



FINDING CONNECTION

LOCAL COMMUNITIES AND HABITAT CONSERVATION
IN THE TULARE BASIN OF CALIFORNIA

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The San Joaquin Valley of California is a geography where climate crisis, economic inequality and historic injustice coalesce. It is also a place of resistance and resilience, founded upon indigenous and Mexican roots, steeped in waves of migration and the flows of people seeking sanctuary. The region is therefore well suited to realize the possibilities of engaging farmworker and climate vulnerable communities to address its interrelated problems and uphold the promise of collective action.¹

Finding Connection opens a dialogue about addressing the Valley’s past trauma and engaging its current structural inequities from conservation and agroecological frameworks. Recent policy initiatives and legislation bolster its findings with optimism for achieving actual outcomes to affect the region’s difficult complex of problems. Among these possibilities are the equity values and biodiversity targets of California’s 30x30 Pathways initiative to conserve thirty percent of the state’s land and water resources through a lens of access, diversity and tribal inclusion.²

Translated into practice, the Pathways policy commits the state to protecting another six million acres by 2030. Will these forthcoming acquisitions achieve direct benefits for local communities; if so, how should they be managed and governed to ensure equitable outcomes?



Figure 1: Volunteer Workday at Pixley Community Garden.

The climate crisis is a global context within which environmental concerns, local community needs and policy responses are being addressed and aligned in California. Ahead of other states, California has responded with legislation, including Global Warming Solutions (AB 32 & SB 32), Sustainable Communities and Climate Protection (SB 375), Community Air Protection (AB 617), and Disadvantaged Communities Benefits (SB 535). Water scarcity, aquifer overdraft and land subsidence are specific examples with relevance to the San Joaquin Valley. The state's response has been the Sustainable Groundwater Management Act of 2014.³ Its implementation necessitates long-term land use planning as early forecasts signal the repurposing of 535,000 to 750,000 acres of agricultural land in the region.⁴ While this overall policy foundation toward climate response is being put in place, its implementation and resulting outcomes are far from certain. Landscape level conservation and restoration of retired agricultural land will still take strong coordination between local residents, stakeholders and more funding on orders of magnitude than previously seen.

Early efforts, such as the Transformative Climate Communities (TCC) initiative's inaugural launch in Fresno, illustrate that state policy implementation aimed at equity and justice outcomes needs to accentuate direct, participatory engagement with frontline communities. This approach seems counter-intuitive to seemingly more efficient, top-down state mandates, but the TCC's inclusive, democratic approach has shown its effectiveness in generating up-front local community buy-in and support. The Valley's expanding ecological crises, economic needs and resulting policy solutions must integrate the input, perspectives and lived experience of the residents who have been immersed in the problems affecting their lives, sometimes over generations.

This introductory report informs such possibilities toward conservation policy implementation connected to equity and justice outcomes in the Tulare Basin of the San Joaquin Valley.

INTRODUCTION

In July 1868, John Muir described the San Joaquin Valley in a letter that he later placed included his book, *A 1000 Mile Walk to the Gulf* :

The valley of the San Joaquin is the floweriest piece of world I ever walked... Here they are not sprinkled apart with grass between, as in our prairies, but grasses are sprinkled in the flowers...side by side, flower to flower, petal to petal, touching but now entwined, branches weaving past and past each other...free and separate, one smooth garment, mosses next to the ground, grasses above, petaled flowers between.

Before studying the flowers of this valley, and their sky and all of the furniture and sounds and adornments of their home, one can scarce believe that their vast assemblies are permanent, but rather that actuated by some plant purpose, they had convened from every plain, and mountain, and meadow of their kingdom, and that the different coloring of patches, acres and miles marked the bounds of the various tribe and family encampments.⁵

Alas, the region's ecological and cultural foundations were not "permanent," as they were under assault and soon transformed by colonization and industrialization. An 1873 map of the Valley recognizes Lake Tulare—the largest west of the Mississippi River at the time—that was subsequently cut off from its river sources by irrigation diversions. Over the next century, this geography became one of the most altered and engineered landscapes in the world.

The tribes of the San Joaquin Valley include numerous distinct communities who lived—and continue to reside—in the region. The Tachi Yokut tribe have posted a recognition of the attempted extermination of native peoples including acknowledgment of land theft and state-funded murder.⁶ In subsequent years, waves of migration brought others from across the world to the region, many fleeing war, deprivation and even their own experiences with genocide in distant lands. Today, more explicit actions must redress past harm and systemic violence, and proactively secure both human and natural communities.

