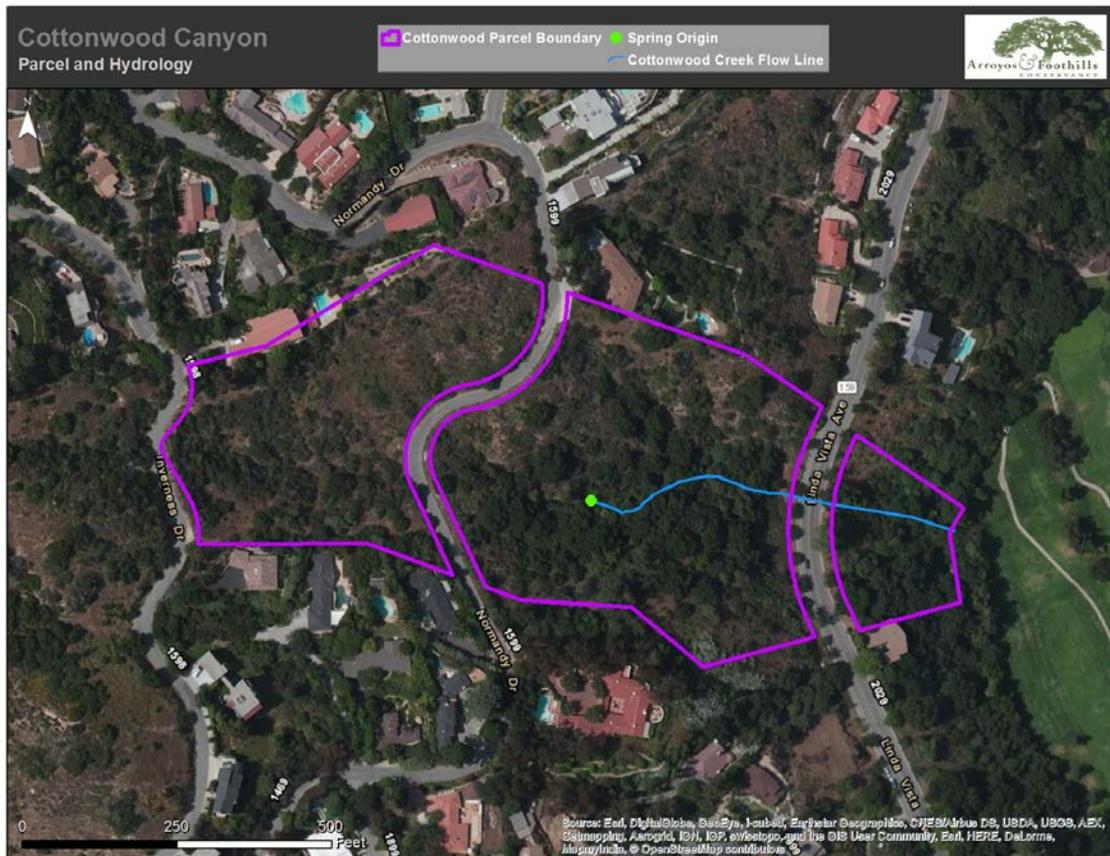




# Cottonwood Canyon Acquisition Project



## Santa Monica Mountains Conservancy Proposition 1 Grant Program Application

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**SANTA MONICA MOUNTAINS CONSERVANCY  
Article I. GRANT APPLICATION**

<b>Project Name:</b> Cottonwood Canyon Acquisition Project	<b>Amount of Request:</b> \$688,482					
<b>Applicant Name:</b> Arroyos & Foothills Conservancy	<b>Total Project Cost:</b> \$1,721,573					
	<b>Matching Funds:</b> \$1,033,091					
<b>Applicant Address:</b> P. O. Box 1 Pasadena, CA 91102	<b>Lat/Long:</b> 34.105009/-118.103288					
	<b>Project Address:</b> NA					
	<table border="1"> <tr> <th>County</th> <th>Senate District</th> <th>Assembly District</th> </tr> <tr> <td>Los Angeles</td> <td>25</td> <td>41</td> </tr> </table>	County	Senate District	Assembly District	Los Angeles	25
County	Senate District	Assembly District				
Los Angeles	25	41				
<b>Phone:</b> (626) 796-0782	<b>Tax ID:</b> 95-4790045					
<b>Email:</b> arroyosfoothills@gmail.com						

**Grantee's Authorized Representative:**

John R. Howell, Chief Executive and General Counsel  
*Name and Title*

(626)796-0782  
*Phone*

**Overhead Allocation Notice:**

Any overhead costs will be identified as a separate line item in the budget and invoices.

The Conservancy encourages grantees to reduce overhead costs including vehicle and phone expenses.

The overhead allocation policy has been submitted prior to or with the grant application.

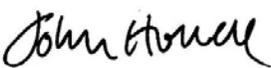
*All check boxes must be checked*

**Project Description:** The Cottonwood Acquisition Project is a multi-benefit ecosystem and watershed protection project for the acquisition of 11 acres of threatened natural canyon property on the east slope of the San Rafael Hills, terminating on its east end into the Arroyo Seco (the "Cottonwood Property"). Cottonwood Canyon is the only discernible wildlife corridor between the Arroyo Seco, and the San Gabriel Mountains beyond, to 2400 acres of natural open space in the San Rafael Hills ultimately connecting again to the San Gabriels in the west via Big Tujunga Wash (the "Hahamongna to Tujunga Wildlife Corridor"); the Cottonwood Property is a pinch point in this corridor filled with riparian habitat. It contains a perennial spring that recharges Raymond Basin groundwater. It is one of only 2 year-round water sources for animals along this entire corridor. Preserving the Cottonwood Property is a strategic investment in our natural resources that will combat climate change and supports the Santa Monica Mountains Conservancy's Grant Program priorities to help protect our natural resources from severe dry periods and to conserve and manage our water supply.

Tasks / Milestones:		Budget:	Completion Date
Land purchase cost	Purchase agreement with extension option	\$1,352,000	October 26, 2016
Project Administration	Attorney's fees, staff, development, fundraising	\$228,230	Ongoing
Eligible acquisition costs	Biological studies, appraisals, mapping, closing	\$37,482	Ongoing
In kind donations	Professional time expended to date	\$103,861	Ongoing

**For Acquisition Projects:** APN(s): 5704-009-002, 5704-001-054  
Acreage: 10.44

I certify that the information contained in this Grant Application form, including required attachments, is accurate.

 \_\_\_\_\_

11/30/15
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*Signature of Authorized Representative* *Date*

**Question 1: A detailed scope of work, including a list of specific tasks, a detailed budget, and a timeline for project implementation (including a completion date for each task);**

Project Statement

Under a dense oak canopy just above Brookside Golf Course in Pasadena, a year-round spring bubbles out of the hillside providing water and a thermal refuge for animals traveling from Pasadena through the San Rafael Hills over to Glendale. Development threatens to cut off this wildlife passage forever. Preserving the 11-acre gateway to this corridor is the goal of the Cottonwood Canyon Acquisition Project. Arroyos & Foothills Conservancy ("AFC") has a purchase agreement to acquire this property (the "Cottonwood Property"). Our community fundraising efforts have raised \$374,778 cash and \$103,861 of in-kind labor (mostly professional) towards the acquisition of the Cottonwood Property and the ongoing effort to preserve the entire Hahamongna to Tujunga Wildlife Corridor. We now need the land cost of \$1.352,000. We request half the purchase price, \$676,000 along with \$12,482 of eligible acquisition costs from Santa Monica Mountains Conservancy's Proposition 1 program for a total of \$688,482.

Project History

Pursuing our Conservation Program, AFC learned 11 acres of land in the San Rafael Hills' Cottonwood Canyon (the "Cottonwood Property") were to be listed for sale. We found (i) large mammals frequent it; (ii) property spring generates year-round flow; (iii) wildlife moves from the San Gabriel Mountains down the Arroyo Seco and up Cottonwood into the San Rafaels; (iv) wildlife also move south to Debs Park; (v) San Rafaels have 2400 acres of natural open space and (vi) Cottonwood Canyon is the only wildlife corridor into the San Rafaels. Biologists applied a land evaluation matrix and ranked it high priority. An appraisal was obtained and AFC signed a purchase agreement in October, 2013. Two Department of Fish & Wildlife ("DFW") biologists visited property on 12/4/13 and verified wildlife passage. On 2/2/15 DFW authorized preparation of a Conceptual Area Protection Plan ("CAPP") for the Cottonwood Corridor plus Verdugo Mountains to San Gabriels at Big Tujunga ("the Hahamongna to Tujunga Wildlife Corridor" see map at page 22). AFC hired Kristeen Penrod to draft the CAPP, funded 2/3 by SMMC, 1/3 by AFC. AFC received a draft and will deliver the study to DFW in December, 2015.

AFC set a \$300,000 community fundraising goal for project management and corridors expansion. The community responded by donating \$374,778 to date. AFC now seeks funding for the land and acquisition costs. AFC formed the volunteer community group Friends of Cottonwood Canyon to help engage the community and manage the property. Future project phases will restore habitat; explore bringing stream to the surface from underground culvert; follow best practices to address climate change and work with stakeholders to prioritize other corridor lands to acquire. Acquisition protects the resiliency of the Cottonwood Canyon corridor and its wildlife populations; if sold for development, passage to and from the San Rafaels would be cut off, creating a biological island and the perennial water source, one of two feeding the Arroyo Seco, would be in jeopardy. Cottonwood is the first step in restoring the natural animal flow through the Hahamongna to Tujunga Wildlife Corridor. Preserving the Cottonwood Property is consistent with priorities of this solicitation as well as numerous watershed and area conservation plans.

Budget

<b>Cottonwood Canyon Acquisition Budget</b>				
<b>Task</b>	<b>Total</b>	<b>AFC</b>	<b>Other Grants</b>	<b>SMMC Prop 1 Request</b>
Land Cost	\$1,352,000		\$676,000 (DFW)	\$676,000
Appraisals, Surveys, Preliminary title report, mapping, anticipated closing costs, attorney's fees	\$31,887	\$19,405(atty fees)		\$12,482
Conceptual Area Protection Plan (Prior SMMC grant contributed \$16,667 to this plan)	\$25,000	\$8,333	\$16,667 (SMMC)	\$0
Project administration	\$208,825	\$208,825		0
Volunteer time of Professionals and Specialists Expended through June, 2015	\$103,861	\$103,861		0
<b>Total</b>	<b>\$1,721,573</b>	<b>\$340,424</b>	<b>\$692,667</b>	<b>\$688,482</b>

Scope of work and timeline for deliverables

	<b>Task Title</b>	<b>Deliverables and Key Project Milestones</b>	<b>Estimated Completion Dates</b>
1	Pre evaluation	<ul style="list-style-type: none"> <li>Initial biological surveys, plant list, bird list, land matrix assessments</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> </ul>
2	Obtain Appraisal	<ul style="list-style-type: none"> <li>Appraisal delivered</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> </ul>
3	Board Authorization	<ul style="list-style-type: none"> <li>Evaluation and Appraisal presented, approval given to pursue acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> </ul>
4	Enter purchase agreement with seller	<ul style="list-style-type: none"> <li>Agreement on appraisal</li> <li>Agreement on terms</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> </ul>
5	Fundraising for acquisition costs & stewardship	<ul style="list-style-type: none"> <li>Direct mail to AFC database</li> <li>Email solicitations</li> <li>Direct mail to neighbors</li> </ul>	<ul style="list-style-type: none"> <li>Complete</li> </ul>

		<ul style="list-style-type: none"> <li>• Neighbor meetings</li> <li>• Open Houses at property</li> <li>• Local school fundraisers</li> </ul>	
6	Submit SMMC grant proposal for acquisition	Grant application submitted	• Complete
7	Submit other cost sharing proposals for acquisition	<ul style="list-style-type: none"> <li>• Grants written to governmental agencies and foundations</li> </ul>	• In process
8	Submit updated appraisal and title report for State Review	<ul style="list-style-type: none"> <li>• Updated appraisal and title report</li> </ul>	• Estimated January, 2016
9	Board approval of grant agreement	<ul style="list-style-type: none"> <li>• Terms of grant agreement presented to board</li> </ul>	• Estimated July, 2016
10	Closing Escrow	Submit all final closing documents specified in grant agreement	Estimated by October 26, 2016
11	Data management storage	Maintain original documents consistent with our records retention policy	Ongoing
12	Implement adaptive management plan		Ongoing

**Question 2: Any preliminary project plans as required: See Adaptive Management Plan for Cottonwood Canyon at page 25.**

After AFC received initial assessments indicating the critical value of Cottonwood Canyon in the overall wildlife corridor stretching from Hahamongna Watershed to Tujunga Wash, we engaged the Department of Fish and Wildlife and received approval to commission a Conceptual Area Protection Plan covering the entire area (see Hahamongna to Tujunga Wildlife Corridor Map at page 22). AFC raised 1/3 the cost of the CAPP and SMMC provided the remaining funding. We now have a draft of the Eastern Rim of the Valley CAPP in hand and will submit it to DFW for approval.

Upon gaining full site control AFC will fully implement its adaptive management plan. Our experts will determine the best way to restore the habitat. Our Friends of Cottonwood Canyon will help implement the plan and provide monitoring and assessment. We will engage stakeholders to study extending the wildlife corridor through the San Rafael Hills and Verdugo Mountains to Big Tujunga and the San Gabriels and play our part in developing and implementing an action plan.

