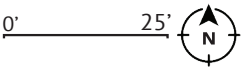


# MILE 3: MAKING THE CONNECTION

## Creating an Eco-Corridor through Bear Arroyo

The one-mile, mostly residential section east of Wyoming Blvd and west of Eubank Blvd, with Spain Rd to the north and Osuna Rd to the south, lies in the center of the Bear Arroyo, making it the ideal location to pioneer an eco-corridor for the entire Arroyo.



### BEAR ARROYO SUPERBLOOM



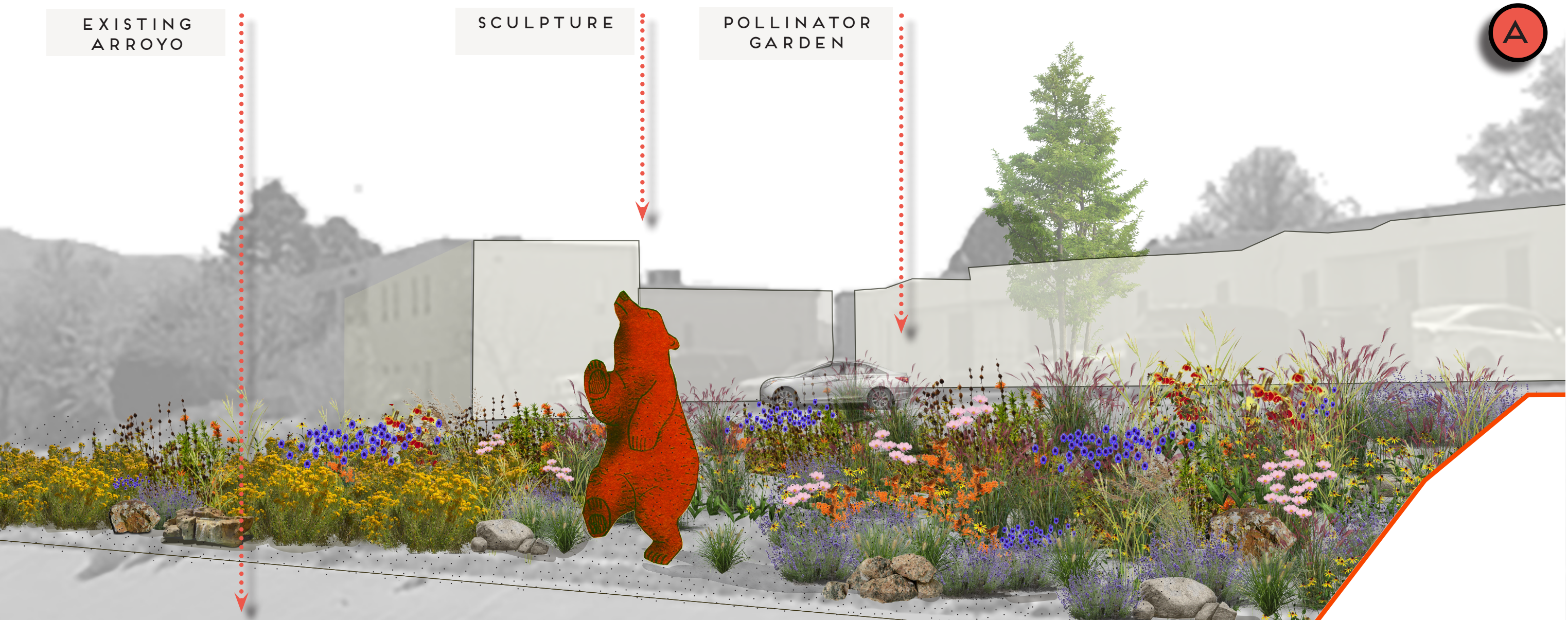
**EXISTING CONDITIONS**

The Bear Arroyo was once a natural series of channels that gracefully and naturally distributed water from the Sandias to the mesa and to the river beyond. The Arroyo is now mostly a concrete channel that runs through a highly fragmented urban, commercial and residential landscape comprised of concrete roads, asphalt parking lots, rock mulchs, turf lawns, and buildings, and with little green space. This creates a landscape that is difficult for most wildlife species to move through, resulting in pollinator decline due to the loss of food and shelter.

This project proposes creating a network of smaller patches of habitat along the Bear Arroyo that are accessible to pollinators and allows these essential creatures to find the pollen, nectar, and shelter they need to survive.