A new geography of healing possibility necessitates policy solutions designed to advance ecological restoration while benefitting the region's most vulnerable residents. An area once known for its abundance of artesian springs and extensive wetlands, managed over generations by indigenous peoples, is experiencing extreme water scarcity and climate predictions that threaten current systems of land management, public health, biological communities and ecosystem services.



Figure 2: 1873 Map of the Sacramento, San Joaquin and Tulare Valleys by the State of California Board of Commissioners on Irrigation (with the Tulare Basin accentuated).

Recognizing this history and current opportunities for policy implementation, we have combined a two-fold research approach that begins with a survey of Valley residents followed by layered maps that combine existing conservation plans. We know that the region has experienced major loss of biodiversity and ecological function, yet it remains critically important for global food production and remaining endemic and migratory species.

California's 30x30 goals promise conservation investments that address local community needs aligned with coordinated global campaigns. At this critical juncture, our work then delves into the question: *how can we conserve natural resources while ensuring equitable development and the redress of past harms?*

RESEARCH METHODOLOGY & COMMUNITY ENGAGEMENT

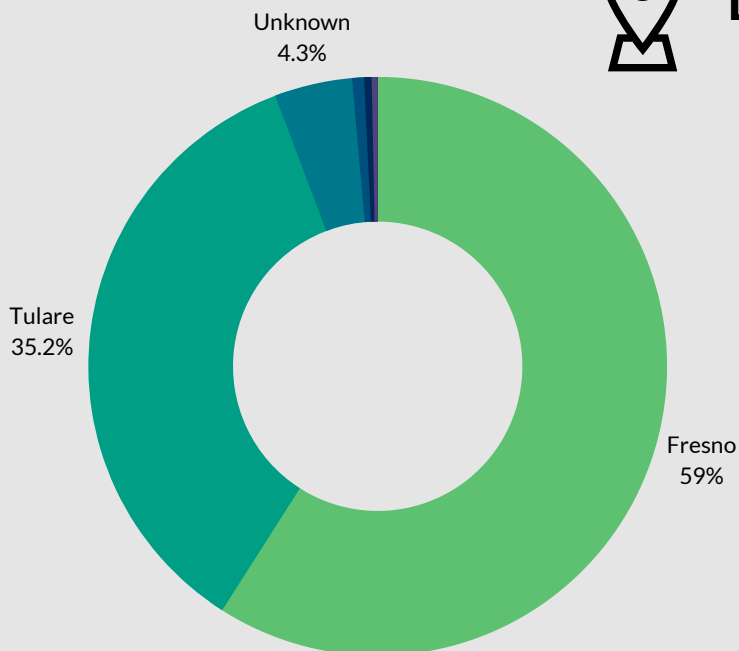
Finding Connection seeks to bridge the challenge to conserve and steward the natural habitats of the San Joaquin Valley within a perspective of local residents’ lived reality and everyday needs.

It builds upon introductory findings that identified “already deep and significant relationships between local community members and our public lands” in the region,⁷ and shifts the optics and object of analysis from the disconnection between local communities and public lands (often under federal management) toward opportunities to acquire, steward and access land closer to home on the valley floor. The report also provides local insight on national-level research like Hispanic Access Foundation’s 2020 Nature Gap Report which affirmed “Black, Latino, Asian, Native American and low-income families are far more likely than white families to live in a place that is deprived of the benefits that nature provides, including nearby places that allow them to get outside safely and access clean water, clean air, and a diversity of wildlife.”⁸

Our research centers the conservation priorities of Tulare Basin residents in Fresno and Tulare Counties, with emphasis on Latinx communities as their demographic growth translates into expanding political empowerment. The perspectives of these residents were surveyed as constituents who will benefit most directly from increased access to nature, improved ecological stability, and an environment that sustainably bolsters local economies and community well-being. It is an opening upon which further, more comprehensive study is needed and justified.



LOCATION



FRESNO	706
TULARE	421
UNKNOWN	52
KINGS	8
KERN	5
OTHER	4

Our approach combined survey research of Valley residents' environmental concerns with currently in-place conservation priorities. We then introduce innovative ways to conserve land through an equity lens while retaining existing spatial assessments of priority natural habitats and biodiversity-rich areas compiled from earlier conservation analysis. Significant gaps in baseline information—both community-based and scientific—were identified during our research.

Community surveys were drafted by staff of local conservation organizations including Audubon California, California Wilderness Coalition, Sequoia Riverlands Trust, Central Valley Partnership, Valley Forward and Alianza Ecologista. Prior to finalizing the surveys, they were tested by the canvas teams to ensure that the responses were most informative to the research questions. They were then edited and revised with input from canvas team members who conducted interviews with residents.