**Question 3: A detailed description of the need and urgency for the grant;**

Preserving Cottonwood Canyon and its perennial spring is part of a sustainable strategy for managing water resources and supply – specifically by ensuring one of the few remaining water

sources recharging the groundwater for the Raymond Basin is preserved in perpetuity. The need is immediate – the buyers have agreed to a bargain price, in that it is well below their previous appraisal, and our time to close the deal is running out. Failure to act will result in the permanent loss to development of a riparian ecosystem functioning as the gateway to a larger wildlife corridor in an otherwise natural resource deficient urban area.

The Cottonwood Property supports a natural and intact mosaic of plant communities and a functioning wildlife ecosystem in itself. As a deep, linear canyon with a perennial stream from a spring that has maintained flow through drought conditions, this property habitat is very rare in the greater Pasadena area. This presents a great opportunity for a riparian/wetland restoration project. Perhaps of even more importance, the property is a critical linkage corridor in an otherwise developed foothill zone, connecting the Arroyo Seco watershed with the full San Rafael Hills' open space. Our adaptive management plan for the property lays out the steps we intend to follow to ensure our restoration of this critical natural open space conforms to best practices.

The spring is one of only two year-round watering holes for large mammals in the Arroyo Seco area. Additionally, the thermal refuge provided by the thick native oak, sycamore and maple canopy gives birds a place to eat and rest, protected from the hot summer sun and dangers of urban/wildlife interface. Use of the refuge by a California Spotted Owl, a state sensitive species that is being reviewed for federal endangered status, was documented last summer. Wildlife cameras AFC installed on the property document daily use of the perennial spring by raccoons, coyotes, deer and bobcats (see Bobcat Photo at page 24). We found mountain lion scat on the property, along with the remains of a mule deer dispatched last summer by a large predator. Neighbors have documented sightings of mountain lion in the canyon in recent years. The evidence is clear: the canyon supports a robust community of wildlife that has no other way to travel between the existing natural open spaces of the Arroyo and the San Rafael Hills. This project will significantly enhance the potential for wildlife movement in this corridor chokepoint.

The need for Cottonwood Canyon's preservation has been recognized by inclusion in (i) the draft Altadena Foothills and Arroyos Significant Ecological Area identified in the Los Angeles County General Master Plan, and (ii) the Rim of the Valley Corridor Special Resources Study for recommended addition to the Santa Monica Mountains National Recreation Area. Department of Fish & Wildlife ("DFW") approved AFC's creation of a CAPP containing the Cottonwood Property. SMMC helped fund the CAPP and it will be submitted to DFW for approval in December.

If Cottonwood Canyon is developed, Los Angeles County will lose a critical wildlife corridor. The properties are situated in a residential area of Pasadena that has been completely developed to both the north and south. The Cottonwood Property was appraised for \$2,140,000 in 2004 and for \$1,300,000 in 2013. This lower price was accepted by the sellers and likely reflects a bargain price, given that the housing market, including existing residences and land for development, has increased substantially in the past 2 years. This is a cost-effective way to preserve this canyon forever. Preserving Cottonwood Canyon would be a strategic investment resulting in the conservation of natural resources that will help meet state water priorities and have a positive impact on climate change adaptation.

#### **Question 4: A detailed description of how the project will provide multi-benefit ecosystem, water quality, water supply, and watershed protection and public benefits;**

Investment in open space and urban greening can yield both water quality and quantity benefits while mitigating climate change and achieving co-benefits such as job creation, investment in disadvantaged communities, and improving public health and recreation opportunities. This

project will result in multiple benefits to this fragile riparian ecosystem as well as multiple benefits to the surrounding communities.

**Benefit to water supply:** Preserving Cottonwood Canyon will preserve one of two perennial water sources in the Arroyo Seco. Restoration of the habitat in the canyon by removal of thirsty invasives will increase the water flow into the Raymond Basin, a water source for Pasadena and the surrounding communities. This perennial spring is a rare and beautiful thing in our urban world; we cannot afford to lose it.

**Benefit to watershed protection:** Preserving Cottonwood Canyon will help ensure the health of the Upper Los Angeles River Watershed by protecting a perennial water source that recharges groundwater of the Raymond Basin.

**Benefit of Mitigating Climate Change:**

In general, California is expected to experience higher air and water temperatures, altered precipitation patterns, more severe El Nino climate events, increased storm frequency and intensity, and greater fire intensity and frequency under a warming climate. (Safford 2007, Parry et al. 2007) “Water supply and flood management systems are significantly more sustainable and economical over time when they preserve, enhance and restore ecosystem functions, thereby creating integrated systems that suffer less damage from, and recover more quickly after, severe natural disruptions. By reducing existing, non-climate stressors on the environment, ecosystems will have more capacity to adapt to new stressors and uncertainties brought by climate change.” (California Climate Adaptation Strategy for Water).

The Cottonwood Acquisition Project is a positive response and mitigation measure for both present and future effects of climate change. Its objective is to preserve, enhance and restore vital ecosystem functions within Cottonwood Canyon – giving the Canyon and surrounding environs more capacity to adapt and deal with climate change stressors. Additionally, enhancing connectivity and linking natural landscapes has been identified as the single most important adaptation strategy to conserve biodiversity during climate change (Heller and Zavaleta 2009). Preserving the Cottonwood Property secures a critical landscape connection and provides riparian habitat and a thermal refuge for plants and animals whose populations are increasingly stressed by elevated levels of aridity and heat brought on by climate change. It also protects a much needed water source for these animals and serves to recharge the Raymond Basin Aquifer, a water source for the City of Pasadena. Its preservation and future management under AFC’s long term adaptive management plan will ensure its continued existence as a countermeasure to the adverse effects of climate change. AFC will continue to research and work with local experts on adapting management methods that meet a changing climate.

**Benefit to public:** It can be argued that all the afore-mentioned benefits benefit the public. But beyond that, this project will have an additional, direct benefit to the public. Parks and open spaces improve public health and boost the resilience of communities by providing respite from urban environments, enhancing air and water quality, and promoting low-cost recreation for communities of all socio-economic levels. AFC engages the communities surrounding all properties it owns and already created the volunteer community stewardship group “Friends of Cottonwood Canyon.” This group is actively engaged in community programs and restoration efforts on the Cottonwood Property (with permission of the owners). Additionally, protected open spaces contribute to the emergency management readiness of the state by acting as buffers for storm, flood, and fire impacts to developed communities, as pointed out by the California Natural Resources Agency’s Safeguarding California Plan. At the Cottonwood Property, AFC already used the California Conservation Corps for fire hazard reduction training for the benefit of our neighbors there. AFC is committed to a fire hazard reduction program which includes the replanting of natives and

education of the community to the value of using California native plant species in their gardening. Finally, natural spaces become long-term venues for on-going research, data collection, and monitoring of current and future climate conditions, while protecting precious biodiversity and public amenities. AFC installed wildlife cameras in Cottonwood Canyon to document the animals using the corridor and intends to conduct on-going research and data collection to continue and expand this and other studies. We are also partnering with photographers who are tracking mountain lions in the San Gabriel and Verdugo Mountains and the San Rafael Hills. These talented photographers are sharing their images with the National Park Service's long term mountain lion study in the region.

**Question 5: A detailed description of how the project achieves one or more of the purposes of Proposition 1 as stated in Water Code Section 79732(a);**

Preserving Cottonwood Canyon's perennial spring is part of a sustainable strategy for managing water resources and supply – namely by ensuring one of the few remaining water sources recharging the groundwater of the Raymond Basin is preserved in perpetuity. To this end, the Cottonwood Canyon Acquisition Project will achieve the following purposes of Water Code Section 79732(a):

- 1) It will protect and increase the economic benefits arising from healthy watersheds, fishery resources, and instream flow: by preserving the instream flow of a perennial spring
- 2) It will implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems – AFC already created an adaptive management plan for the Canyon which starts with the conservation of its natural resources in order to help meet the state's climate change and water priorities.
- 3) The habitat in Cottonwood Canyon may not lend itself to the public access envisioned in the River Parkways Act, but the property will be used to educate the public surrounding watersheds, riparian habitat and urban wildlife corridor value. A portion of the property already has a public trail used by the surrounding community on a daily basis.
- 4) It will protect and restore an aquatic, wetland, and migratory bird ecosystem, including a wildlife corridor and the acquisition of water rights for instream flow. Acquisition of Cottonwood Canyon will protect the instream flow coming from its perennial spring. It is a heavily used wildlife corridor and a California Spotted Owl was seen using its ecosystem as a stopping point along its assumed journey to higher elevation (see Owl Photo at page 23). Other migratory birds seen on the property include Band-tailed Pigeon, Allen's Hummingbird, Calliope Hummingbird, Pacific-slope Flycatcher, Ash-throated Flycatcher, Warbling Vireo, Northern Rough-winged Swallow, House Wren, Blue-gray Gnatcatcher, Ruby-crowned Kinglet, Hermit Thrush, American Robin, Varied Thrush, Cedar Waxwing, Orange-crowned Warbler, Yellow-rumped Warbler, Black-throated Gray Warbler, Fox Sparrow, White-crowned Sparrow, Song Sparrow, Western Tanager, and Hooded Oriole.
- 5) AFC already has taken it upon itself, prior to owning Cottonwood, to implement fuel treatment projects to reduce wildfire risks, and promote watershed health. Under the expert guidance of J. Lopez, Assistant Chief, Forestry Division, County of Los Angeles Fire Department, AFC conducted fire hazard reduction doubling as native habitat restoration, using California Conservation Corps crews from the Pomona and Los Angeles operational centers with support from the adjoining property owner. In

partnership with Outward Bound Adventures AFC hosted local schools as well as those from disadvantaged communities to Cottonwood for habitat restoration projects and educational field trips about watershed health.

- 6) It will protect and restore urban watershed health to improve watershed storage capacity, forest health, protection of life and property, stormwater resource management, and greenhouse gas reduction. Preserving Cottonwood Canyon will avoid the negative impact development would have on the perennial spring which impacts the watershed's storage capacity. It will also provide a positive response to climate change by improving the habitat health in this riparian ecosystem by preserving it, restoring it and conducting fire hazard reduction in a manner that will enhance the natural habitat. AFC employs a continuing program of fire hazard reduction that includes planting native plants species to avoid erosion resulting from brush clearance. Finally, this project will help meet the State's greenhouse gas reduction target by avoiding the clearing of property of valuable, carbon sequestering oak woodland and replacement with concrete, glass and steel.
- 7) Protect and restore coastal watersheds, including, but not limited to, bays, marine estuaries, and nearshore ecosystems. Cottonwood may not technically be a "nearshore ecosystem" but its preservation will have a positive impact on the upper Los Angeles River Watershed which ultimately leads to the coast.
- 8) The acquisition will reduce pollution or contamination of the spring and its stream, and protect and restore natural system functions that contribute to water supply, water quality, or flood management. The perennial spring in Cottonwood Canyon is one of only 2 perennial water sources flowing into the Arroyo Seco. It will be preserved and protected from contamination. It serves to recharge the Raymond Basin, a water source for the City of Pasadena and surrounding communities.
- 9) It will assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flow and inland wetland restoration, by implementing a natural community conservation plan and habitat conservation plan. We have an adaptive management plan for Cottonwood Canyon with the goal of improving the watershed health and overall ecosystem that provides the sole means of travel for animals between the Arroyo Seco and San Rafael Hills (see Adaptive Management Plan at page 25).

**Question 6: A detailed description of how the project promotes and implements one or more of the objectives of the California Water Action Plan as stated in Section 1.3 of this guideline;**

The Cottonwood Canyon Acquisition Project supports the 3 broad objectives of the CWAP to 1) provide more reliable water supplies, 2) restore important species and habitat and 3) promote a more resilient, sustainably managed water resources system. It implements these objectives by protecting a degraded stream ecosystem to assist in natural water management and improved habitat thereby protecting and restoring ecological health and natural system connectivity which will benefit local water systems. This acquisition protects an important stream ecosystem that will assist in natural water management, while facilitating natural system connectivity in a wildlife corridor to aid in preserving the genetic diversity of species in contiguous natural open space. It provides a critical thermal refuge for wildlife and has diverse plant communities. Purchasing it will allow us to improve the aquatic habitat by establishing a modest natural wetland-marsh where the creek currently goes into a culvert.

This acquisition also implements other desired CWAP actions, such as 1) to “help manage and prepare for dry periods” by conserving a parcel containing a perennial spring which recharges the groundwater of the Raymond Basin, a primary water source for the City of Pasadena and other jurisdictions; and 2) “to make conservation a California way of life” by informing the public about this critical wildlife corridor, its perennial stream, and the importance of preserving both so as to support conservation strategies in Southern California. When we started our campaign to acquire the land, the public was unaware that there was a water source on the land or that the land served as a wildlife corridor – our community outreach changed that. AFC’s “Friends of Cottonwood Canyon” support group will continue to engage the community.

**Question 7: A detailed description of how the project helps meet the State’s greenhouse gas emissions reductions targets, including a quantification of the metric tons of CO<sub>2</sub> or CO<sub>2</sub>e removed or avoided, and an explanation of the methodology used to quantify this figure.;**

With the passage of AB 32 in 2006, California has embarked on an ambitious path to reduce greenhouse gas emissions to 1990 levels by 2020, a reduction of approximately 15 percent below the emissions forecasted under a Business As Usual scenario. The regulations promulgated under the law seek technologically feasible and cost-effective programs to be developed and implemented by the California Air Resources Board. The Cottonwood Canyon Acquisition Project is not only consistent with these goals, the project’s avoidance of the Business As Usual emissions is a cost effective way to reduce forecasted greenhouse gas emissions.