By planting a diversity of native, drought resistant, flowering plants, providing undisturbed nesting and overwintering areas, and protecting these areas from pesticide use, this project proposes a healthier blooming Eco-Corridor that follows the path of Bear Arroyo and re-imagines it as a conscientious pollinator habitat that conserve waters, creates a beautiful, healthier Albuquerque, and provides outdoor learning and recreation spaces.

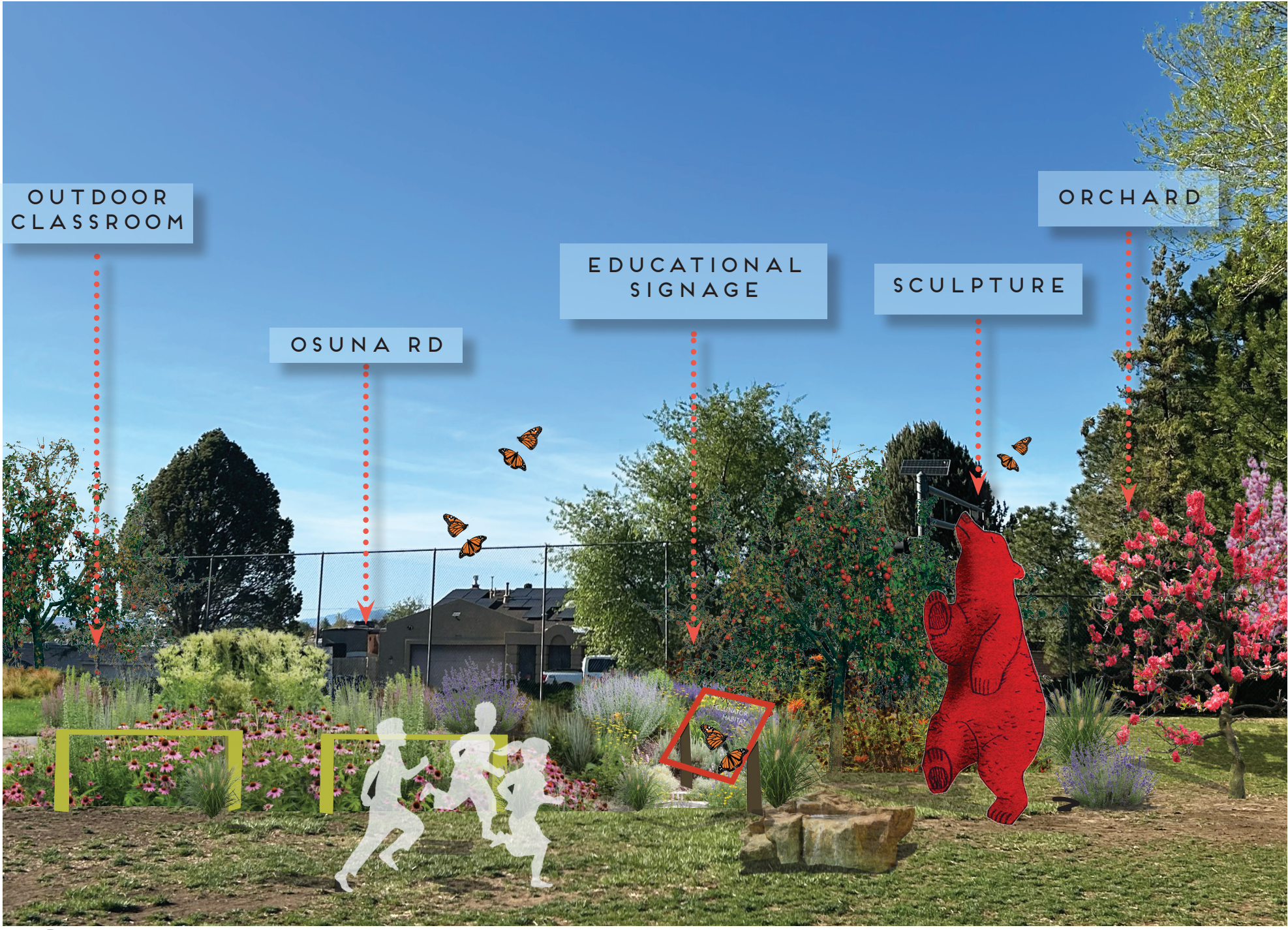
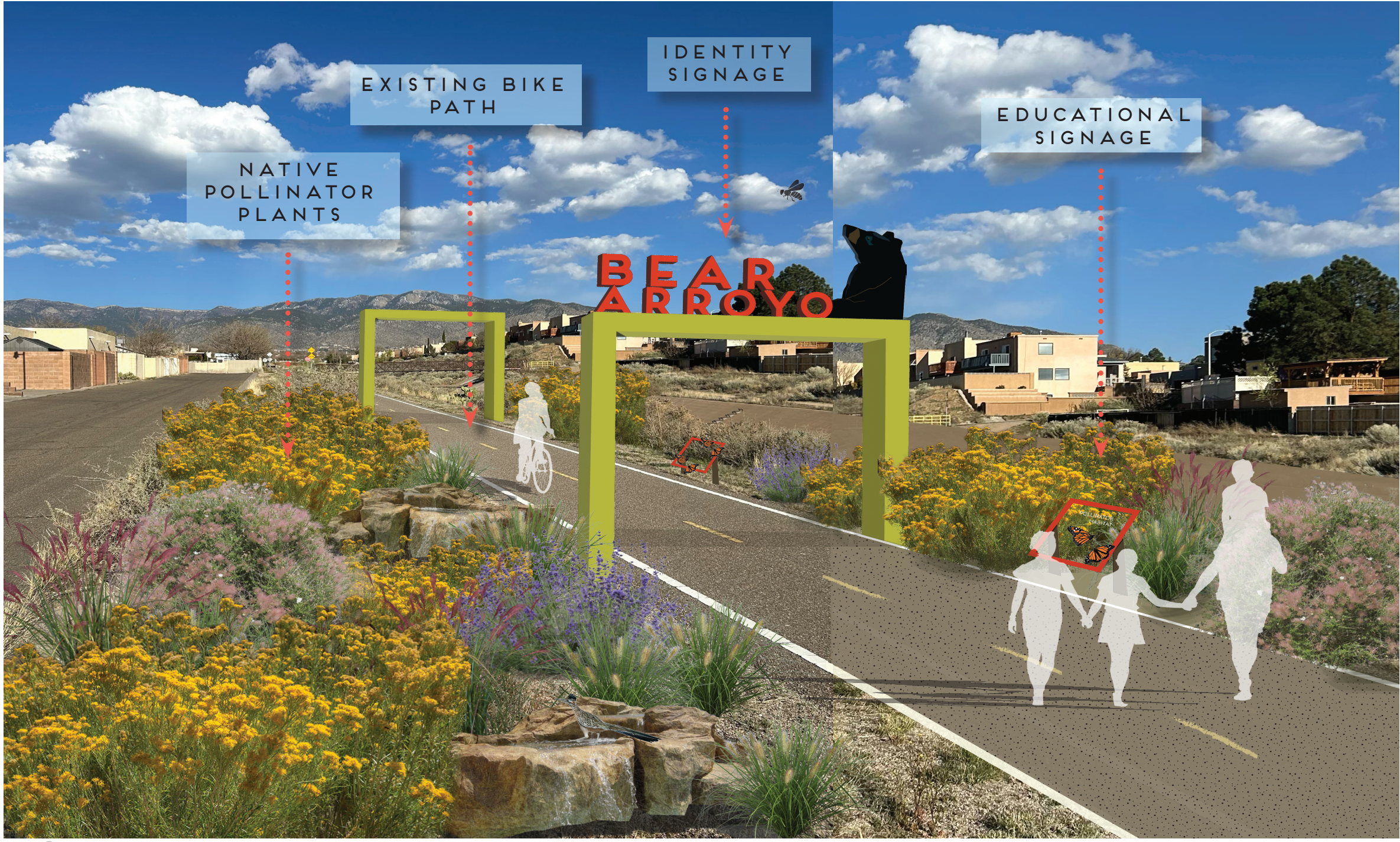
Wildlife/pollinator patches are stepping stones between areas of viable habitat, allowing living areas of land for foraging and protection between less welcoming environs. This is especially important for pollinators in an urban setting. By providing healthy green spaces, the gaps can be bridged between disturbed environments that might be hostile to pollinators. Large sculpture is added to draw even more attention to the gardens.



These six non-demanding plants below thrive in a dry climate and are skilled at self seeding themselves into future generations. This proposal involves a 5-year study to see how many of these prolific self-seeders make it to the green area of Mile 0 just before the Diversion Channel.