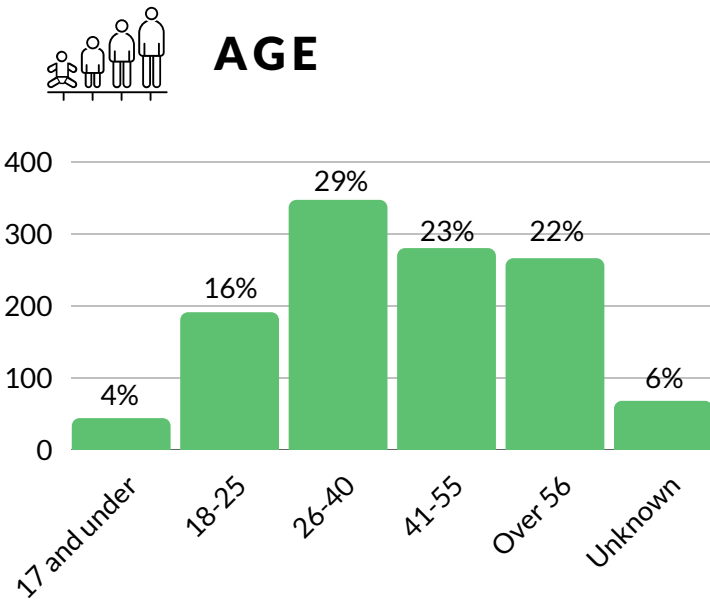


Figure 3: CHMA Community Garden Inauguration in Porterville (Alianza Ecologista)

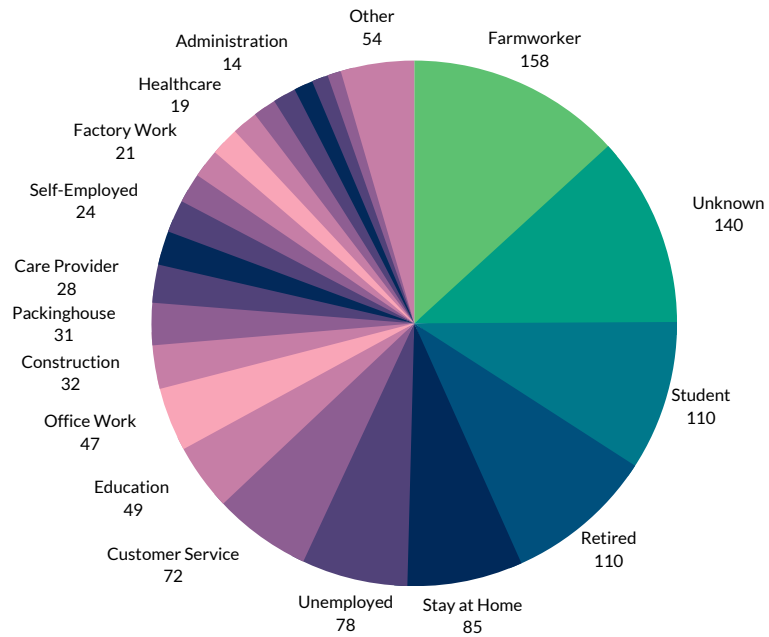
The research teams were themselves comprised of local residents. The first team were Valley Forward organizers based in the Fresno region, who surveyed responses from Fresno, Tulare and Kings Counties. This team had extensive experience in door-to-door canvassing, community organizing, political campaigns, and community-based research. The second team was based in Tulare County, led by Dr. Fernando Serrano and coordinated by Alianza Ecologista. They recruited and trained residents to collect survey information in local neighborhoods. Both of these survey teams were comprised primarily of college students and farmworkers.

A total of 1,196 surveys were collected from about 50 cities and unincorporated communities. The data collection focused on underserved, migrant, working class communities of color, with particular emphasis on farmworkers though the surveys ultimately had a much broader scope of occupations.

