



DESERT VIEW RECREATIONAL TRAILS

ABSTRACT OF THE PROGRAM:

The Desert View Recreational Trails project, (DVRT), located in the unincorporated community of Joshua Tree, California addresses critical open space management challenges. Nestled in an isolated valley amid large rock outcroppings between the Bullion and Little San Bernardino Mountains, the 605 acre project area provides nature education to visitors, as well as, habitat conservation for the various species living there and traveling through the wildlife corridor that connects to the Joshua Tree National Park, (JTNP). Additionally the area provides a variety of opportunities for individuals to recreate in the area while exploring the unique desert biome along the two designated trail loops.

The DVRT project includes site amenities that help regulate and control use of the area in an organized and respectful manner to encourage stewardship of the environment. The designation of a trail route along the periphery, as well as, the installation of several gates decommissioning roads in sensitive habitat areas, aides in the protection of habitat by minimizing disturbances to sensitive species such as the Desert Tortoise found in the restricted central portion of the Desert View Conservation Area.

THE PROBLEM:

Since the annexation of the 605 acre open space area to the County Service Area 20 – Joshua Tree Recreation and Parks District was completed on February 24, 1964, there have been multiple proposals to develop a recreational facility on site. However, lack of community consensus on how the area should be developed kept any formal management plan from being implemented over the past five plus decades. As a result, the area experienced a large degree of habitat degradation due to activities such as illegal off-highway vehicle (OHV) use, dumping, camping, fires, shooting, poaching of animals and plant materials, and the introduction of invasive plant species. Additionally, as visitation to the JTNP grew exponentially to nearly 3 million visitors in 2019, many visitors began to use the DVCA as an over-flow camping area, which contributed to further long-term damage of the sensitive habitat. This resulted in increased support for conservation efforts in the area by the local community.

DESCRIPTION OF THE PROGRAM:

The Desert View Conservation Area, located in the unincorporated community of Joshua Tree, CA, consists of approximately 605 acres of undeveloped desert biome, which is home to a variety of unique wildlife, such as: desert tortoises, big horn sheep, coyotes, cougars, bob cats, as well as various fowl, rodents, and reptiles. The Desert View Recreational Trails project established 3.1 miles of designated multi-user trails for hiking, mountain biking, and equestrian use for visitors of all ages to enjoy low-impact recreation while they adventure into a Joshua Tree Woodland.

Although there are many sensitive species found in the DVCA, the Mojave Desert Tortoise is the most notable flagship species for conservation within the high-desert region, especially in the Joshua Tree community. The population was state listed as threatened in 1989 and federally listed as threatened in 1990 and has declined dramatically in the last 25 years. In some areas of occupied habitat, tortoise density has dropped by 50 to 90 percent; near some desert towns, as they have been almost completely extirpated. More than 20 stressors affecting tortoise populations have been identified as a cause of their decline, most of which have been the cumulative impact of both direct and indirect stressors from human-related activities.

Environmental factors that supported the completion of the DVRT project are numerous. In recent years, there has been an increase in the number of accounts of unwanted usage occurring within the DVCA. Unfortunately, many who visit the area are not aware of the impact their visit has on the unique environment and its inhabitants. The OHV use in the area created numerous trails across the valley portion of the site, creating larger exposed areas that result in a higher risk of loss among sensitive species and the environment. Unconditioned users were known to trail blaze over habitat, causing permanent damage to vegetation, collapsing tortoise burrows and killing small burrowing animals. Studies have shown that it can take hundreds of years to restore the plant life and habitats destroyed by off road activity. Fire rings were also common along the foothills of both the northern and southern ranges of the site, indicating that it was a regularly occurring activity. Aside from the hazard unregulated fires have on neighboring homes, fire has the ability to strip an ecosystem of the native vegetation. Since the dominant vegetation in this region is not representative of fire-dependent flora, the growth of the post-fire successional community could cause a transition in the dominant vegetative biomass, posing a direct threat to the overall biodiversity found in the DVCA.

After several years of design work and environmental studies were completed, a contract for construction of the DVRT project was awarded in January of 2020. Ground was broken in March and the project was completed at the end of June, 2020.

A new 30-foot wide, 12-foot high corten steel monument sign installed at the gated entry of the DVCA, establishes a definite sense of importance to the site. Additional signage at the entry describes appropriate use for the area. The main gate is open daily during daylight hours providing a no-cost recreational opportunity for visitors.

Two additional metal gates were installed within the interior of the DVCA in order to decommission roads in sensitive habitat areas. They further serve to guide visitors to areas and activities of acceptable usage.

