



# Big T Wash Line

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## About the Big Tujunga Wash Mitigation Area

**“Big T” is a parcel of land located in the City of Los Angeles Sunland area (see Page 5).**

The Big Tujunga Wash Mitigation Area (Big T) covers an area of approximately 210 acres of sensitive habitat, encompassing the Big Tujunga Wash and Haines Canyon Creek. The site was purchased by Los Angeles County Public Works in 1998 as compensation for habitat loss for other Public Works projects.

Public Works' implementation of the Master Mitigation Plan for Big T has been underway since April 2000. Big T protects one of the most rapidly diminishing habitat types found in Southern California: willow riparian woodland. The site is home to several protected species

of fish, including the Santa Ana sucker, Santa Ana speckled dace, and arroyo chub. It also contains habitat for sensitive bird species such as the least Bell's vireo and southwestern willow flycatcher.

The purpose of this newsletter is to provide updates to ongoing programs and to explain upcoming enhancement measures that will be implemented on the site. Newsletters are published on a semi-annual basis in the spring and fall.

**More information can be found at:**  
[pw.lacounty.gov/wrd/projects/BTWMA](http://pw.lacounty.gov/wrd/projects/BTWMA)

# The Endangered Least Bell's Vireos Habitat at Big T



Photo 1. Example of the dense riparian woodland that dominates areas surrounding Haines Canyon Creek.

Big T hosted a very special bird this spring and summer – the least Bell's vireo. This migratory songbird is endangered throughout its range and only occurs in small pockets of habitat in Southern California during its nesting season (spring and summer) before flying down to western Mexico and Central America for the non-breeding season. They can be recognized by their distinctive song. It is sometimes described as sounding like a cassette being played on fast-forward or like the static sound of a phonograph.

Least Bell's vireos rely on areas that contain dense riparian vegetation for breeding (Photo 1), and the cottonwood and willow woodlands surrounding Haines Canyon Creek provide ideal habitat. While the 2017 Creek Fire left much of the riparian vegetation at Big T burnt to the ground, the habitat that grew back in its wake created the dense understory vegetation that least Bell's vireos need for nesting. The newly resprouting trees and shrubs create what is called "primary successional habitat", or habitat that is early in its recovery after major disturbance, including fires. So, while the Creek Fire was devastating to much of the mature riparian vegetation, it also allowed a natural regeneration of vegetation which serves an environmental purpose.

The male and female vireo build their nest together, selecting a site within thick vegetation, usually just a few feet above the ground. They take turns delivering bark and other plant material to the nest site and use spider webs to glue the whole structure together, which usually hangs between two small twigs (Photos 2 and 3). The female lays 2 to 4 eggs, which the pair then incubates for about two weeks until they hatch. It takes another two weeks of feeding and brooding their young until they are large enough to fledge from the nest. If the vireos' nest

fails, they usually build a new nest soon afterward and can re-nest several times over the course of the breeding season.

## A Species at Risk

Populations of least Bell's vireo have declined over the last few decades for two main reasons: habitat loss and nest parasitism by brown-headed cowbirds. These vireos can only breed in dense riparian vegetation that grows around streams and rivers. This type of habitat has been steadily disappearing throughout Southern California because of human development. Riparian woodlands are no longer common in Southern California, making Big T an important patch of habitat for vireos in our area.

Brown-headed cowbirds, which are related to blackbirds, use a breeding strategy referred to as nest parasitism. They never build their own nests and exclusively lay eggs in the nests of other bird species, referred to as hosts. Cowbirds parasitize the nests of many different bird species, including the least Bell's vireo, leaving the vireo hosts to incubate the cowbird eggs and raise the cowbird young. The cowbird eggs and nestlings develop faster than the host's eggs, resulting in the cowbirds hatching sooner and outcompeting the host's own young.

Cowbirds utilize various strategies to ensure that the host birds don't remove or damage the foreign eggs. They often remove some of the host's own eggs from the nest when they lay their own, possibly tricking the hosts into unknowingly raising the cowbirds' young. In addition, if the host birds recognize and remove the cowbird egg, the cowbird often comes back and pecks holes in the host's eggs, resulting in the failure of the nest. This behavior is to deter the hosts from removing cowbird eggs, but also causes the hosts to build another nest, creating another opportunity to parasitize the birds. Female cowbirds can lay 40 to 60 eggs each year, and often parasitize the same birds throughout the breeding season, even if the hosts have already raised cowbird young or lost their nests as a result of previous parasitism. In these ways, cowbirds make it difficult for the host to successfully raise their own young, and least Bell's vireo populations in Southern California have been decimated as a result.

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Photo 2. A least Bell's vireo nest hanging between twigs.

Photo 3. A least Bell's vireo building its nest.