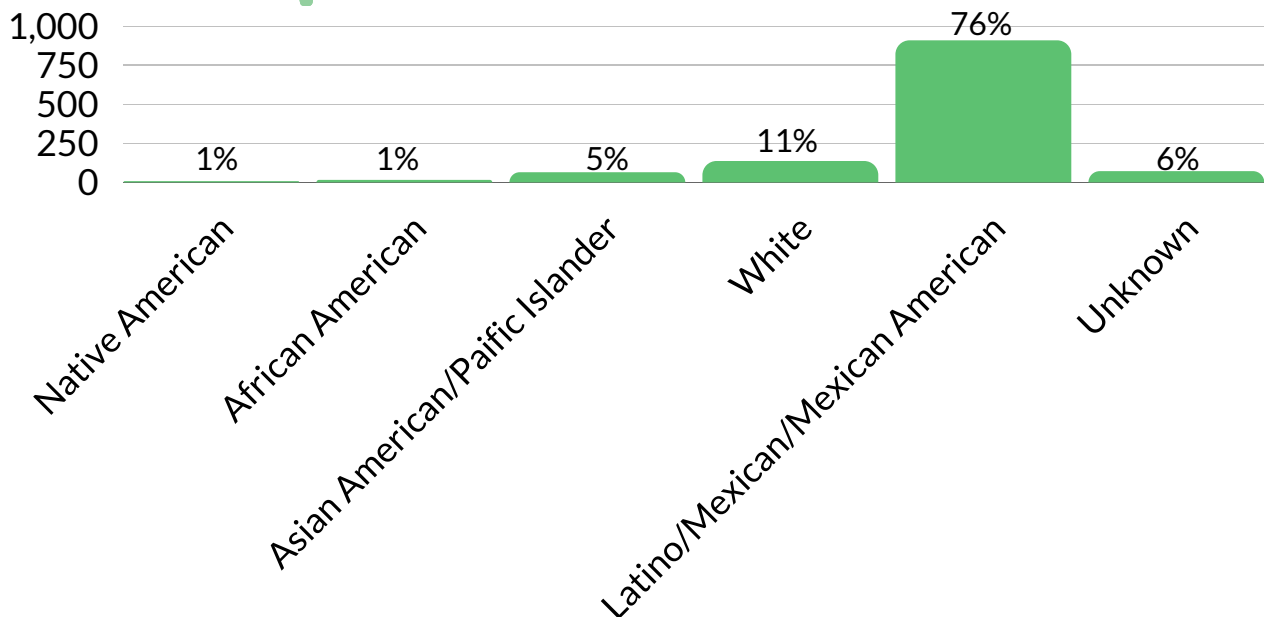
1,196 SURVEYS - SAN JOAQUIN VALLEY



OCCUPATIONS



ETHNICITY



LOCAL COMMUNITY PERSPECTIVES OF THE TULARE BASIN

A broad objective of the surveys is to better understand the relationship between natural habitat and biodiversity—in public lands, conservation spaces or other green areas—with local communities in the San Joaquin Valley.

Three specific research goals bound the presentation of survey responses:



- to better understand the **environmental concerns** affecting local communities in the San Joaquin Valley, and identify possible solutions as perceived by residents.



- to determine what type of **access** local communities have to public lands, conservation and green spaces, and how they conceive of access to these spaces.



- to assess the level of interest from local communities to be more directly involved in the **management of public lands** for community use, including recreation, food production, employment generation, and ecological stewardship.