The new staging area with informational kiosks, shade structure, parking areas and single pit restroom serves

as a place to gather before heading out to explore the 3.1 miles of completed trails. The Tortoise Trail is a .6 mile trail loop designed for younger and less experienced hikers. The 2.5 mile long Big Horn Sheep Trail traverses the conservation area and is much more challenging as it changes elevations offering multiple vistas. In addition to directional signage, distance markers were installed along the trails to allow visitors to measure the length of their journey.

RESPONDING TO ECONOMIC DOWNTURN:

Joshua Tree is a rural, under-privileged community with an average median household income of \$39,424. According to the 2019 American Community Survey 5-year estimates, Joshua Tree has a poverty rate of 26.3%. Taking these metrics into consideration, CSA20-Joshua Tree is very much aware of the limited funding available for park and facility improvement projects. As a result, the District has been actively pursuing special funding opportunities that support community needs. As a result, the District applied for both a Habitat Conservation Fund Grant, and a Land and Water Conservation Fund grant and was successful in receiving \$200,000.00 each for the purpose of completing the DVRT project. The advantage of receiving both of those specific grants is that they could be leveraged against each other to supply the mandatory 50% match component. Without this special funding, the District would not have been able to complete the project.

In contrast to the JTNP, there is no cost to individuals to utilize the Desert View Recreational Trails.

COST OF THE PROGRAM:

Total project cost including environmental studies, design, engineering, project management, trail alignment, construction and site amenities was \$571,382.97. \$400,000.00 was reimbursed by the two grant authorities. The District supplies minimal maintenance to the site as local users have taken great pride in monitoring appropriate use and addressing random trash and trail maintenance problems as they arise. This allows District staff to address larger issues as they arise and to pursue other alternative funding sources to address any future improvements or restoration efforts in the DVCA. Further, interest has been expressed by the local residents to form a "Friends of the DVCA" type group whereby official volunteers would maintain the area and provide educational material to visitors.

RESULTS AND SUCCESS:

The completion of this project has resulted in a sustainable management plan for the sensitive habitat. Additionally, areas of appropriate use have been successfully established and undesirable activities have been almost completely eliminated. Since its completion in June 2020, there have only been a few fire rings found in the area. Overnight camping in the area is no longer occurring and illegal dumping of trash has stopped completely. Although it is still too early to assess how the completion of the project has affected sensitive species in the area, visitors have noticed more horned lizards, snakes, and baby tortoises in the area, all indications that the habitat is healthy and supports sensitive species.

Additional interest has been expressed by community members for implementing additional educational measures to ensure that visitors stay on designated trails and learn more about their impact on the unique desert biome and the wildlife it supports.

WORTHINESS OF THE AWARD:

By working with multiple partners in the area and reaching out to the diverse local population, the District was able to finally, after many years of proposals and discussion, complete a project that establishes long-term community support and education in the area of habitat maintenance, while providing valuable recreational experiences along the multi-use trails. A recent survey identified that nearly 70% of the individuals participating in the survey use the area to “Be alone in nature”. About 50% go to the area to “Meet with friends to hike in the area” and to “Take pictures of flora and fauna”.

Although, future projects may be completed in the area in order to refine trail alignment and offer additional educational opportunities at interpretive kiosks, a solid foundation has been established that creates respect for the environment and supports healthy recreation. The District can now implement a site maintenance plan that focuses on habitat restoration and the health of sensitive species. Besides public awareness, this project has garnered respect from other area conservation groups such as the Joshua Tree National Park, The Morongo Basin Conservation Association, and the Mojave Desert Land Trust. We look forward to strengthening our partnerships with these organizations to further build awareness of the importance of protecting open space, sustainable design, and habitat conservation.