Urban forests are an important part of the forest sector and like wildland forests, urban forests are also contributors to carbon sequestration and storage. More than 94% of Californians live in an urban area and depend on the multiple ecosystem, social, and economic benefits of urban forests. Urban forests reduce atmospheric carbon by locking up CO<sub>2</sub> in their roots, trunks, stems and leaves while they grow. They also reduce heating and air conditioning demands, thereby reducing emissions associated with power production. Maintaining existing urban forests sustains current carbon sequestration benefits while planting more trees offers significant new GHG reduction opportunities that will increase as trees grow. Urban forests also improve air and water quality, provide local jobs, reduce residential energy consumption, and enhance quality of life in our disadvantaged communities.

Additionally, wetland restoration and conservation promote carbon sequestration to meet climate change adaptation objectives for natural resources. Preserving these ecological communities with an eye towards increasing connectivity can help to create a large-scale, well connected, sustainable system of conservation areas that will be necessary for allowing species movement and persistence into the future. Sequestration activities will also restore and enhance ecosystem function to wetlands.

The Cottonwood Canyon Acquisition Project will conserve 11 acres of urban forest comprised of oak woodland and riparian wetland containing a perennial spring. It will result in GHG savings of 1409 metric tons of CO<sub>2</sub>e over a 30-year life of the project.

The methods used to quantify GHG emissions is a combination of the CalEEMod and information presented in the following discussion and from sources cited in The References section. The horizon for the Project and Business As Usual for this comparison is 30 years, primarily because human habits, building materials, fuel use, and other assumptions become less predictable over time. Current (i.e., 2015-era) estimates of emissions is consistently projected over the 30-year horizon in all emissions scenarios presented below.

### *Cottonwood Canyon Acquisition Project*

The AFC is a land conservancy with holdings managed as plant and wildlife habitat. The AFC typically draws upon their group of local volunteers for as-needed invasive plant weeding and plantings of native plant species. The AFC also coordinates with local junior high schools, high school and college affinity environmental groups, and Boy and Girl Scout Troops for special projects and educational programs.

For the Cottonwood Canyon Acquisition Project, the main assumption used in quantifying GHG emissions is that the property will be managed similarly to AFC's other holdings.

The GHG emissions associated with these activities include driving to events, driving to native plant nurseries, and hand irrigation of new plantings. Although volunteers walk, bus/carpool, and bicycle to events, the assumption is that each holding has 24 events per year, 7 volunteers/students attend each, and each participant drives approximately 10 miles in a vehicle with typical emissions for 2015. For the 30 year horizon of this scenario, this results in approximately 213 metric tons of CO<sub>2</sub>e.

### *Business As Usual*

Business as usual would be acquisition of the property by a developer to convert the land to residential housing and use. The Business As Usual is much more GHG intensive, and the emissions are distinctive by phase: emissions associated with construction and materials, and emissions associated with residential occupancy emissions.

The Linda Vista area of the City of Pasadena has a typical lot size of 0.6 acres and typical square footage of houses at 4129 sq ft, yielding the development of the land into 16 residences. In this area of Pasadena, approximately 10 percent of the properties are left wooded (similar to the entirety of use of the Cottonwood Canyon Project), and the acreage used for structures and ornamental landscaping will be considered removed for GHG sequestration purposes.

**Table 1. Greenhouse Gas Contributors over the life of the Project (30 years), in metric tons CO<sub>2</sub>e**

Contributor	Cottonwood Canyon Acquisition Project	Business As Usual	GHG Savings
Construction	--	1064	1064
Operation	21	366	345
Summary	<b>21</b>	<b>1430</b>	<b>1409</b>

### **THE REFERENCES**

2008 AB 32 Climate Change – 2050 Vision Scoping

Plan: [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/naturalandworkinglands.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/naturalandworkinglands.pdf)

CalEEMod Model and Users Guide. South Coast Air Quality Management

District: <http://www.aqmd.gov/docs/default-source/caleemod/usersguide.pdf?sfvrsn=2>

USEPA. 2014. Greenhouse Gas Emissions from a Typical Passenger Vehicle. Office of Transportation and Air Quality. <http://www3.epa.gov/otaq/climate/documents/420f14040a.pdf>

**Question 8: A detailed description of how the project promotes and implements other relevant regional and state plans and policies;**

**Common Ground Plan:** In addition to the CWAP, this acquisition project is also consistent with the The San Gabriel and Los Angeles River Watershed and Open Space Plan's ("Common Ground Plan") 3 guiding principles which are all implemented by AFC's Cottonwood Canyon Acquisition Project:

- 1) It implements the guiding principle for land – to “Grow a Greener Southern California” by protecting the habitat and connectivity of open space in Southern California and improving public access by creating community programs thereby expanding and improving open space available to the public. AFC also promotes stewardship of this landscape with its Friends of Cottonwood group.
- 2) For water, the Cottonwood Acquisition Project will improve the quality of surface water and groundwater by preserving in perpetuity the perennial spring located on the property and working to restore it and the riparian habitat surrounding it to its native condition which will also increase the flow by removing thirsty non-native vegetation. It will also reduce the dependence on imported water by preserving and enhancing a local water source recharging the Raymond Basin – a water supply for the City of Pasadena and surrounding communities. AFC plans to restore the natural hydrologic functioning of this sub-watershed area.
- 3) For planning, AFC's “Friends of” land stewardship program will involve the public through education and outreach. Our adaptive management plan for the property will use science as a basis for planning. We will integrate the stewardship of this vital riparian ecosystem with that of the entire corridor it serves as a gateway, in collaboration with multiple jurisdictions and stakeholders. During this time of restricted funding for open space acquisition AFC believes it is crucial to encourage and facilitate public and private partnerships to protect and restore the last remaining areas of open space in Southern California

The **Safeguarding California Plan** supports “projects that produce multiple benefits”: urban green spaces decrease electricity consumption by reducing the heat island effect, sequester carbon, conserve water, and encourage non-motorized transportation. The Cottonwood Acquisition Project will provide a valuable green space in the midst of intense urban development; the preservation of its riparian habitat and oak canopy will sequester carbon and conserve water. It provides a notable thermal refuge for migrating birds (Spotted Owl documented on property for a week to avoid the heat and obtain water and food (woodrat) before moving on).

The preservation of the significant resources in Cottonwood Canyon implements the **National Park Service, 2015 Rim of the Valley Draft Special Resource Study; LA County, 2015 General Management Plan: Significant Ecological Area – Altadena Foothills & Arroyos; and CA Department of Parks and Recreation, 2015 Statewide Comprehensive Outdoor Recreation Plan**. Securing the watershed to assist natural water management by preventing development implements the action of safeguarding our lives from climate change by reducing reliance on distant unpredictable water sources: **CA Natural Resources Agency, 2014, California Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan; California @ 50 Million**. It is also consistent with **North East Trees 2006, Arroyo Seco Watershed Management and Restoration Plan Prepared for CA State Water Resources Control Board**.

Securing this critical link to protect ecological health and the natural system connectivity of the San Rafaels and the opportunity to create the urban Hahamongna to Tujunga Wildlife Corridor

implements the action of preserving natural connectivity promoted by: UC Davis Wildlife Health Center, David Bunn, et al, **2005 California Wildlife: Conservation Challenges, California's Wildlife Action Plan** (created for CA Department of Fish & Game) and Spencer, W.D., et al **2010 California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California**, Prepared for CA Department of Transportation, CA Department of Fish & Game, and Federal Highways Administration.

Securing this readily-accessible wilderness as a local resource for nature education is championed by **California's Outdoor Recreation Plan 2008; California's Outdoor Recreation Policy 2005; California Water Action Plan; and Children's Outdoor Bill of Rights.**

**Question 9: Indicate whether the project will have matching funds from private, local, or federal sources, and if so, to what extent;**

Costs incurred to date have been for pursuit of the opportunity to purchase the property, biological and historic due diligence, negotiations, preparation of a purchase agreement (attorney's fees), real estate due diligence, fundraising, stakeholder engagement and promotion, total \$273,510. Additional costs will be incurred in the continuing effort to identify funding for the purchase price, an updated appraisal, title and closing costs. We ask SMMC to help by funding ½ the cost of the land along with qualified acquisition costs of this project.

<b>Cottonwood Canyon Acquisition Project Cost Sharing</b>			
<b>Source of Funds</b>	<b>Cash Pledged or Received</b>	<b>In-kind donations received</b>	<b>Pending requests</b>
<b>Santa Monica Mountains Conservancy Prop 1 Watershed Protection Program</b>			\$688,482
<b>Department of Fish &amp; Wildlife Prop 1 grant</b>			\$676,000
<b>Santa Monica Mountains Conservancy CAPP grant pledged (2/3 of cost)</b>	\$16,667		
<b>Applicant - professional and volunteer services</b>		\$103,861	
<b>Applicant - community organization and individual donations received*</b>	\$236,563		
<b>Total funds \$1,721,573**</b>	<b>\$253,230</b>	<b>\$103,861</b>	<b>\$1,364,482</b>

\*Community Organizations include: Ann Peppers Foundation, Filntridge Sacred Heart Academy, Helen & Will Webster Foundation, John & Beverly Stauffer Foundation, Pasadena Audubon Society, Pasadena Community Foundation, San Gabriel Mountains Chapter of the California Native Plant Society and Westridge School. 239 individual donors contributed. (See pages 28-39 for letters of community support)

\*\*The acquisition of the Cottonwood Canyon Property is only the first in a series of intended acquisitions to secure the entire Hahamongna to Tujunga Wildlife Corridor. Community-donated funds remaining after closing will be used for the Hahamongna to Tujunga Wildlife Corridor.

Project Feasibility – AFC's Capacity

AFC's capacity to implement this project has already been acknowledged by SMMC in a March 30, 2015 memo recommending SMMC grant AFC funds to complete a CAPP for the Eastern Rim of the Valley Area: "The Arroyos & Foothills Conservancy has had strong success acquiring land and raising funds."

Previous similar projects completed by AFC:

2002 Chaney Trail Acquisition, Altadena: 1.5 acres for \$30,000 from community fundraising and matching grant from the SMMC. Objectives: trail enhancement and habitat protection. AFC volunteers do annual fire hazard reduction.

2009 Rubio Canyon Acquisition, Altadena: 20 acres acquired for \$24,000 from community fundraising.

2010 Rubio Canyon Acquisition: 3.81 acres appraised at \$300,000, acquired for \$240,000 with a \$240,000 loan from MRCA. The loan was made by MRCA to secure a time-sensitive discount; MRCA used operating funds, which had never been done before. Then SMMC took out the loan with a \$252,000 Prop 84 grant (\$240,000 for the land, \$12,000 for AFC closing costs and attorney's fees); MRCA owns the land and AFC operates it pursuant to an automatically-renewing 20-year lease. Supervisor Antonovich initially offered AFC a \$220,000 grant which AFC swapped for the MRCA/SMMC funding so that SMMC had funds to acquire a property elsewhere.

2011 Rubio Canyon Acquisition: 18 acres appraised at \$630,000, acquired for \$540,000 with grant from the California Wildlife Conservation Board (WCB) on recommendation of DFW.

Objectives of the 3 adjacent Rubio properties: protect a blue line stream, enhance a trail network, and help tell the story of the Mount Lowe Railway that ran through the property. AFC works with neighbors, local schools and volunteers to restore the habitat, address vagrancy and build and repair 3 miles of trail. The California Conservation Corps ("CCC") came to the property three times to do trail work, fire fuel reduction, invasive removal, and native tree planting and care pursuant to an LA County San Gabriel Forest Reforestation Initiative grant. AFC created an audio slide show featuring CCC for mutual use. LACC also did a week's worth of fire fuel reduction.

2012 Goss Canyon Acquisition, La Crescenta ("Rosemont Preserve"): 8 acres appraised at \$550,000, acquired for \$350,000 with grant from LA County (Antonovich). Objectives: Secure wilderness at the mouth of Goss Canyon, connecting to 220 privately-owned acres upstream that are adjacent to National Forest; protect abundant wildlife, including bear and mountain lion; and provide community resource as the only wilderness accessible from La Crescenta. Community goal: \$100,000, raised \$101,000 to help acquire and steward. We created all-volunteer Friends of the Rosemont Preserve, to manage the property pursuant to a management plan adopted by AFC and with expertise and money provided by AFC. Projects completed: interpretive trail; monthly habitat restoration, open gate events and docent-led tours; free field trips; 3 Boy Scout Eagle, 1 Girl Scout Bronze and 1 Girl Scout Silver Award projects; partnered with La Crescenta Public Library to create Rosemont Preserve Photo Exhibition, and the 1<sup>st</sup> California native seed lending library; sustainable hazard fuel reduction work – remove invasive plants and install California native fire-safe plants chosen in cooperation with neighbors to serve as habitat for animals.

2012 Millard Canyon Acquisition, Altadena: 13 acres appraised at \$535,000, acquired for \$475,000 using \$375,000 grant from DFW/WCB and \$100,000 from SMMC. Objectives: secure and improve important wildlife corridor between the San Gabriels and Hahamongna Watershed Park; protect creek that usually flows year-round; protect and enhance remarkable riparian habitat, including 10 native tree species and robust amphibious life that once contained native trout. "There are few unprotected places like Millard Canyon left in Los Angeles County" (biologist Thomas Juhasz). Community goal: \$150,000, raised \$153,000 to help acquire and steward. Friends of Millard is

formed and stewarding the property: hosted 10 students in 2013, and 6 in 2015 from Muir High School for 6-week Careers in Conservation program through the City of Pasadena and Outward Bound Adventures. CCC offered a discretionary grant to do sustainable fire hazard reduction work; CCC crews planted and cared for trees pursuant to LA County grant. Volunteer groups have cleared the stream of Eupatory and Himalayan Blackberry to increase stream flow.