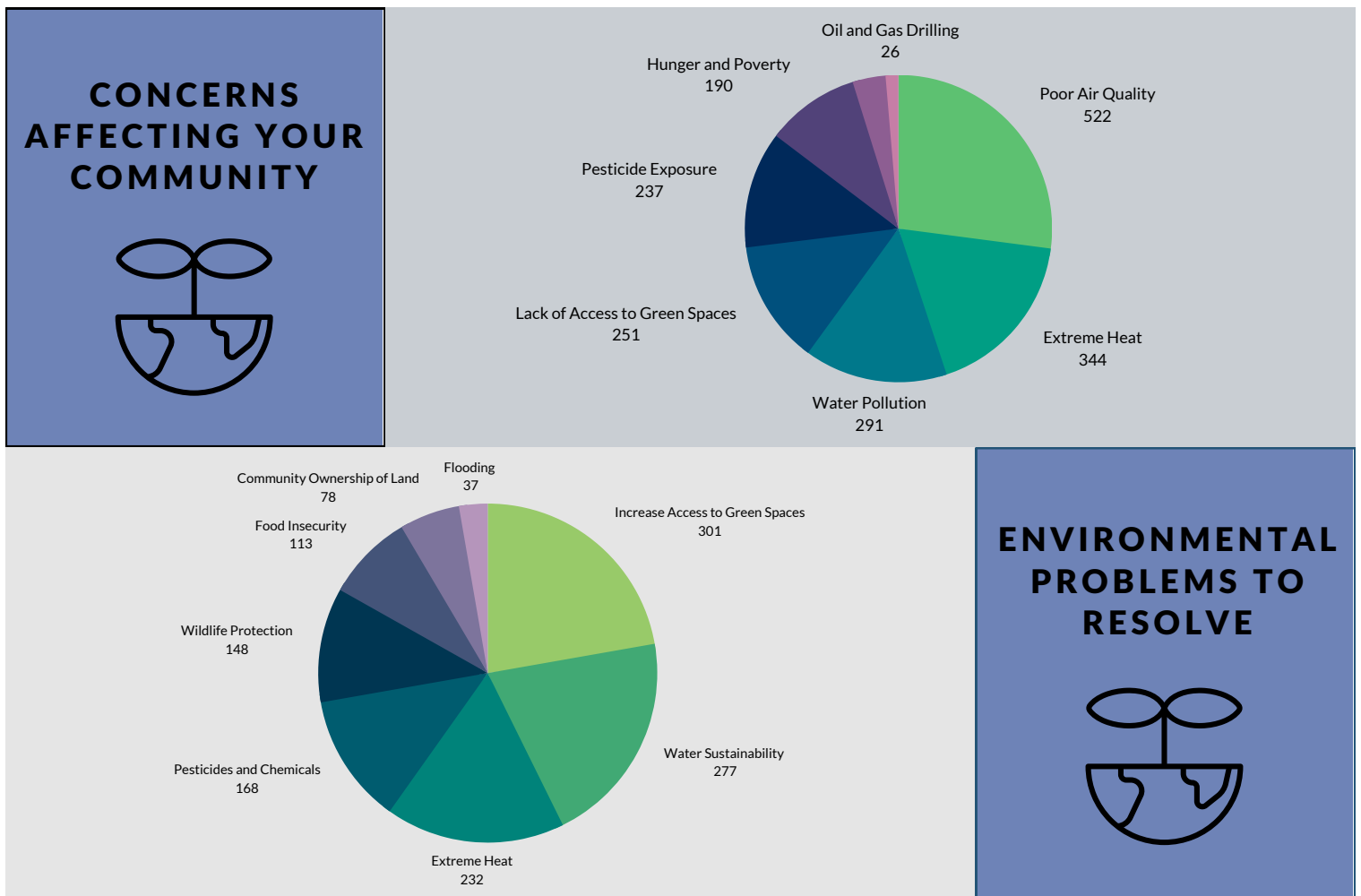


Figure 4: Community Biodiversity Festival at Circle J-Norris Ranch in Springville (Alianza Ecologista)

I. ENVIRONMENTAL CONCERNS

The San Joaquin Valley is home to some of the most polluted communities in the country, including some with the highest cumulative social vulnerabilities.¹⁰

Agricultural and dairy waste pollute air, water, and soil in most of the region, while oil and gas extraction contaminate a smaller but still significant portion of the southern part of the valley. Wildfire smoke from adjacent natural systems, such as the Sierra Nevada mountains and Coast Range, increasingly impair air quality. Taken together, these have significant impacts on people’s quality of life and health.¹¹



Poor air quality registered the highest concern cited by survey participants. This corresponds to research that identifies the Valley as having the some of the worst air quality measures in the country.¹² The limited responses related to oil and gas drilling may be due to the geographic focus of the research in which Kern County was not extensively surveyed.

Based upon community concerns, a follow-up question asked about the environmental problem residents most wanted to resolve. Access to green spaces was the most cited answer, followed by water sustainability and extreme heat.