### Brown-headed Cowbird Trapping

In an effort to combat the pressure that cowbirds exert on the breeding birds at Big T, multiple cowbird traps have been deployed regularly throughout the Mitigation Area since 2009. The traps are not used to control the number of cowbirds. The traps are used to decrease the likelihood of cowbirds attempting to nest in riparian areas where endangered birds can be found and thereby increasing the potential for successful nesting by our native songbirds. These traps are baited with decoy cowbirds, and are serviced every day from the end of March through early July. The traps capture the cowbirds in a large cage where they are provided with food and water until they are humanely euthanized. In 2019 alone, 55 cowbirds were removed from the Mitigation Area, providing nesting birds in the area with needed relief.

### Trouble for the Vireos at Big T

Three pairs of least Bell's vireos were detected at Big T this year in the riparian habitat that dominates the southern and eastern sections of the Mitigation Area. Unfortunately, of these three pairs, only one nest was observed to have successfully fledged young. Roughly half of the other observed nests were parasitized by cowbirds (Photo 4), resulting in the failure of the nests, with the remaining nests failing for unknown reasons (possibly from parasitism or predators eating the eggs or young). While these observations were unfortunate, they do inform the strategies that will be implemented in the future at Big T to protect the vireos, particularly where to place cowbird traps within the Mitigation Area to provide the most relief.



Photo 4. A failed least Bell's vireo nest containing a brown-headed cowbird egg.

### Annual Cleanup Day Cancelled

The Big Tujunga Wash Annual Cleanup Day was canceled this year due to COVID-19 restrictions that remain in place and limit group size. While this situation is unfortunate, the health and safety of our community members is of the utmost importance, and we will look forward to resuming the Annual Cleanup Day in 2021.

### Please Report Prohibited Activities

Evidence of prohibited activities, including campfire use and fishing at the Tujunga Ponds has been observed by maintenance crews this past summer and fall. While fishing may seem like a relatively benign activity, lost or discarded fishing line is a hazard to wildlife.

In late September, a barn owl was observed hanging in a tree, and upon closer inspection it was apparent that it had become entangled in fishing line and was unable to escape, likely dying of starvation. In addition, campfire remains, including a couple of areas where the surrounding vegetation had burned, were observed. Considering the current fire climate, it is important to remain vigilant in reporting any illegal fires to keep Big T and the surrounding communities safe. Please report any prohibited activities observed at Big T to Public Works or call local authorities to report emergencies.

Maintenance crews will resume onsite maintenance starting in the early spring of 2021. Until then, no maintenance crews will be on site. If unauthorized activities such as fishing or recreating are observed in Haines Canyon Creek or the Tujunga Ponds during that time, please notify Public Works.

# Fighting Fire with Fire: The Past, Present, and Future of Wildlands Management

**In recent years, California has experienced some of the state's most catastrophic and destructive wildfires, with this current fire season already breaking records as the worst in California history even before the end of September.**

These fires have displaced whole communities, destroyed homes, and damaged precious habitat while leaving behind silent moonscapes of ash and rubble in their wake. California is no stranger to wildfire, and the 2017 Creek Fire was a reminder of how quickly fire can alter a landscape. In fact, fire has played an intrinsic and irreplaceable role to the complex and interconnected life cycles of many of California's ecosystems. However, the fires of today share only a scant resemblance to those which burned throughout the state before colonization. So, what is causing this acceleration in the size and destruction of wildfires? Despite the negative effects of fire, what beneficial role does it play in the environment? How these pressing questions are addressed by Californians may determine the future of this place so loved for its diversity of wildlife, terrain, people, and opportunities.

According to CAL FIRE on September 24, 2020, from the most reliable records available from 1932 to 2020, 17 of the 20 largest fires in California history have burned in just the last 18 out of 88 years. Of the 5,681,236 total acres burned by these notorious fires, 5,113,945 acres (90 percent) were burned in that 18-year period, and 2,218,495 of those acres (39 percent) have burned so far this year from 5 fires alone. These numbers may be startling, but more importantly they reveal an interconnected pattern that has set the stage for these increasingly voracious blazes. The culprits are factors associated with climate change paired with the suppression of the indigenous land management practices that many California ecosystems have evolved to depend on.

The popular trope of the "untouched wilderness" before colonization is not only false but does a great disservice to the vast wealth of knowledge developed by indigenous peoples who once skillfully stewarded the land. In her book, "Tending the Wild", author and researcher, M. Kat Anderson describes indigenous land management practices that included selective pruning, coppicing, removal of vegetation, developing irrigation channels, sowing seed, tilling soil, transplanting plants, weeding, and setting seasonally scheduled burns in grasslands, meadows, and forest and woodland understories. The scheduled burns in particular sustained much of the resources the indigenous peoples depended upon for survival while at the same time rejuvenating and maintaining these ecosystems. Anderson sums up the important role that fire played for their cultures and the health of the land.

"Deliberate burning increased the abundance and density of [wild plant foods]; enhanced feed for wildlife; controlled the insects and diseases that could damage wild foods and basketry material; increased the quantity and quality of materials used for basketry and cordage; and encouraged

the sprouts used for making household items [and tools]. It also removed dead material and promoted growth through the recycling of nutrients, decreased plant competition, and maintained specific plant communities [...]"