**Question 10: Indicate whether the project will benefit a disadvantaged community;**

While the Cottonwood Property is not located in a Disadvantaged Community, it is adjacent to areas in Pasadena and Altadena identified by the Economically Distressed Areas Mapping Tool as being and part of Census Block Groups identified as having both: a population that is  $\leq 20,000$  people; and less than 85% of the State's median household income (MHI). Its acquisition will benefit these communities directly by being a nearby outdoor education resource for schools and community groups. Additionally, AFC strives to bring nature into the classroom in order to engage underserved, urban, youth who have not yet connected with nature in ways that are meaningful to them. AFC has an on-going partnership with Outward Bound Adventures, who already brought students from Esteban Torres High School (located in a Disadvantaged Community) to the Cottonwood Property for outdoor education.

To reach underserved demographics where students are unable to visit AFC properties AFC launched their Wildlife Movement Education Project, installing cameras on each AFC property to track wildlife movement through vital natural corridors. The motion-sensitive cameras, in place 24 hours per day, capture diurnal and nocturnal animals, as they move through the camera's field. This data can be used in a variety of teaching modes spanning many grade levels, from basic native animal identification to the value of conservation and land stewardship and the opportunity for careers in conservation. We are creating a website to host the curriculum and data from the properties and provide it free of charge to schools. For public schools with little to no money available for transportation this brings the outdoors into their classrooms as the basis of interactive projects. 2 cameras installed on the Cottonwood Property are already sending us photo documentation of the wildlife using the corridor.

**Question 11: Indicate whether the project will use the services of local or state conservation corps.**

Although the acquisition of Cottonwood Canyon per se will not utilize the services of the Conservation Corps, they have already been consulted and utilized for fire hazard reduction training on the property and AFC intends to continue to consult and employ them for future projects on the property.

**Question 12: A detailed description of any new or innovative technology or practices that will be applied to the project**

AFC employs an innovative method of land stewardship across all its properties. AFC utilizes a land acquisition matrix to identify and prioritize undeveloped private properties in the San Gabriel and La Crescenta Valleys. We pursue the purchase of high priority properties, raising funds from government grants, community organization grants and individual donors. When we acquire the property we then establish a local, volunteer-driven community "Friends" group to steward it. The Friends provide program ideas and outreach to the community while AFC provides the organizational structure and resources the Friends need to execute programs and effectively manage the property.

The resulting programs – like field trips for local public schools, community service days for students, docent led tours and open gate days - provide opportunities for community members to visit our properties and learn about the unique natural diversity of our foothills. We are successfully executing this model of property acquisition and stewardship at three properties: Rosemont Preserve in La Crescenta, Millard Canyon in Altadena and now at the Cottonwood Canyon property (with the owners' approval). Formation of a fourth Friends group is underway at Rubio Canyon.

Our free educational programming includes: ongoing 3<sup>rd</sup> and 6<sup>th</sup> grade public school field trips at our Rosemont Preserve -- our Friends group has created the curriculum and recruited and trained the docents; Polytechnic School 7<sup>th</sup> grade field trips to our Rubio Canyon property (18 this year); Flintridge Prep High School field trips to Millard Canyon for biology studies; and Westridge School AP Environmental class field trips to both our Millard and Cottonwood Canyon properties to perform water testing and aquatic invertebrate study.

We are also finding ways to engage students and volunteers in stewardship projects to help restore habitat. In 2013 we hosted 10 students from Muir High School on our Millard Canyon property as part of a partnership with the City of Pasadena's Rose Program and Outward Bound Adventures. They logged over 950 hours working to restore the natural habitat of the Canyon. Last summer we did it again. The group logged over 1,000 hours at both Millard and Rubio Canyon restoring the trails and installing a cactus garden at the Rubio Canyon trailhead. AFC has working relationships with several local schools to provide venues and guidance for habitat restoration community service projects. We look forward to building our relationship with the Pasadena Unified School District for our Pasadena and Altadena properties, and providing educational programming at no charge to the district. As we look to acquire the 11-acre Cottonwood Canyon natural area, we see more engagement opportunities.

The innovation is the consistent groundwork we do at each property, spending time talking to the surrounding community both before and after we purchase property. The result is the permanent engagement of each community in the stewardship the properties we preserve.

**Question 13: A detailed method for monitoring and reporting on the progress and effectiveness of the project during and after project implementation.**

Two biological assessment surveys were conducted to establish baseline biological conditions on the Cottonwood Property (Preliminary Biological Assessment Memorandum, T. Juhasz, Feb. 25, 2013; Biological Overview of Cottonwood Canyon, M. Long, February 3, 2013) with a follow up installation of remote sensing wildlife cameras to document wildlife movement through the property. Further focused surveys include breeding bird surveys, presence-absence surveys for rare species under the supervision of a qualified biologist, and plant transect surveys to determine the biological diversity of the site. The biological surveys and monitoring efforts have revealed that Cottonwood Canyon is of high ecological value and serves as a critical link to adjacent undeveloped open spaces located in the San Rafael Hills and the San Gabriel Mountains.

The relative abundance of the study's target species (mule deer, raccoons, coyotes, bobcats, black bears, mountain lions, ring-tailed cats etc.) will be monitored through focused wildlife camera monitoring in conjunction with planned multi-year studies. Two cameras are in place in Cottonwood Canyon at strategic sites selected by biologists. The data collected (photographic evidence, statistical data) will provide seminal data that will support existing wildlife corridor monitoring efforts being conducted in the NPS Rim of the Valley Corridor carnivore tracking. Our tracking efforts that will support our joint CAPP study with DFW, if adopted by DFW upon review, include photo monitoring for tagged animals such as the mountain lion that was collared in the

Verdugo Mountains in May 2015. Further monitoring efforts to document the long-term stability/changes to the biological diversity within Cottonwood Canyon will take place through its long-term adaptive management plan.

### Performance Measures Table

Project Objective(s)	<p>Preservation in perpetuity 11 acres of highly critical urban watershed and associated water rights</p> <ul style="list-style-type: none"> <li>- Secure perennial spring and creek for benefit of riparian habitat and animals</li> <li>- Secure the watershed to assist in natural water management</li> <li>- Secure this critical link to protect ecological health and natural system connectivity</li> <li>- Secure wildlife corridor gateway between the Arroyo Seco and the San Rafels and potentially to the Verdugos and San Gabriels</li> </ul>
Project Output Performance Measures	<ul style="list-style-type: none"> <li>- Complete initial biological assessment studies to establish baseline conditions of property</li> <li>- Complete breeding bird surveys</li> <li>- Complete presence-absence surveys for rare species</li> <li>- Complete plant transect surveys to determine the biological diversity of the site</li> <li>- Install wildlife cameras on property to document wildlife movement</li> <li>- Propose CAPP creation to DFW</li> <li>- Approval of CAPP creation by DFW</li> <li>- Complete adaptive management plan for Cottonwood Property</li> <li>- Submit draft CAPP to DFW for adoption</li> <li>- Receive funding for property acquisition</li> <li>- Complete purchase of Cottonwood Property and associated water rights</li> </ul>
Project Outcome Performance Measures	<ul style="list-style-type: none"> <li>- Protect water dependent habitat and replenish ground water of Raymond Basin</li> <li>- Provide live-in and move-through habitat for multiples species</li> <li>- Provide habitat for State Sensitive species</li> <li>- Ensure availability of key resources, such as host plants for butterflies and pollinators for plants</li> <li>- Reduce species survival stressors by preserving a vital wildlife corridor and the thermal refuge it provides</li> <li>- Provide buffer against edge effects such as lighting, noise, nest predation and parasitism</li> </ul>

	<ul style="list-style-type: none"> <li>- Preserve this riparian habitat and adjacent natural communities connectivity as survival insurance and a positive climate change response action</li> <li>- Preserve critical gateway of Cottonwood Corridor and opportunity to extend corridor west to Verdugos and San Gabriels</li> <li>- Expand environmental stewardship and opportunities for wildlife-oriented education and recreation</li> </ul>
Measurement Tools and Methods	Biological assessment studies, breeding bird surveys, presence-absence studies, wildlife movement studies, plant transect surveys, CAPP creation, adaptive management plan implementation

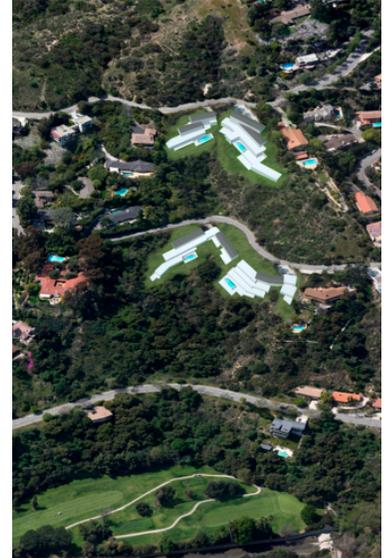
# OPEN SPACE

land  
opportunity

## COTTONWOOD CANYON

“WHAT AN OPPORTUNITY TO PRESERVE SOME OF THE MOST GORGEOUS, HISTORICALLY IMPORTANT WILD LAND LEFT IN PASADENA. REMIND ME TO BORE YOU WITH MY FAVORITE COTTONWOOD CANYON BOBCAT STORY NEXT TIME WE MEET DOWN ON THE ARROYO TRAIL.”

LARRY WILSON  
*Cottonwood  
Campaign Chair*



## HELP SECURE NEW NATURAL OPEN SPACE FOR PASADENA

Cottonwood Canyon remains one of the last undisturbed stretches of water-bearing land so prized from Pasadena’s earliest days. **Its 11 acres still hold a year-round spring** important in the agricultural heyday of the Linda Vista area, and now of prime importance to wildlife. So I shouldn’t have been surprised by the buck strutting across Linda Vista Avenue at Cottonwood Canyon as I rode my bike toward Devil’s Gate Dam. In fact, the chances are that on any visit to the Canyon you will see a mule deer, coyote or even bobcat.

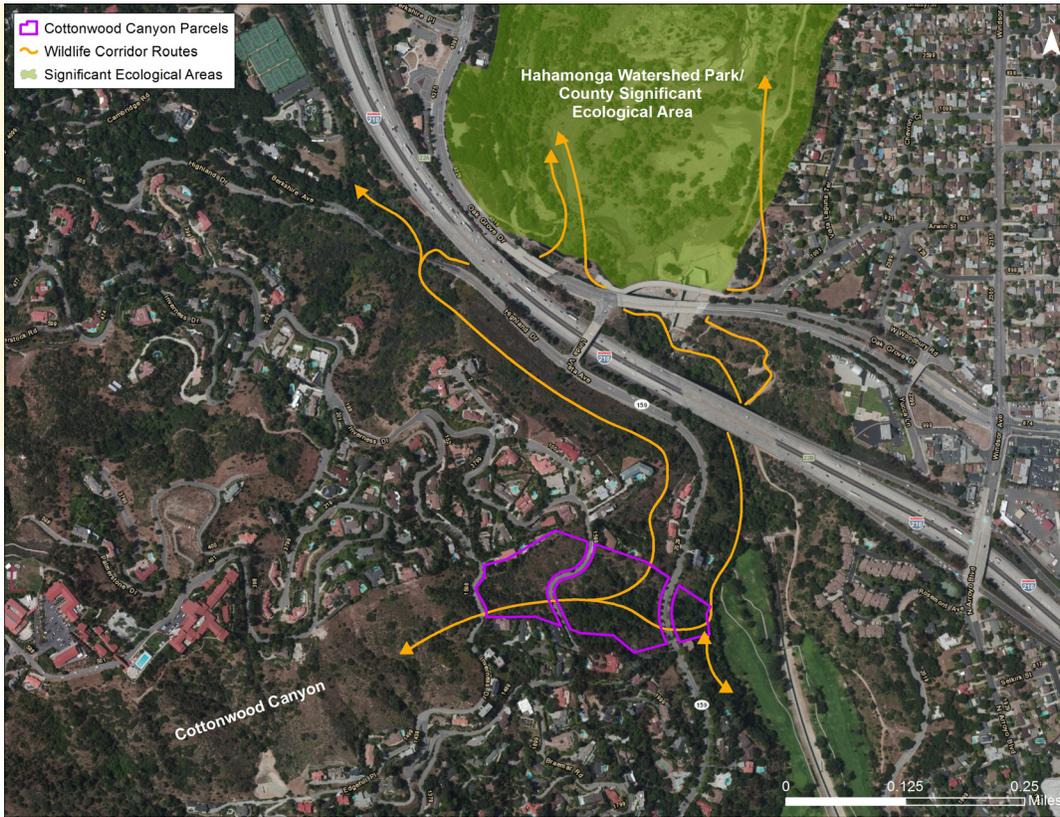
Development of Cottonwood Canyon would disrupt or even entirely eliminate the wildlife corridor through Cottonwood Canyon, biologically isolating the San Rafael Hills. **This land provides critical passage for animals** between the San Rafael Hills and the Arroyo Seco, and on to Hahamongna Park and the San Gabriel Mountains. It was nearly sold for development. Instead, we have the chance to buy it. **But if we fail, the white houses pictured above right might be built, squeezing that critical pathway shut** at Inverness Drive and likely at Normandy Drive.

If we act now we can save this precious resource forever.