II. ACCESS

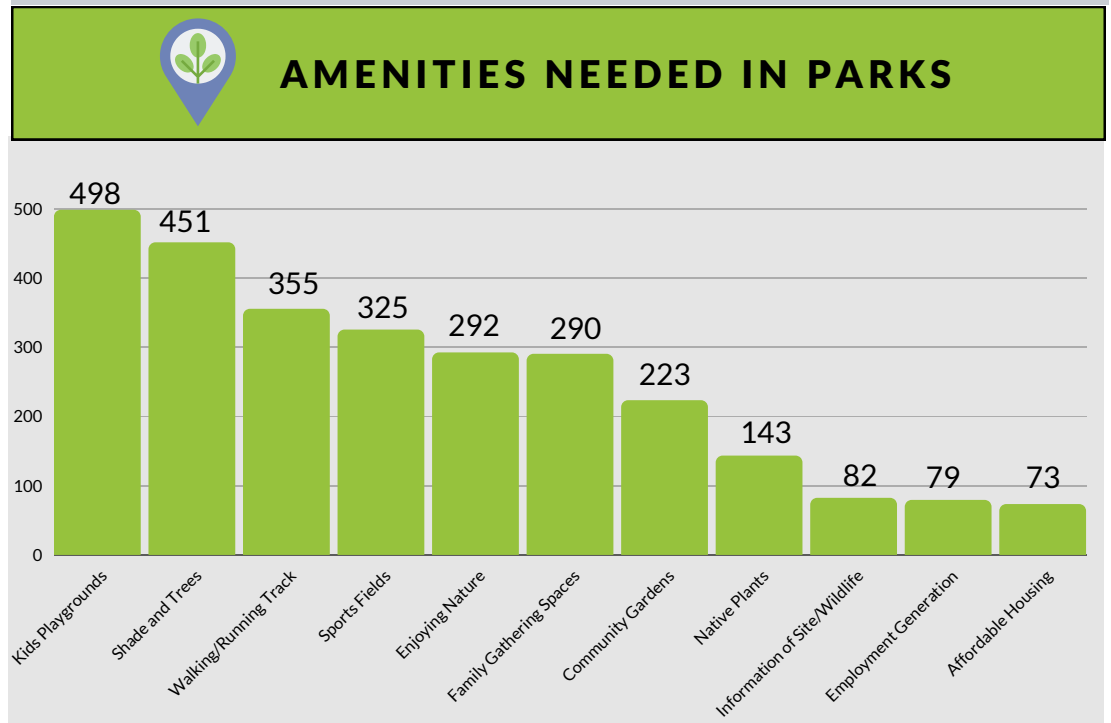
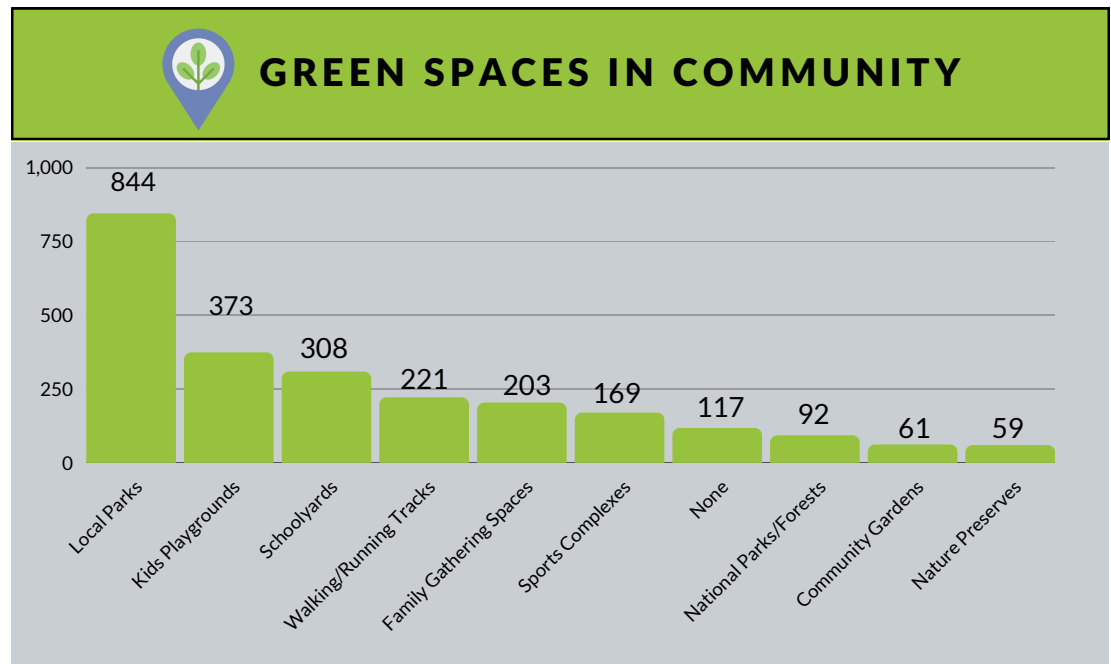
An important goal of this study was to learn more about the types of access that local communities have to public lands, conservation spaces, or green areas.

The San Joaquin Valley is relatively close to internationally recognized public lands in Sequoia, Kings Canyon and Yosemite National Parks that attract millions of visitors from across the world, but local community members still find it difficult to access those and other spaces.