### EXTRAORDINARY SELF-SEEDING SUPERSTARS



### PLANTS FOR POLLINATORS

chosen for their drought tolerance, color, ease, native origin, varying bloom times, varying heights and attractiveness to pollinators



Pollination by hummingbirds, but hawkmoths, bumble and carpenter bees are also attracted to it



The bees that milkweed flowers attract are important for pollinating a wide variety of vegetable forage and fruit crops



THE preferred host plant for Monarchs to lay their eggs on and the Genus Asclepias provides the only food that Monarch larvae will eat



Attracts a number of specialist bees, bumble bees, predatory wasps, hummingbirds, and hawk moths



Flowers attract bees and butterflies, the plants shelter wildlife, and the seeds attract birds



Nectar source for butterflies and many kinds of native bees



Larval host to the cobweb skipper, common wood nymph, crossline skipper, Dakota skipper, dusted skipper, Indian skipper, Leonard's skipper, Otis skipper, and swarthy skipper



Bloom time coincides with the fall migration of the Monarch butterflies in fall



# CREATING AN ECO CORRIDOR

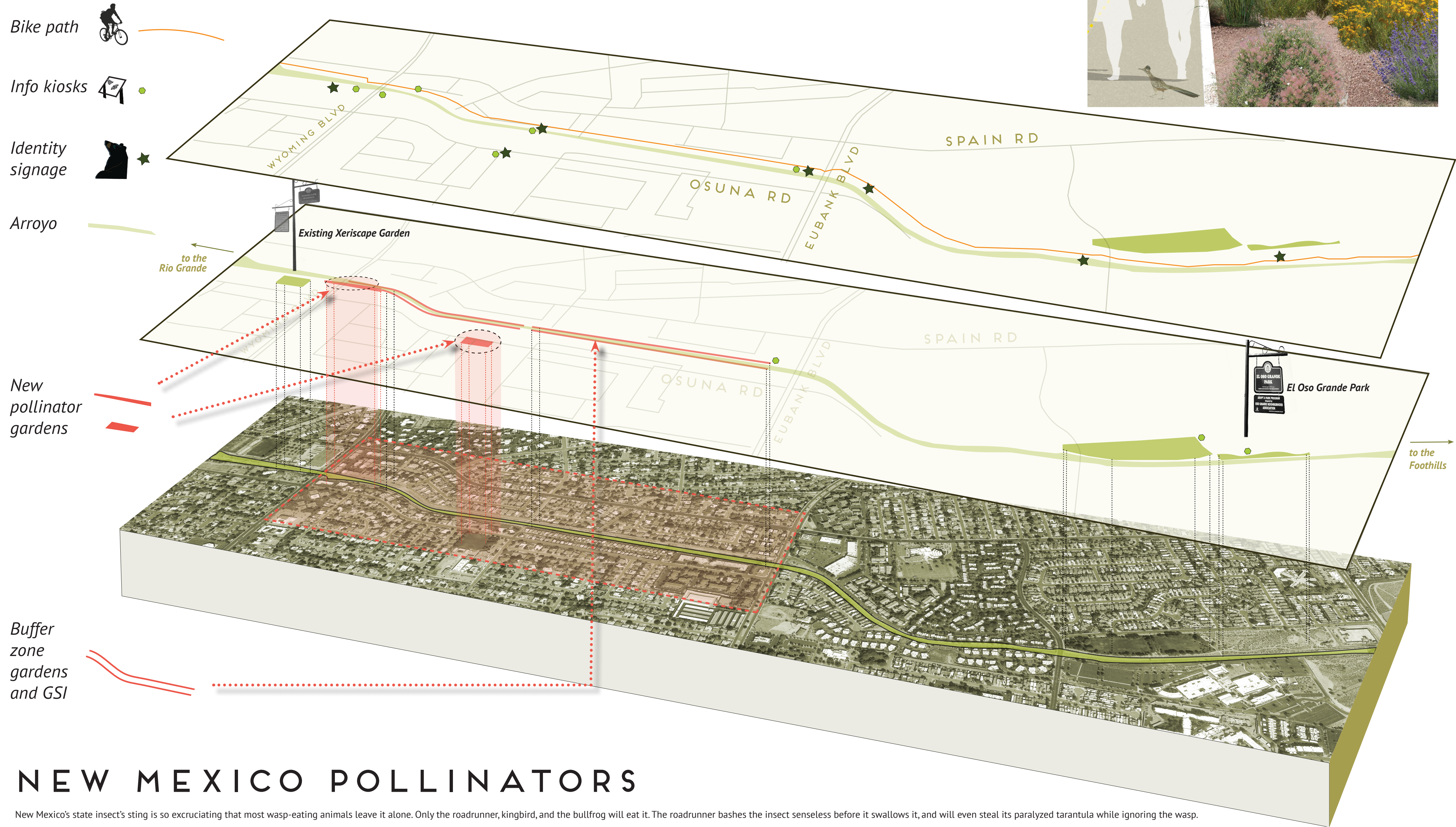
## CONNECTIVITY · CONTINUITY · COMMUNITY