John Howell  
*Executive Director & General Counsel*  
626.796.0782 [arroyosfoothills@gmail.com](mailto:arroyosfoothills@gmail.com)



[www.arroyosfoothills.org/cottonwood](http://www.arroyosfoothills.org/cottonwood)



## Fast Facts

1. AFC is working to **preserve 11 acres in Pasadena's Cottonwood Canyon** in the north San Rafael Hills, running from Inverness on the west, across Normandy and Linda Vista to the bottom of the Arroyo Seco on the east.
2. Preserving the land would **stop development of multiple residences.**
3. There is a **spring** on the land that **flows year-round** into the Arroyo Seco.
4. The spring supports a dense woodland, making the land a **prime refuge for wildlife** in the otherwise dry hillsides.
5. Cottonwood Canyon is an **unimpeded corridor for wildlife** moving between the San Rafael Hills and the Arroyo Seco. It links to a corridor running south beyond South Pasadena and north to Hahamongna Wilderness Park and the San Gabriel Mountains.
6. The canyon helped support Native Americans living in this area, known as **Indian Flats** by 19th century settlers.
7. The land has been in the same family (including the family line of **Caltech co-founder Robert Millikan**) for over 120 years, and had a water bottling operation serving residents.

## COTTONWOOD CHALLENGE

Project cost is \$1,600,000, of which AFC expects to raise \$300,000 from the community to acquire and steward Cottonwood Canyon and help secure and enhance extended wildlife corridors.

Please donate today to help us reach our community fundraising goal. You can donate online or by mail. Gifts are tax-deductible.

**[www.arroyosfoothills.org/cottonwood](http://www.arroyosfoothills.org/cottonwood)**  
PO Box 3 • Altadena Ca • 91003-0003

*Visit our website to learn more about the history, biology and educational opportunities at Cottonwood.*

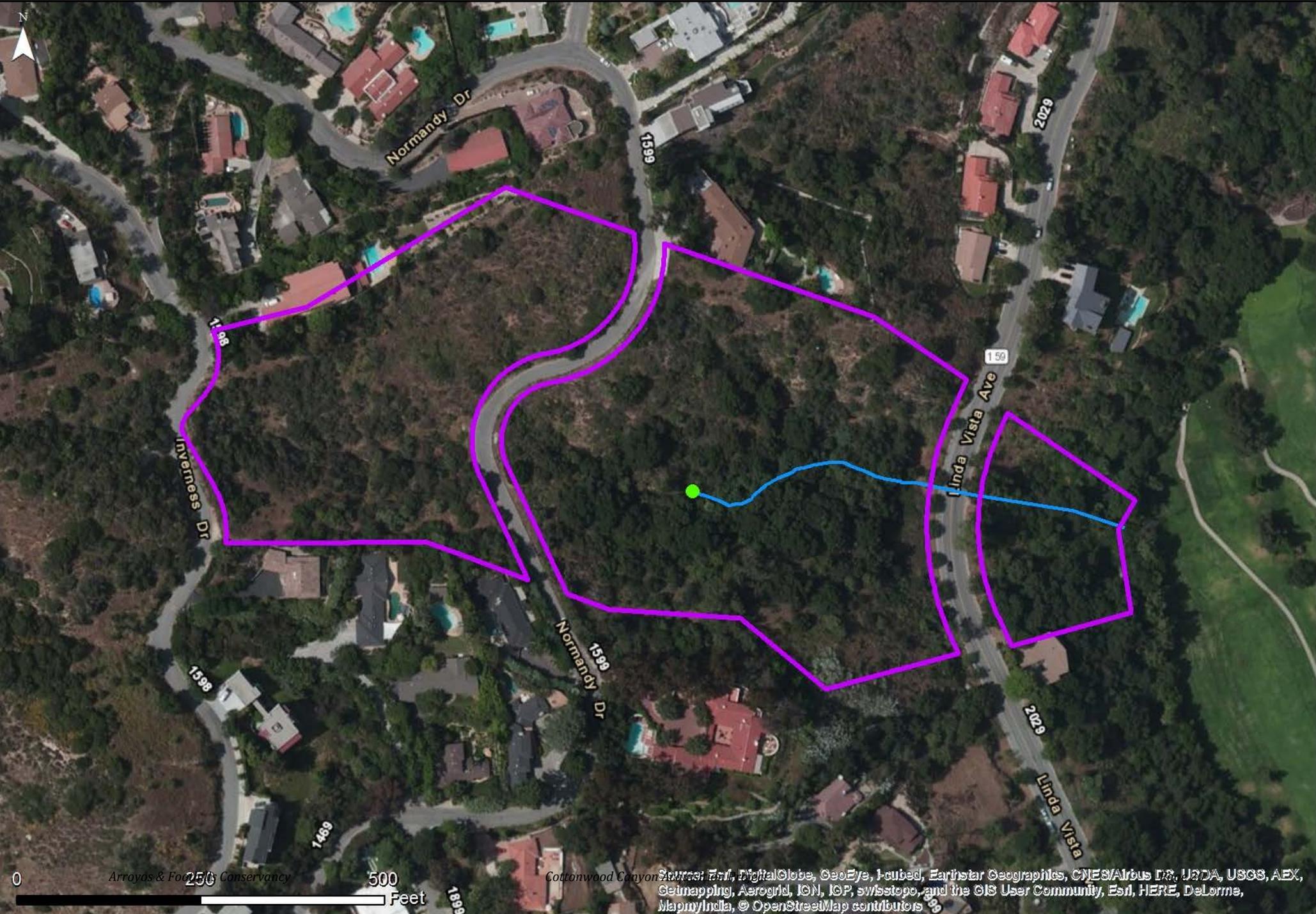
### ABOUT AFC

The Arroyos & Foothills Conservancy (AFC) preserves and restores wilderness land in the San Gabriel and Crescenta valleys. AFC also restores trails, leads hikes, and conducts education projects. AFC is a 501(c)(3) non-profit organization.

# Cottonwood Canyon

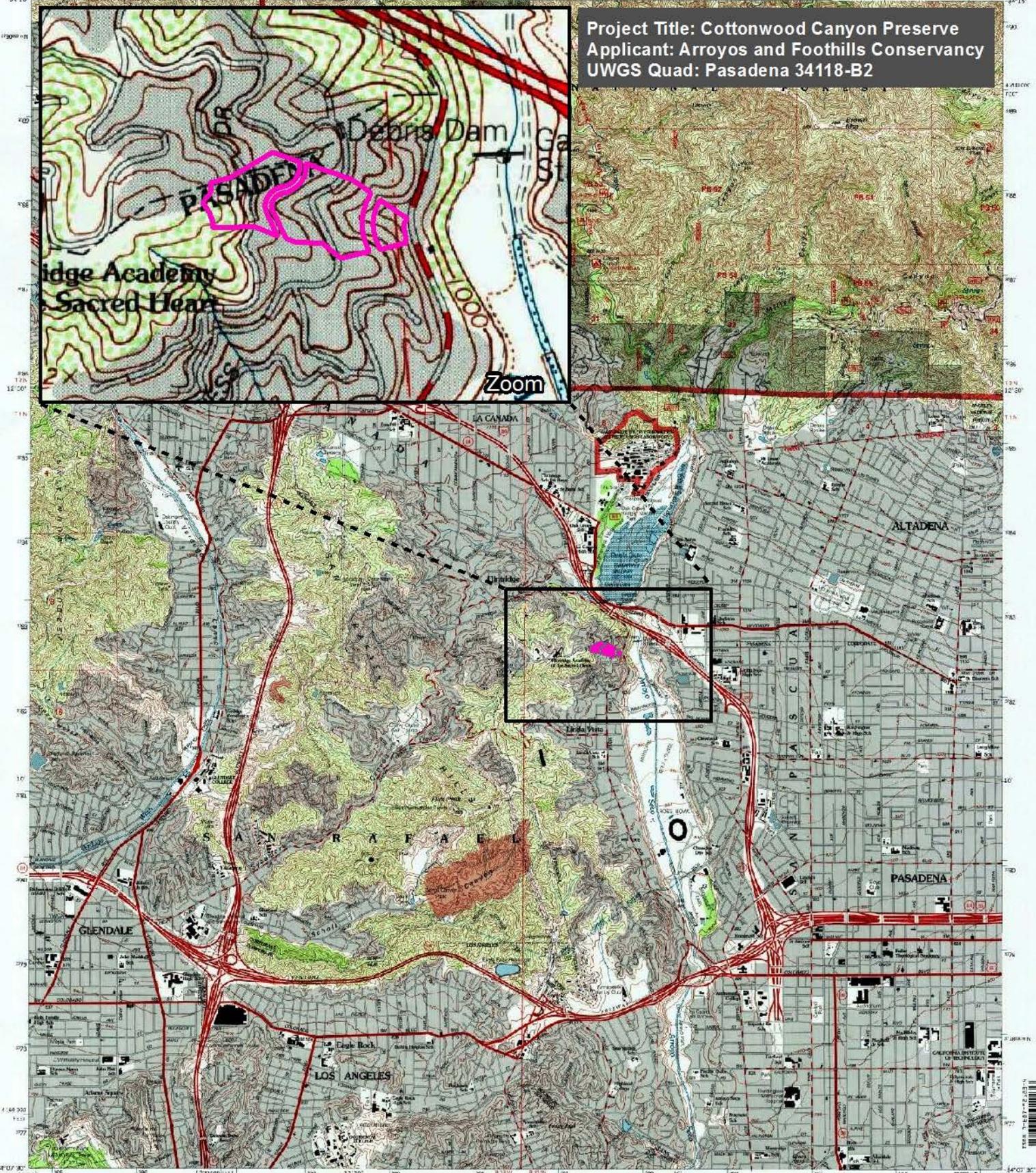
## Parcel and Hydrology

 Cottonwood Parcel Boundary  Spring Origin  
 Cottonwood Creek Flow Line

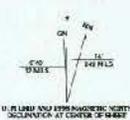


Arroyos & Foothills Conservancy  
Sources: Esri, DigitalGlobe, GeoEye, I-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

**Project Title: Cottonwood Canyon Preserve**  
**Applicant: Arroyos and Foothills Conservancy**  
**UWGS Quad: Pasadena 34118-B2**



Produced by the United States Geological Survey 1988  
Revisions by USGS Forest Service 1995  
Topography compiled 1964. Boundaries defined from bearings taken 1960 and other sources. Public Land Survey System and survey control corners as of 1989.  
See Bureau Annals of 1927 (PAD 27), Projection and 10 000 foot scale California coordinate system, zone 7. Lambert conformal conic. Blue 1000 meter Liberman Triangulation Network data, zone 11.  
NAD 83 datum of 1983 (PAD 83) is shown in dashed corner 54s. The values of the 44s between 1983 and 1983 are for 75 meters. Name changes are available from National Geographic Society (NGS) website.  
New National Forest System lands under the National Forest System may exist in other blocks of this series.  
This map is not a legal land title or ownership document. Boundary lines are subject to change and bearing, and may have some discrepancies with local advice. Please contact the Arroyos and Foothills Conservancy at 620-960-1111.  
Private (Black) 789 are unannounced land of uncertain extent.  
Where omitted, land titles have not been established.  
Areas covered by dashed lines indicate an unestablished foundation.



SCALE 1:24 000  
CENTIMETER INTERVAL: 40 FEET  
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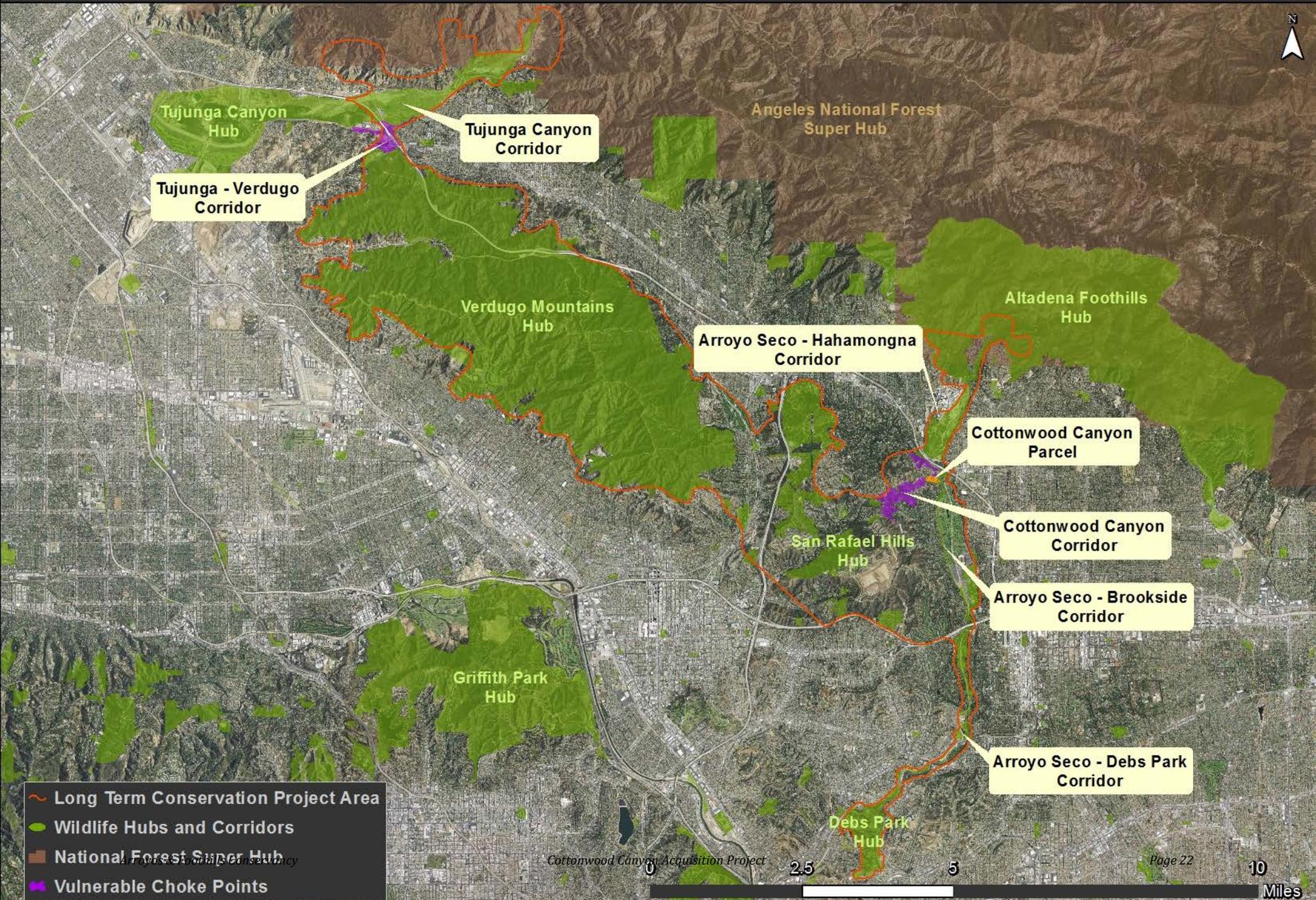