Public Works

2021 NACo
ACHIEVEMENT AWARD
SAN BERNARDINO COUNTY
SPECIAL DISTRICTS

DESERT VIEW RECREATIONAL TRAILS



YUCCA TREE



MONUMENT ENTRY SIGN



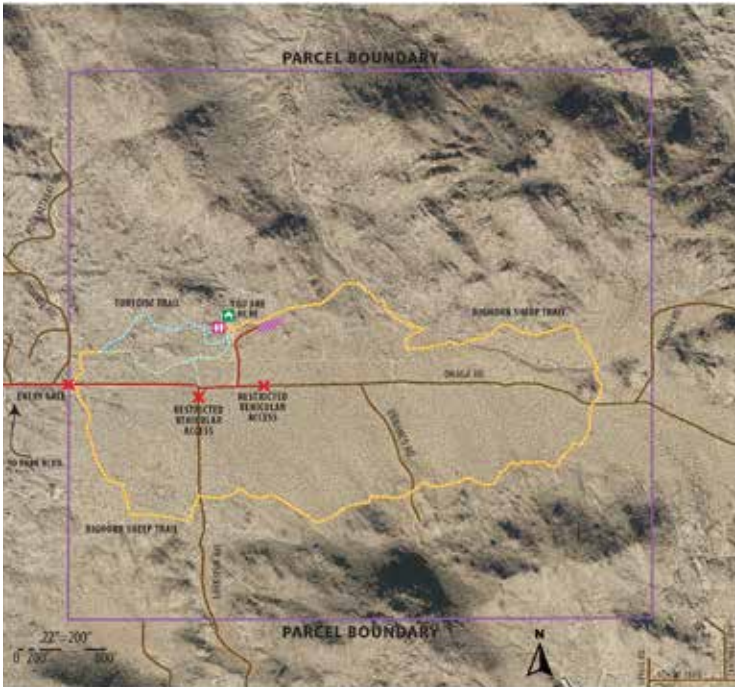
MONUMENT INSTALL



STAGING AREA BEFORE



SPECIAL DISTRICTS CREW DOING TRAIL WORK



DESERT VIEW CONSERVATION AREA SITE MAP

- DVCA AREA BOUNDARY
- TORTOISE LOOP TRAIL (0.6 Miles)
- BIGHORN SHEEP TRAIL (2.5 Miles)
- ACCESS ROADS
- ACCESS POINT ROADS
- RESTROOM (APPR. 125 s.f.)
- JOSHUA TREE WOODLAND DISCOVERY SHELTER (APPR. 400-500 s.f.)
- UNPAVED PARKING
- RESTRICTED ACCESS POINTS



RESTROOM



SENSITIVE HABITAT



SENSITIVE HABITAT



BIG HORN SHEEP TRAILHEAD MARKER



BIG HORN SHEEP



Desert Tortoise (Gopherus agassizii)





California State Reptile

The Desert Tortoise is the official reptile of both California and Nevada. While in the 1930's there were circa 450 desert tortoises per square mile in parts of the Mojave Desert, today, the species has a conservation status of "Threatened" under both the Federal and California Endangered Species Acts due to the marked decline in population and habitat. Adult tortoises weigh between 8-55 pounds, are 8-16 inches in length and may live as long as 85-95 years in the wild. Adults can survive for several months without drinking. They are herbivores and get most of their nutrition from the annual grasses, perennial plants and wildflowers they eat.

Survival in the Harsh Desert

Tortoises are well adapted for desert environments. They dig underground burrows that protect them from the scorching heat and freezing temperatures experienced in the desert climate. Tortoises also dig burrows to capture rainwater for drinking. Between April and July tortoises lay up to three clutches of 4-8 ping pong ball sized eggs which hatch in August or September. They hibernate during the winter months, spending about 85 percent of their lives inside their burrows.

Threats to Habitat and Species

The main threats to this vulnerable species are habitat loss, streamers, and predators such as raptors and coyotes. Human activities such as urbanization and utility development have reduced the size of desert tortoise habitat, and spread of disease among wild tortoises. Hikers may prey on tortoise burrows. Dogs may destroy burrows, the most important shelter and retreat option a tortoise has. Many tortoises are killed by motor vehicles, so please be sure to look under your vehicle before making it within the DVCA.

What to Do if you Encounter in the Wild

Remember you are in their territory. Do not approach or pick up a tortoise unless they are in danger or being harmed. They have a defense mechanism that causes them to void their bladder and lose their liquid waste when frightened. A tortoise that voids its bladder may subsequently die of dehydration if it is unable to replenish its water reserves. It is against the law to harass a desert tortoise or to take a tortoise. Do not feed it! Licensed tortoise rescue facilities can provide you with important care and adoption information. Please do not release pet tortoises into the DVCA because they may carry diseases that infect wild tortoises.

Conservation Status: Vulnerable

EX	EW	CP	EN	NT	LC
Extinct	Extinct in the Wild	Threatened	Near Threatened	Least Concern	

The 2019 Red List of Threatened Species lists the Desert Tortoise as Vulnerable. The 2019 Red List of Threatened Species lists the Desert Tortoise as Vulnerable. The 2019 Red List of Threatened Species lists the Desert Tortoise as Vulnerable. The 2019 Red List of Threatened Species lists the Desert Tortoise as Vulnerable.



TORTOISE TRAIL SIGNS





SHELTER ROOF



PREP WORK FOR SHELTER INSTALL



DESERT TORTOISE INTERPRETIVE PANEL



SHELTER