This plan proposes the design and construction of a new Superbloom Pollinator Garden on the hill at Wyoming Blvd, along the Bear Arroyo, and a Pollinator Garden + Orchard at Osuna Elementary School.

These gardens will serve as the center of a Pollinator Patch Eco-Corridor all along Bear Arroyo, from the foothills to the Rio Grande, which will include the existing El Oso Grande Pollinator Garden and a refreshed Xeriscape Garden at the police station.

### OTHER GOALS:

- Clean up and improve the biking/walking paths and fill in bare buffer areas with native perennials for wildlife habitat.
- Install consistent informational and identity signage and kiosks along the six-mile corridor. Include information about AMAFCA, arroyo safety, pollinators, native species, and the history of the Bear Arroyo.
- Create public awareness campaign to educate and encourage the neighbors up and down the Bear Arroyo to understand the importance of pollination and native plantings, and to plant their own pollinator patches.



## NEW MEXICO POLLINATORS

New Mexico's state insect's sting is so excruciating that most wasp-eating animals leave it alone. Only the roadrunner, kingbird, and the bullfrog will eat it. The roadrunner bashes the insect senseless before it swallows it, and will even steal its paralyzed tarantula while ignoring the wasp.



Did you know? New Mexico is home to more bee species than all of the 28 states east of the Mississippi River combined. Source (quote and bee photos) : Dr. Olivia Carril & Dr. Paul Polechla (treenn.org)

## CONSERVATION

### PRESERVATION OF KEYSTONE SPECIES

What happens when a prairie dog population declines

Prairie dogs are a keystone species, a species that many other species, both plant and animal, depend upon for survival. Keystone species are incredibly important to their ecosystems, and if removed, the ecosystem itself will most likely collapse. Prairie dogs keep the mesas from turning into deserts and provide food, home or shelter to about 200 other species.

Prairie dogs were once a major part of the New Mexico landscape. They can be spotted in the Sandia foothills, and closer in, along Tramway from Indian School to Montgomery. It is not ideal to have them in schoolyards and residential neighborhoods, but efforts must be made to provide habitat for these ecological engineers.

Before 1800, over 5 billion prairie dogs roamed the American plains. Today, the original range of prairie dogs has shrunk to just 5% of its initial size and two of the total five prairie dog species in existence are threatened or endangered. As white settlers expanded west into ranching and farming, they considered prairie dogs a nuisance, as carriers of disease that competed with cattle for forage, ruining grazing areas. We now know these assumptions are untrue, that prairie dogs are killed so quickly by disease that they aren't even a viable disease-carrier, and that prairie dogs cannot consume enough grass to be considered as forage competitors with cattle. Humans have been killing prairie dogs in large quantities and this is finally being re-considered.

Albuquerque Open Space land on the West Mesa has been deemed suitable prairie dog habitat thanks to the work of local prairie dog conservation and advocacy groups, and the city approved funding for relocation of many of them to habitat made available at the Sevilleta National Wildlife Refuge.

Grazing animals (pronghorns, mule deer, and bison) have shown a proclivity for grazing on the same land used by prairie dogs. It is believed that they prefer the vegetative conditions after prairie dogs have foraged through the area.



### GREEN STORMWATER INFRASTRUCTURE



Stormwater management using green infrastructure practices involves keeping and using water close to its point of origin. To help filter and capture stormwater runoff without losing it directly to the arroyo channel, this project proposes adding gently sloping depressions on either side of the biking/walking path, planted with dense native vegetation and grasses. Bioswales such as these filter stormwater runoff as it flows through the swale, allowing it to slowly infiltrate into the ground.

This project envisions enhanced planting of native trees, shrubs, forbs and grasses all along the buffer corridors of the arroyo.



"If you kill the prairie dogs who will cry for rain?"  
--Navajo Elders