ROADS AND ROADS

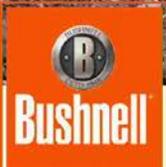
Interstate	Primary highway
U.S.	Secondary highway
State	Expressway
County	Competition
National Forest, suitable for passenger cars	Trail
National Forest, suitable for high clearance vehicles	Unimproved or shared road
National forest road	Gate

**Cottonwood Canyon Acquisition Project**  
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 38288, DENVER, COLORADO 80238  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS AVAILABLE ON REQUEST

# Hahamongna to Tujunga Wildlife Corridor







Ⓜ cottonwood2 68°F20°C



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## COTTONWOOD PROPERTY LONG TERM ADAPTIVE MANAGEMENT PLAN

AFC strives to incorporate adaptive management as a core framework for its long term management plans. "Adaptive management is a key element of implementing effective conservation programs. Adaptive management combines data from monitoring species and natural systems with new information from management and targeted studies to continually assess the effectiveness of, and adjust and improve, conservation actions." CA Wildlife Action Plan 2005

AFC's Goal: To purchase 11 acres of riparian wildlife corridor in Cottonwood Canyon (the "Cottonwood Property")

*OBJECTIVE: Preserve the Cottonwood Property as natural open space in perpetuity.*

- Action 1 – accept conveyance of the land in the name of "Arroyos & Foothills Conservancy, a California public benefit non-profit corporation". Holding the property in its natural state "in perpetuity" is assured by AFC's stated mission, by board resolution, by community expectations in supporting the acquisition and by recorded grant agreements with grantors.

*OBJECTIVE: Secure Yokum Spring and Yokum Creek on the Cottonwood Property for the benefit of the riparian habitat and animals. This constantly-flowing water source is one of only two reliable watering holes in the wildlife corridor running between Hahamongna and the San Rafaels.<sup>1</sup>*

- Action 1 – develop scope of work to assess riparian corridor
  - Expected outcomes: 1) detailed recommendations for assessment model methodology, 2) recommendations for action plan with timeline and task list, 3) understanding of regulatory context, 4) list of deliverables and performance indicators, 5) review and comments by technical advisory panel, 6) Yokum Creek Assessment Report
- Action 2 – Implement assessment model as recommended by Yokum Creek Assessment Report
  - Expected outcome: Yokum Creek restoration and adaptive management plan ("Adaptive Management Plan") to include 1) task list, timeline and performance measures, 2) short-term and long-term threats to implementation, 3) flora and fauna lists completed, 4) evaluation of upper canopy species, including age and health, 5) list of stakeholders and contacts, 6) report and review schedule.
- Action 3 - Implement Adaptive Management Plan

<sup>1</sup> Tim Brick and Tim Martinez, Arroyo Seco Foundation; EJ Remson, The Nature Conservancy

- Expected outcome: Friends of Cottonwood Canyon assumes active role<sup>2</sup>
- Action 4 – periodic reviews of new climate change studies to maintain best practices

*OBJECTIVE: Secure the watershed from development or other human interference and guaranty year-round percolation of water into the Raymond Basin Aquifer, which serves 16 different water purveyors.*

- Action 1 – Research the historical uses configuration and legal framework for the water flow
  - Expected outcome – 1) Legal review has already determined AFC will own water rights to Yokum Spring and Yokum Stream while on flowing on the Cottonwood Property<sup>3</sup>, 2) list of stakeholders associated with the creek flow, 3) historical high and low flow rates, 4) determination of any recommended flood management engineering, 5) hydrogeomorphology study, 6) recommendations for further steps consistent with creek restoration objectives, including determination of whether to bring stream to the surface to the west of Linda Vista Avenue and to the east to the Arroyo Seco

*OBJECTIVE: Secure this critical link in the natural system connectivity between the San Gabriels at Hahamongna and the San Rafaels by precluding development. The Cottonwood Property is the choke point in the only wildlife corridor between the Arroyo Seco (with headwaters in the San Gabriels) and the San Rafael Hills. The Cottonwood Property is zoned for 4 houses; development would cut off the corridor rendering the San Rafaels a biological island.<sup>4</sup>*

- Action1 – Continue to monitor and record species movement through the property in coordination with other stakeholders [we know of another gal who is doing this in the Verdugos]
  - Expected outcome – 1) expanded database of species movement/activity from AFC cameras and from cameras of collaborating third parties, 2) review of data by technical advisory panel, comprised of all relevant stateholders, 3) recommendations for actions to support/expand species use of the riparian corridor, 4) share data among stakeholders (See Question 7.12 for Data Management and Access strategy)
- Action 2 Initiate annual workshop with stakeholders to discuss findings and strategies to support species use and movement through the corridor

<sup>2</sup> The Friends of Cottonwood was established in 2014 and is operational. It is populated by volunteers with a demonstrated passion for Cottonwood Canyon and skill sets useful to our work in the canyon. The Friends of Cottonwood Canyon is supported by AFC with expertise, funding and staff.

<sup>3</sup> Tom Bunn, Esq. of Lagerlof, Senecal, Gosney & Kruse, water rights specialists

<sup>4</sup> Summary Appraisal Report, Tom Erickson, MAI, May 27, 2013; Appraisal of Residential Land, Cottonwood Canyon Site, Robert A. Steele, MAI, October 4, 2003 (who appraised the site for 5 residential lots); Tracey Bremer, architect created aerial rendering of potential development – attachment to this application.

- Expected outcome – 1) coordinated stakeholder effort, 2) leveraged relationships with community and land management agencies.

*OBJECTIVE: Secure this critical link in the potential natural system connectivity from the San Gabriels at Hahamongna to the San Rafaels, then to and through the Verdugo Mountains to the San Gabriel Mountains at Big Tujunga Wash (the “Hahamongna to Tujunga Wildlife Corridor”). Acquiring Cottonwood will not by itself complete the Hahamongna to Tujunga Wildlife Corridor; more properties have to be secured. But even if system connectivity were established from Big Tujunga to the Verdugos to the San Rafaels, development of Cottonwood Canyon would cut off continued passage to the Arroyo Seco and the San Gabriels at Hahamongna. Cottonwood is one piece of the puzzle. (See Hubs and Corridors Map Attachment)*

- Action 1 – Complete work on the CAPP and submit to DFW for review and approval
  - Expected outcome – Approval of the Hahamongna to Tujunga CAPP
- Action 2 – Convene kick-off stakeholder workshop
  - Expected outcome 1) Identification of staff and community contacts for agencies and land managers, 2) establishment of a CAPP land acquisition committee, 3) outline for a five year, ten year and 25 year land acquisition and management strategy

*OBJECTIVE: Secure this readily-accessible wilderness as a local resource for nature education.*

- Action 1 – establish Friends of Cottonwood Canyon to recruit community volunteers (see Footnote 2)
  - Expected outcome – 1) Friends of Cottonwood Canyon community outreach and education plan, 2) environmental education program links with local schools and colleges, 3) environmental education program links with underserved communities regardless of location, 4) Community funding for creek management

John Howell  
Chief Executive and General Counsel  
Arroyos Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Date: September 11, 2015

Re: The Nature Conservancy's Support of Cottonwood Acquisition and Hahamongna to Tujunga Wildlife Corridor

Dear John,

When we saw each other at the Biodiversity Workshop we hosted in March, I was very pleased to learn that the Arroyos & Foothills Conservancy ("AFC") has identified a wildlife corridor that is outside of The Nature Conservancy's ("TNC") current area of engagement in Southern California. This corridor links the San Gabriel Mountains via the Arroyo Seco with the San Rafael Hills, the Verdugo Mountains, and then ultimately meets up with the San Gabriel Mountains again at Big Tujunga Wash. While some parts of this corridor are currently under conservation management, there is further work to be done to ensure that wildlife can continue to use this linkage on into the future. We appreciate that AFC is working to create the exciting opportunity for the conservation community to work together to realize this ambitious and extremely important goal.

You have asked for TNC's support of your acquisition of 11 acres in Cottonwood Canyon. The mission of TNC is to conserve the lands and waters on which all life depends. To achieve that mission in California, the Conservancy has worked to protect and restore a variety of wetland and upland habitats in the state for over 56 years. Our work has included economic investments numbering in the hundreds millions of dollars to protect and restore ecologically important lands for the protection of rare and endemic species, natural communities, and vital sources of water that support biodiversity and essential ecological functions. Using a science-based approach, we have made significant investments in riparian restoration throughout California.

In 2013, TNC completed an assessment of biodiversity within Greater Los Angeles, and found that Cottonwood Canyon ranked very high in terms of its biodiversity potential. The canyon contains habitat that, due to decades of development, has grown increasingly rare within the South Coast of California: Southern Oak Woodland, Coastal Sage Scrub, Chaparral, and Streamside Riparian Woodland. Because Cottonwood Canyon lies within a narrow strip of intact habitat that connects the Arroyo Seco to the San Rafael Hills, its loss to development could have negative consequences for the movement of wildlife through the area. If connectivity is severed, species that depend on this linkage to move between the San Rafael Hills and the San Gabriel Mountains would no longer have an intact land route for movement, and the San Rafael Hills could become a biological "island" without this

connection. From hundreds of studies in the conservation science literature, we know that ultimately, small patches of habitat are vulnerable to losses in biological diversity. If Cottonwood Canyon is not preserved as native habitat, the San Rafael Hills may not be able to support the wide a variety species it does today.

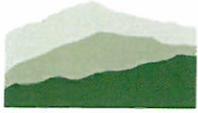
We appreciate that AFC provides valuable educational program on its lands, and that, in working with the owners, you are already making full use of the Cottonwood property. This not only serves the current generation but engenders the conservation ethic for future generations.

We support your Cottonwood Canyon acquisition as the first strategic step to establish the Hahamongna to Tujunga Wildlife Corridor, and strongly support the AFC in working to protect this vital wildlife connection.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sophie Parker', written in a cursive style.

Sophie Parker, Ph.D.  
Senior Scientist  
The Nature Conservancy



135 Green St.  
Second Floor  
Pasadena, CA  
91105  
323.223.0441

[www.tpl.org](http://www.tpl.org)

September 1, 2015

John Howell  
Chief Executive and General Counsel  
Arroyos Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

**Re: Support of Cottonwood Acquisition and Hahamongna to Tujunga Wildlife Corridor**

Dear John,

The Trust for Public Land (TPL) recognizes the critical need to preserve the 11-acre parcel in Cottonwood Canyon (the "Cottonwood Property") that is a current project of The Arroyos & Foothills Conservancy ("AFC"). This canyon appears to provide the only wildlife corridor connecting the San Rafael Hills to the San Gabriel Mountains via the Arroyo Seco. If the Cottonwood Property is lost to development, the extensive wildlands in the San Rafaels would be rendered a biological island. The corridor is at its narrowest at the Cottonwood Property and the likely siting of four residences allowed by zoning would span the width of the canyon in two locations.

TPL is especially appreciative that AFC is authoring a conservation plan for a potential 10-mile wildlife corridor linking the San Rafaels to the Verdugo Mountains and then the San Gabriels at Big Tujunga Wash. This will lay the groundwork for conservation organizations to partner on the ambitious and extremely important goal of reestablishing uninterrupted wildlife passage through the San Rafaels and the Verdugos to the San Gabriels on the east at Hahamongna Watershed Park and on the west at Big Tujunga Wash. The Cottonwood Property is a lynchpin; this grand plan will fail if developed.

We know AFC has worked extensively over the past 15 years preserving and restoring habitat in the foothills of the San Gabriels. In 2001 TPL partnered with AFC to preserve 15 acres along Altadena's Chaney Trail corridor and add it to the Angeles National Forest. The conservation plan AFC authored in 2008 for Altadena proved pivotal to your four acquisitions in Rubio and Millard Canyons in 2009-2012. Your strategic 2012 purchase at the mouth of Goss Canyon in La Crescenta was critical as well.

We also appreciate that AFC does more than save land. We applaud AFC's efforts to provide access and educational experiences for our communities, including habitat restoration. Your Friends of the Rosemont Preserve at Goss Canyon created a model for community programming. You already replicated it in Cottonwood Canyon, creating program there with the owner's approval.

We support your Cottonwood Canyon acquisition as the first step to establish the Hahamongna to Tujunga Wildlife Corridor, and look forward to working together to make the corridor a reality.