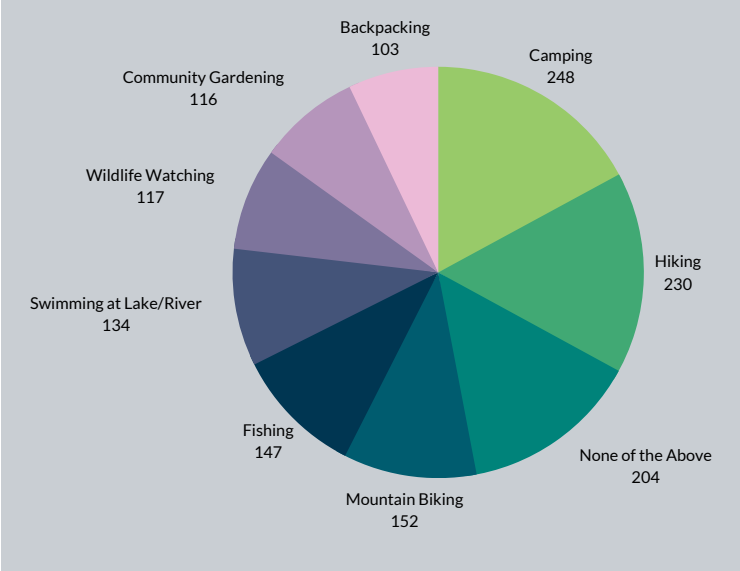
While most community members acknowledged having access to a variety of local parks, sporting complexes and other green areas, approximately ten percent stated a lack of access to any of these spaces. These were mostly residents of unincorporated communities, surrounded by large-scale agricultural production, who are often neglected or inadequately represented by elected officials at county governments. In all, nature preserves were the least identified green area in local communities.

Residents were also asked about the amenities that would best serve them in parks and green spaces. Most responses highlighted family-friendly amenities including playgrounds and sports-related facilities. Importantly, some basic needs such as shade from trees were prioritized.

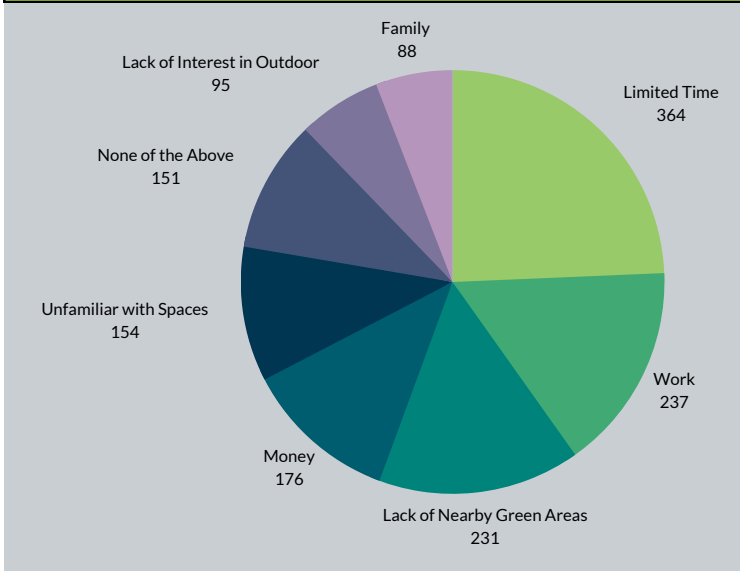
When respondents were asked what activities they would like to do that they haven't yet tried, the two most commonly cited activities were camping and hiking. Both answers, as well as other associated responses, correlate with access to nature, or lack thereof. Of the 204 people that responded, "none of the above," survey team members considered that this response was due to people who had already engaged in the activities.



INTEREST IN NEW OUTDOOR ACTIVITIES



FACTORS PREVENTING OUTDOOR ACTIVITIES

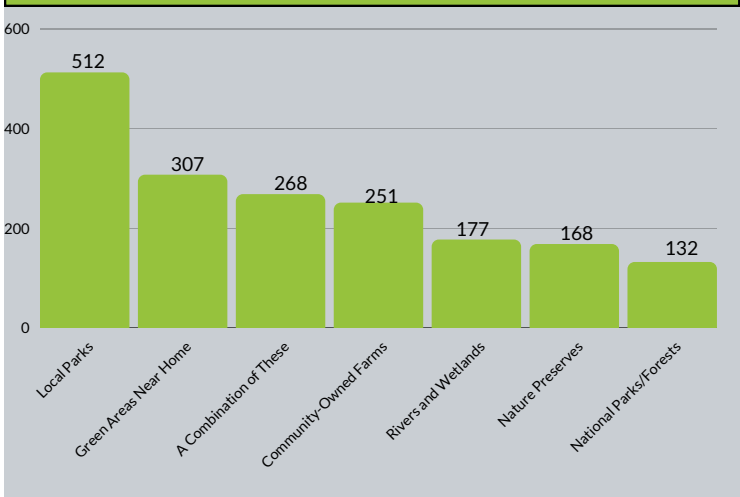


The survey also inquired into the barriers preventing people from engaging in outdoor activities. The most widely mentioned factor was time, which was interpreted as both the time it takes to engage in the actual activity, and the time it takes to plan, coordinate, and get to the location of the activity. Proximity to green spaces was also highly cited, and opens additional questions on how to engage and mobilize local residents in innovative ways to advocate for conservation and for the acquisition of public lands that are near their communities.