These complex symbiotic relationships made living sustainably off the land possible and fruitful, but once indigenous people were forced from their homes and into reservations, their ability to continue these practices became nearly impossible. Then around the early 20th century began a well-meaning yet woefully misinformed conservation movement that sought to preserve and protect nature. It largely overlooked the role of indigenous people in shaping the land and sought to preserve nature without human intervention. Though there was push back from people like Galen Clark, advocate for the Sierra Miwok and their traditional ways, his words were overshadowed by the momentum gained by those pushing for strict preservation and fire suppression. This helped solidify the path towards today's predicament.

Moving forward to 2020, smoke laden skies loomed for days on end from the local Bobcat Fire and two dozen other fires throughout the state as the sun glowed red in the sky like a fading warning light. The Bobcat Fire in particular has challenged firefighters due to a set of underlying factors. "This fire was man-made on many levels," said Bill Patzert, a climatologist who spent several decades working at the NASA Jet Propulsion Laboratory in La Cañada Flintridge. "Record heat, population growth, fossil fuels, and other factors related to climate change have contributed not only to the state's unprecedented fire season," Patzert said, "but also to the particular challenges of the Bobcat Fire," the Los Angeles Times reported on September 15, 2020. According to Angeles National Forest spokesman, Andrew Mitchell, the challenges making this a nightmare for firefighters are the aforementioned factors in combination with rugged terrain and built up dry vegetation in an area that, "hasn't burned in 60, 70 years".

With so much fuel available to burn, little rain this past winter and spring, and record-breaking heat waves, fires are burning hotter and more aggressively than prescribed burns of the past, making it harder for ecosystems and communities to cope. Because of the complexity of the situation, a multilayered approach that includes climate change action, invasive weed management, selective vegetation thinning, and the careful reintroduction of fire regimes may be needed. As stated by fire ecologist Richard Minnich, "[...] the ecological bottom line [is the] more burns in a given area, the smaller and more manageable fires will be in the future." Reaching that future will require a wealth of societal support for our firefighters and scientists and mass pressure on the political forces capable of allocating resources to this cause.

# KID'S CORNER

## My Fire Inspection Checklist

**Become an official Safety Inspector!**

Make sure your home is safe and inspect for risks. Ask a grown-up for help.

If the item on your list is **SAFE**, color the circle next to it **GREEN**.

If the item on your list is **UNSAFE**, color the circle next to it **RED**.

If you are **NOT SURE** if the item on the list is safe, color the circle **YELLOW**.

-  Electrical cords are in good condition (not damaged).
-  Appliances and lights are plugged into separate electrical outlets.
-  All smoke alarms work when tested by a grown-up.
-  All escape routes are clear of clutter and easily accessible.
-  Curtains and other things that can burn are away from the stovetop.
-  Portable space heaters are off whenever a grown-up leaves the room and goes to sleep.

-  The clothes dryer has a clean vent and filter (no lint build-up).
-  A grown-up always stays in the kitchen whenever food is cooking on the stovetop.
-  All extension cords are used safely (not under carpets or across walking areas).
-  Portable space heaters are 3 feet away from anything that can burn.
-  The furnace has been inspected in the past year.
-  The chimney has been inspected and cleaned in the past year.

If any of your circles are **YELLOW** or **RED**, ask a grown-up to make it safe.

Parent Signature: \_\_\_\_\_



Check out Sparky the Fire Dog® at [sparky.org](http://sparky.org)  
Sparky® is a trademark of NFPA

## EMERGENCIES? INCIDENTS? QUESTIONS?

CALL 911 TO REPORT ANY EMERGENCY SUCH AS FIRE OR ACCIDENT

• To report minor incidents or regulation infractions contact Los Angeles County Sheriff's Department, Parks Bureau Trails Team at (323) 845-0070. (Please DO NOT use 911.)

• Do not attempt to enforce regulations yourself; please allow law enforcement to handle the situation or incident.

• For emergency follow up or to report minor incidents, obtain information, or get questions answered (8 a.m. to 5 p.m., Monday through Thursday), please contact:

### Los Angeles County Public Works

900 S. Fremont Ave  
Alhambra, CA 91803  
Email: [BTWMA@pw.lacounty.gov](mailto:BTWMA@pw.lacounty.gov)  
Phone: (626) 458-6158

## Where is the Big Tujunga Wash Mitigation Area?

Downstream of Big Tujunga Canyon, right in Lake View Terrace and south of the 210 freeway, there is a native riparian (water loving plant) natural area filled with cottonwoods, willows, and pools of water that support many native aquatic species.

Check out the Big T website for more information at:

- [pw.lacounty.gov/wrd/projects/BTWMA](http://pw.lacounty.gov/wrd/projects/BTWMA)