Sincerely,

Paolo Perrone  
Land and Water Project Manager, Los Angeles

# ARROYO SECO FOUNDATION

May 29, 2015

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John,

Thank you for informing the Arroyo Seco Foundation about the latest news regarding the Arroyos & Foothills Conservancy's ("AFC") intended acquisition of 11 acres of open space in Pasadena's Cottonwood Canyon. The information you provided describing the vital importance of this wildlife corridor in the establishment of an overall wildlife corridor connecting the San Rafael Hills to the Arroyo Seco and the San Gabriel Mountains is compelling.

We are pleased to know that you have established a volunteer community group to steward the property and that the property is already being utilized for outdoor education programs. Your partnership with Outward Bound Adventures, the local schools and scout groups is a testament to your commitment to engage the community in all your property acquisitions.

We were thrilled to hear about the Spotted Owl who used Cottonwood Canyon as a thermal refuge last summer. The video footage on your website is spectacular. We look forward to seeing what other migrating wildlife will make a stop in the Canyon to snack on the woodrats and avoid the heat of the summer.

The Arroyo Seco Foundation strongly supports your efforts to acquire and rehabilitate Cottonwood Canyon. We are encouraged by your plan to restore its habitat and thereby enhance its critical position in this wildlife corridor. We also support your ongoing efforts to secure wildlife corridors beyond Cottonwood Canyon into the San Rafael Hills and along the Arroyo Seco.

Sincerely,



Tim Brick  
Managing Director  
Arroyo Seco Foundation

Los Angeles River Center, 570 W. Avenue 26 #450, Los Angeles, CA 90065  
PO Box 91102, Pasadena, CA 91109-1622 ([www.arroyoseco.org](http://www.arroyoseco.org))

CITY OF LA CAÑADA FLINTRIDGE

RESOLUTION NO. 14-33

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LA CAÑADA FLINTRIDGE, CALIFORNIA, SUPPORTING THE PROPOSED ACQUISITION AND PRESERVATION OF COTTONWOOD CANYON BY THE ARROYOS AND FOOTHILLS CONSERVANCY

WHEREAS, the Arroyos and Foothills Conservancy is working to preserve eleven acres of open space know as Cottonwood Canyon, which includes a wildlife corridor, in the Linda Vista area of the City of Pasadena; and

WHEREAS, Cottonwood Canyon directly abuts the City of La Cañada Flintridge and therefore has a direct impact on the quality of life in the City; and

WHEREAS, Cottonwood Canyon has all four major plant communities; a spring which flows year-round and empties into the Arroyo Seco; provides an unimpeded wildlife corridor for animals moving both north and south such as mule deer, coyote, opossum, etc.; and is an extensive birding habitat; and

WHEREAS, development of Cottonwood Canyon would disrupt or possibly eliminate the wildlife corridor through Cottonwood Canyon, biologically isolating the San Rafael Hills as well as impacting the flow of the spring; and

WHEREAS, the City's General Plan states, in the Open Space and Recreation Element, Goal 2, that the City has a goal to: "preserve, protect and enhance open space within and adjacent to the City" and to "cooperate regionally with other municipalities and Los Angeles County to preserve natural open space corridors for wildlife."; and

WHEREAS, the Arroyos and Foothills Conservancy proposes the acquisition of Cottonwood Canyon, which is now for sale by private owners, in order to preserve the property's extensive resources.

NOW, THEREFORE, the City Council of the City of La Cañada Flintridge does hereby support the proposed acquisition and preservation of Cottonwood Canyon by the Arroyos and Foothills Conservancy.

PASSED, APPROVED AND ADOPTED THIS 6th DAY OF OCTOBER 2014.

  
Michael T. Davitt, Mayor

ATTEST:

  
Tania Moreno, City Clerk

Resolution No. 14-33  
Page 1 of 2

State of California )  
County of Los Angeles ) ss.  
City of La Cañada Flintridge )

I, Tania Moreno, City Clerk of the City of La Cañada Flintridge, California, do hereby certify that the foregoing Resolution No. 14-33 was duly adopted by the City Council of the City of La Cañada Flintridge at a Regular Meeting held on the 6th day of October, 2014, by the following vote:

AYES: COUNCILMEMBERS: CURTIS, OLHASSO, SPENCE AND DAVITT  
NOES: COUNCILMEMBERS: NONE  
ABSENT: COUNCILMEMBERS: NONE  
ABSTAIN: COUNCILMEMBERS: VOSS

Dated: October 6, 2014

  
Tania Moreno, City Clerk



OFFICE OF THE MAYOR

November 13, 2013

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 3  
Altadena, California 91003

Dear John:

Thank you for informing us of the intended acquisition of 11 acres in Pasadena's Cottonwood Canyon ("Cottonwood Canyon Property") by the Arroyos & Foothills Conservancy ("AFC"). The information packet you provided us describing the opportunity, with sections entitled "Biological and Ecological Values of Cottonwood Canyon and Enhancement Opportunities", "Upper Arroyo Seco, Cottonwood Canyon and Hahamongna Wildlife Corridors Survey and Enhancement Opportunities", "Cottonwood Canyon History", "Nature Education in Cottonwood Canyon", and "What If We Fail to Save Cottonwood Canyon", is very informative.

The Open Space Element and Conservation Element of the General Plan, adopted by the City Council January 23, 2012, underscores that Pasadena is vitally interested in preserving natural open space. To enable the process, we adopted open space land evaluation criteria. A remarkable number of those criteria appear to apply favorably to the Cottonwood Canyon Property, as highlighted on the attached listing. In addition, we are both familiar with the Cottonwood Canyon Property. It appears very likely that it would rank as a high priority target, were the City to evaluate it.

Further, we are pleased that you are focusing on the rich history of Cottonwood Canyon, and are supportive of your efforts to interpret it to the community.

Accordingly, we express our strong support of your efforts to purchase and preserve the Cottonwood Canyon Property. We are encouraged by your intent to enhance its habitat for wildlife, and to continue your efforts to secure wildlife corridors beyond the Cottonwood Canyon Property, both into the San Rafael Hills and along the Arroyo Seco. Please let us know if we can assist in these efforts.

Sincerely,

BILL BOGAARD  
Mayor

STEVE MADISON  
Councilmember, District 6

BB:jls

100 North Garfield Avenue • Pasadena, CA 91109  
(626) 744-4311 Fax (626) 744-3921



OFFICE OF THE MAYOR

September 10, 2015

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John:

Thank you for taking our City Manager, Michael Beck, and me on a tour of Pasadena's Cottonwood Canyon and describing the Arroyos & Foothills' ("AFC") intended acquisition of 11 acres of open space there. The information you provided describing the vital importance of securing the only discernible wildlife corridor connecting the San Gabriels at Hahamongna Watershed Park to the San Rafael Hills, and perhaps on to the Verdugo Mountains and the San Gabriels at Big Tujunga Wash, is compelling. Securing the flow of water from the spring on the land for the Raymond Basin is in itself of vital importance, given our water predicament in the state.

I am thrilled to know that you have established a volunteer community group to steward the property, and that the property is already being utilized for outdoor education programs. Your partnership with Outward Bound Adventures, the local schools and scout groups is a testament to your commitment to engage the community in all your property acquisitions.

Thank you for reaching out to the neighbors through your open house events last summer and inviting them to visit the property so that they could learn about its unique natural resources. I applaud your establishment of the Friends of Cottonwood Canyon committee. Your commitment to involve your neighbors in the stewardship of the canyon is commendable.

I strongly support your efforts to acquire Cottonwood Canyon. I am hoping the City can help with bringing the creek to the surface from its culvert. I am encouraged by your plan to restore its habitat and thereby enhance the land's critical position in this wildlife corridor. Your ongoing efforts to secure wildlife corridors from Cottonwood Canyon along the Arroyo Seco and into the San Rafael Hills then through the Verdugos is, in my opinion, of statewide importance.

Sincerely,

TERRY TORNEK  
Mayor

TT:jk

**PUTNEY AREA NEIGHBORS**

*Putney Road Crofton Way Devon Road Inverness Drive Braemar Road  
Normandy Drive Linda Vista Avenue Edgehill Place*

May 18, 2015

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John,

Thank you for involving Putney Area Neighbors (PAN) in activities surrounding Arroyos & Foothills Conservancy's (AFC's) intended acquisition of 11 acres of open space in Pasadena's Cottonwood Canyon. This property comprises the only remaining wildlife corridor from the Arroyo Seco to the San Rafael Hills and beyond. Cottonwood's year-around natural spring and stream are used by a wide variety of urban wildlife. PAN members recognized the importance of saving this and contiguous properties and worked on preservation strategies for several years without success; we just did not have the technical resources or fund-raising experience. As a result, we felt powerless to save the property. You probably remember our elation when AFC stepped up to effect preservation of this wildlife corridor, and we gratefully handed over documentation regarding our past efforts. AFC's extensive mapping of the area is impressive. The technical evaluations by biologists and wildlife experts are stellar. Even more impressive is that all the work is done by scores of dedicated volunteers!

AFC's neighborhood outreach last summer and fall provided many opportunities for the community to visit the property and learn about its unique natural resources. Establishing a volunteer group of neighbors, Friends of Cottonwood Canyon, to steward the property clearly shows AFC's commitment to involve the community in preservation of this wildlife corridor. In addition, the property is already providing outdoor education programs through AFC's partnership with Outward Bound Adventures, local schools, and scout groups.

Neighbors here support AFC's efforts to acquire and rehabilitate Cottonwood Canyon. We are encouraged by your plan to restore its habitat and enhance its critical position in this wildlife corridor. We also support your ongoing efforts to secure wildlife corridors beyond Cottonwood Canyon into the San Rafael Hills and along the Arroyo Seco.

Sincerely,



Sharon D. Scull, contact person for Putney Area Neighbors  
1722 Putney Road  
Pasadena CA 91103-1141  
626-578-1747



## FLINTRIDGE PREPARATORY SCHOOL

**Peter H. Bachmann**

Headmaster

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John,

Thank you for informing me about Arroyos & Foothills ("AFC") intended acquisition of 11 acres of open space in Pasadena's Cottonwood Canyon. The information you provided describing the vital importance of this wildlife corridor in the establishment of an overall wildlife corridor connecting the San Rafael Hills to the Arroyo Seco and beyond is compelling.

I am thrilled to know that you have established a volunteer community group to steward the property and that the property is already being utilized for outdoor education programs. Your partnership with Outward Bound Adventures, the local schools and scout groups is a testament to your commitment to engage the community in all your property acquisitions.

Cottonwood Canyon would be a great location for our students to get a hands-on education about California native plants and animals while performing community service projects on the property. You have proven to be a good partner with our students here at Flintridge Preparatory School in La Canada and we look forward to working with you in the rehabilitation of this new property.

I strongly support your efforts to acquire and rehabilitate Cottonwood Canyon. I am encouraged by your plan to restore its habitat and thereby enhance its critical position in this wildlife corridor. I also support your ongoing efforts to secure wildlife corridors beyond Cottonwood Canyon into the San Rafael Hills and along the Arroyo Seco.

Sincerely,

Heather Clark  
Science Faculty  
Advisor to Student Community Action Council  
Flintridge Preparatory School



John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John,

I want to thank AFC for helping with our interdisciplinary water study last spring. Your biologist and docent were very knowledgeable and did a good job teaching us all about the ecosystem of the canyon. The students enjoyed removing invasive non-native plants to help preserve and restore the natural environment.

Thank you for informing me about Arroyos & Foothills ("AFC") intended acquisition of 11 acres of open space in Pasadena's Cottonwood Canyon. The information you provided describing the vital importance of this wildlife corridor in the establishment of an overall wildlife corridor connecting the San Rafael Hills to the Arroyo Seco, and beyond, is compelling.

Cottonwood Canyon is a great location for our students to get a hands-on education about California native plants and animals while performing community service projects on the property. You have proven to be a good partner with our students here at Polytechnic School in Pasadena and we look forward to working with you in the rehabilitation of this new property.

I strongly support your efforts to acquire and rehabilitate Cottonwood Canyon. I am encouraged by your plan to restore its habitat and thereby enhance its critical position in this wildlife corridor. I also support your ongoing efforts to secure wildlife corridors beyond Cottonwood Canyon into the San Rafael Hills and along the Arroyo Seco.

Sincerely,

Tom Berrian  
Middle School Science Teacher  
Polytechnic School



**WESTRIDGE  
SCHOOL**

324 Madeline Drive  
Pasadena, California  
91105-3399

t 626.799-1153  
f 626.799-9236

[www.westridge.org](http://www.westridge.org)

John Howell  
Chief Executive and General Counsel  
Arroyos & Foothills Conservancy  
P.O. Box 1  
Pasadena, CA 91102

Dear John,

I want to thank AFC for helping with our first "Science, Service and Leadership" class this summer. The girls enjoyed visiting all the AFC properties and learning about your Friends groups model of property stewardship.

They especially enjoyed getting to know about your Cottonwood Canyon Acquisition Project. They had a great time hiking the property and seeing the photos generated by your Wildlife Movement Education Project. They had a great sense of accomplishment in holding a fundraiser for Cottonwood and informing their school community about this critical wildlife preservation opportunity in the over developed San Rafael foothills.

Cottonwood Canyon is a great location for our students to get a hands-on education about California native plants and animals while performing community service projects on the property. You have proven to be a good partner with our students here at Westridge School in Pasadena and we look forward to working with you in the rehabilitation of this new property.

I strongly support your efforts to acquire and rehabilitate Cottonwood Canyon. I am encouraged by your plan to restore its habitat and thereby enhance its critical position in this wildlife corridor. I also support your ongoing efforts to secure wildlife corridors beyond Cottonwood Canyon into the San Rafael Hills and along the Arroyo Seco.

Sincerely,

Ryan Skophammer  
Upper School Science Faculty  
Westridge School

# ARROYOS & FOOTHILLS CONSERVANCY 2015 ANNUAL REPORT

**"Thousands of tired, nerve-shaken, over-civilized people are beginning to find out that going to the mountains is going home; that wildness is a necessity"**

John Muir  
*Our National Parks*



PHOTO CREDITS  
**OWL:** Lance Benner  
**BOBCAT:** Bob Grassie  
**SALAMANDER:** Robert Hess  
**MOUNTAIN LION:** Johanna Turner  
**HAWK:** Mickey Long

# A LETTER TO OUR FRIENDS & SUPPORTERS

Our cover page heralds why we do what we do. Preserving property to provide habitat for these beautiful animals is our main goal, and we can't do it without you. So we want to thank you and share with you the incredible journey of P41 that really highlights the importance of your ongoing support.

This beautiful mountain lion has taken up residence in the Verdugo Mountains. Experts tracked his journey there from the San Gabriel Mountains at Big Tujunga Wash. We already know that mountain lions frequent the San Rafael Hills. So here's the question: When a mature female cat is in the San Rafael hills across the divide from the Verdugos, can P-41 move the short distance there to choose his mate? Not now; he can only go back the way he came. But if we can connect the two ranges, he will have the option to go east into the San Rafael hills then all the way to the San Gabriels in Altadena—20 miles from where his journey began. We call this potential linkage the Hahamongna to Tujunga Wildlife Corridor—running all the way from the San Gabriels at Hahamongna to the San Gabriels at Big Tujunga Wash by way of Cottonwood Canyon, the San Rafael hills and the Verdugos.

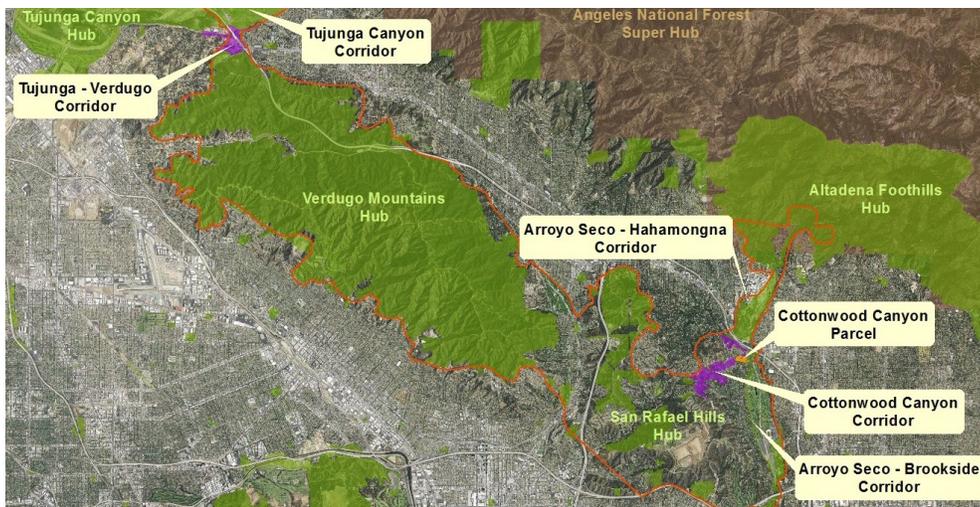
Community members got this Cottonwood and Corridors Project off to a great start by donating \$375,000 and committing \$100,000 in volunteer time. We're all itching to charge ahead. As we work with government agencies to secure the balance of the money to save this first critical link in the Hahamongna to Tujunga Wildlife Corridor, we also are reaching out to more and more conservation organizations to share our discovery. People are getting really excited. We need to build on this momentum and create a network of land trusts and agencies to work together to realize the Hahamongna to Tujunga Wildlife Corridor. This is the reality of land conservation in Southern California—no one agency or organization has the assets to purchase or the capacity to manage these urban wildlife corridors on their own. So we work together.

Below is a map of this incredible passageway we are working to preserve. Cottonwood Canyon is the very first step, and we will pursue government funding and community support until we save it. Then we and our partners will move on to the next highest priority parcels and do it again—until we succeed in securing the entire Hahamongna to Tujunga Corridor for the benefit of wildlife—forever.

We thank you for joining us on this incredible journey—and invite you to stay with us. With gratitude,

  
Matthew DeVoll  
AFC President

  
John Howell  
Chief Executive and General Counsel



Hahamongna to Tujunga Wildlife Corridor

## COTTONWOOD CANYON & WILDLIFE CORRIDORS

(11-15-14 through 11-5-15)

**Cottons** (\$50,000)  
Gordon Crawford  
Helen & Wilton Webster Foundation  
Anonymous

**Woods** (\$25,000)  
Ann Peppers Foundation

**Canyons** (\$10,000-\$24,999)

**Wildlife** (\$5,000-\$9,999)  
Don Hall

**Corridors** (\$1,000-\$4,999)  
Henry Fliege  
Flintridge Sacred Heart Academy  
Perlette Jura  
Jim McManus  
Louisa & Mark Nelson  
Sharon Scull

**Perennial Spring** (\$5-\$999)  
Katie Arial  
Carole & Mike Babcock  
Linda & Michael Babcock  
Danny Bakewell  
Sally Beaudette  
Lance Benner  
Susan Bleecker  
Lia Carter  
Sharon & Pat Crandall  
Joan Evans  
Carolyn Gmelich  
Barbara & Roy Goto  
Clara Gross  
Lyle Hatridge  
Marianne Herrill  
Christine Hessler  
Mindy & Michael Hickman  
Bonnie Hidas  
Patricia Hill  
Judy & Fred Hoepfner  
Debbie & Schuyler Hollingsworth  
Melinda Howell & Steve Cole  
Karen Jain  
Nancy & David Johnson  
Heidi Johnson & Daniel Bowen  
Carolyn Kellogg-Toogood  
Dana Lamphear  
Carole Lewis  
Horace MacVaugh  
Charlene Mao  
Carolyn McBride  
Robert Meade  
Beth Miles  
Leslie Miller  
Kathleen Moore-Alpaugh  
Sue Mossman  
Charles Nearburg  
Eloise Nelson  
Mimi Paller  
Diane Park  
Diane Philibosian & Tom Seifert  
Mike Reibel  
Julie Richards  
Laura Scott Sellers  
Tamara & Michael Silver  
Elaine Silvestro  
Specstacular Fine Eyewear  
Janet Sporleder  
Rody Stephenson  
Barbara Turner  
Omourtag & Svetla Velev  
Sue & Seth Walworth  
Linda & Bob Winters  
Lincoln Wood  
Mary Yui

## AFC PROGRAMS



AFC would like to welcome its new Program Administrator, Tim Martinez. Tim's been brought on board to oversee our

ever expanding program opportunities. He will be working with local schools and community groups to help AFC more actively engage and connect its protected lands and conservation efforts with the communities we serve. Over the past year AFC volunteers completed over 3,000 hours of work accomplishing our mission!

### ROSEMONT PRESERVE

Friends of the Rosemont Preserve continue to engage the communities of La Crescenta, La Canada, Glendale and Burbank by partnering with local schools, youth groups and passionate volunteers. Ongoing programs include monthly restoration days, open gate days, docent-led tours, field trips, and Scout projects. During Earth Day, held last April in partnership with LA Works, over 130 volunteers came to the Preserve to update the trail, reduce the fire hazard for our neighbors and plant around the perimeter of our outdoor classroom. A big THANK YOU to all the volunteers who help make the Preserve a cherished community resource!



### MILLARD CANYON

Friends of Millard Canyon were busy this past year hosting local school and community groups. For the 3rd year in a row, they worked with the Pasadena Garden Club on the Garden Club of America's Partners for Plants program. The Friends also worked with the Meadows Fire Safe Council on fire hazard reduction for our neighbors in the Canyon. As part of the LA Reforestation Initiative they oversaw tree planting in the canyon and helped nurture the trees through the drought.

### RUBIO CANYON

Polytechnic School did an interdisciplinary study of the human impact on water in the canyon. For the 2nd year in a row, Westridge did restoration work at both Rubio and Millard as part of their Soil Unit Study.



### WILDLIFE MOVEMENT EDUCATION PROJECT

Say hello to the real "Friends" of Cottonwood—the animals who rely on the spring and thermal refuge created by its canopy of indigenous oaks, sycamores and maples. Thanks to Ann Peppers Foundation, Edison International and Pasadena Recreation & Parks Foundation, AFC received startup funding for our Wildlife Movement Education Project, designed to provide underserved, urban youth with interactive wildlife experiences without stepping out of the classroom. We do this by installing wildlife cameras on each AFC property to track wildlife movement through vital natural corridors. We upload the captured images to a website to compliment a curriculum created by our biologists. This will give teachers the resources to teach their students about wildlife corridors and the importance of land conservation. It also informs us about how the animals use these corridors. This bobcat and deer were drawn to Cottonwood's spring and creek.

# THANK YOU TO OUR SUPPORTERS

## INDIVIDUALS

These supporters made donations in the fiscal year to enable us to offer programs and steward our properties:

### Arroyos Donors (\$1,000+)

Gordon Crawford  
Rob Floe  
Noble & Lorraine Hancock Family Fund  
Cameron Hotchkis  
Remington Hotchkis  
Joanne Lipsig  
Desiree & Paul Rabinov  
Fred Schwarzenbach

### Foothills Donors (\$1-\$999)

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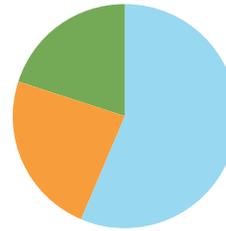
## COMMUNITY GROUPS

Altadena Community Chest  
Ann Peppers Foundation  
Edison International  
Kiwanis Club of Pasadena  
Orchard Supply Hardware  
Pasadena Diggers Club  
Pasadena Garden Club  
Pasadena Rec. & Parks Foundation  
Polytechnic School  
SoCalGas

## CORPORATE EMPLOYEE MATCH PROGRAMS

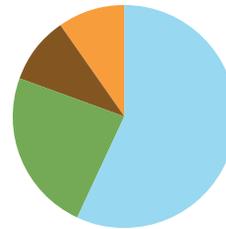
Bank of America  
Google  
Tesoro  
Verizon  
Walt Disney Company  
Wells Fargo

# AFC FINANCES FYE 2015\*



TOTAL INCOME	\$ 312,521
Individual donations	56.6%
Corporate donations	23.6%
Community groups	19.8%

90.7% of Total Income was directed to program and land acquisition



TOTAL EXPENSES	\$ 150,149
Programs	57.1%
Land acquisition	23.6%
Management	9.8%
Fundraising	9.5%

\*Figures are preliminary pending completion of 990.

## FOOTHILLS SOCIETY

Foothills Society members support AFC with 3-year pledges.

[WWW.ARROYOSFOOTHILLS.ORG/FS](http://WWW.ARROYOSFOOTHILLS.ORG/FS)

### Legacy Members

Sameer Etmán  
Ninarose Mayer  
Terry Villanueva & Justin Whalin

### Canyon Live Oak (\$5,000 per year)

Don Hall

### Bay Laurel (\$2,500 per year)

### Engelmann Oak (\$1,000 per year)

Sara & George Abdo  
Claire & Bill Bogaard  
Carole & Jack Brady  
Sandy Gillis & Tom Gammill  
Sally & John Howell  
Sharon Laubach & Andrew Mishkin  
Coyotes Dianne Philibosian & Tom Seifert  
Katie & Chris Poole  
Nancy & Bruce Steele  
Betsey Tyler  
Linda Zinn

### Coast Live Oak (\$500 per year)

Laura & Jim Garrett, Ninarose Mayer, Bill Meurer, Ellen & Anthony Portantino, Jeanette & Mark Stirdivant, Colleen & Luke Welsh

### California Sycamore (\$250 per year)

Tracey Alsobrook, Mary Barrie & Ted Stork, Sally Beer, Suzanne & Walter Cochran-Bond, Jennifer & Matt DeVoll,

Christine Hessler, Betty Ho, Walter Hubert & Mark Saltzman, Michelle Huneven & Jim Potter, Vicky & Benny Ko, Jeanne & Patrick Lejeune, Scarlett & James Osterling, Julie Reiz & Kennon Miedema, Andrea Rawlings & E.J. Remson, Loretta Savery & Alex Black, Dorothy Scully, Lois Tandy, Edwina Travis-Chin & Robert Miller, Lynn & Donald Voss, Joanne & Tim Wendler

### Toyon (\$100 per year)

Joan Aarestad, Jane & Tom Apostol, Marshall & Paul Ayers, Tom Brady, Edichi & Lou Byerly, Barbara & William Christopher, Sharon & Pat Crandall, Brendan Crill, Annmarie Eldering, Jocelyn & Peter Fernandes, Anita Fromholz, John Grant, Mic Hansen, Lyle Hatridge, Ginny & Jim Heringer, Jennifer Herstein & James Rudd, Michael Horner, Katie & Jim Ipekjian, Roger Klemm, Mary Ellen Kramer & Peter Eisenhardt, Dana Lamphear, Jan & Mickey Long, Tim Martinez, Karin & Herb Meiselman, Toni & Patrick Morrissey, Sue Mossman, Gregg Oelker, Carla Slepak & Gary Day, Marie & John Slonski, Peggy Stewart, Tiona Wierman, Felicia Williams, Michele Zack & Mark Goldschmidt



Thanks to our corporate sponsors



**BEQUESTS:** Did you know that you can leave/create a legacy that commemorates your commitment to AFC's mission? By making a gift through your estate or naming AFC as a beneficiary of your retirement or insurance plan, you will ensure that our work of protecting the land will continue. To learn more, contact your estate planning professional.