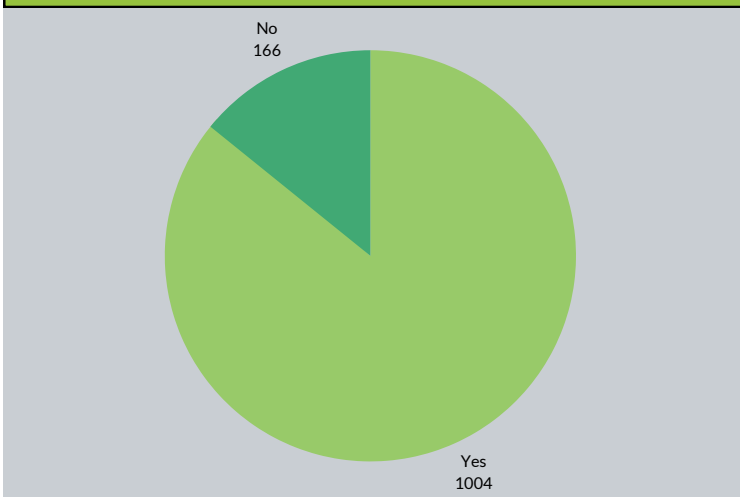
Given that many people already have ideas about conservation spaces, the survey expanded and explicitly solicited feedback on how public lands may be most useful to their communities. Local parks topped the list. Yet, the other responses were less conventional and expanded upon what may be considered a “park,” namely green areas near their homes, community-owned farms or gardens. Their responses counter some traditional ideas of conservation and invite public lands priorities that are closer to residents’ daily lives.

Finally, in relation to access, residents were asked if they needed more green spaces near their communities, of which the overwhelming response affirmed this interest.

MOST USEFUL CONSERVATION SPACES



GREEN SPACES NEEDED NEAR COMMUNITY



An open-ended survey question enabled us to better understand the position and perspectives of residents. We asked, “If your community could acquire land for any of these uses listed above, where would it be?” The community responses offer us clarity into what conservation means for local residents. Here is a sampling of their answers:

- “En la área de árboles”
- “Land near canal, walking paths”
- “On vacant lots within city limits”
- “It would be in the trailer park where I live”
- “No hay espacio cerca por las casas”
- “En tierras abandonadas cerca de las casas”
- “Along the river, it needs a lot of care and protection”
- “On the west side, there aren't many parks there”
- “Any spot with open land near commercially populated areas”
- “NW side of town at the corner of Cartmill and HWY 99 in Tulare”
- “There is empty land south of Main Street in between the bridge and the stump”
- “On the outskirts of Visalia and Farmersville”
- “Retired agricultural land “
- “There are lots in town which are vacant. these could be purchased”
- “Empty or abandoned land within city limits”
- “On undeveloped residential space”
- “On Newcomb, the lot near Super Burger”
- “There is an area across the street from Super Burger where they sell the corn in the summer”
- “Across from PetSmart and adjacent to CVS/Starbucks lot”
- “Open areas near homes for a community garden”
- “Use all the empty lots around town”
- “Behind the Starbucks on Henderson”
- “Near housing complexes”
- “Cerca de la escuela para los niños”
- “Somewhere near, where people can go easily”
- “Las áreas que están por la tienda Svenhards Swedish Bakery”
- “Hay un lote directamente en frente de mi casa al fin del campo donde hay espacio grande”
- “El espacio de campo libre entre las casas”
- “Behind the Vallarta or near the walking path”
- “Parques cerca de los apartamentos y de las escuelas”
- “Por la escuela Santa Fe me gustaría un parque grande”
- “Within the city, spaces near homes, open up the schools”

Within the resident responses, we see a depth of care and consideration filtered through their daily experience and future aspirations. Their desired conservation outcomes are highly localized, pointing to specific street corners and particular parcels of land. These are places that residents are obviously deeply engaged with and hopeful for utilizing towards community benefit. Many of their answers can be translated into policies promoting smart growth, infill development, urban revitalization and the conservation of resources.

III. MANAGEMENT OF PUBLIC LANDS

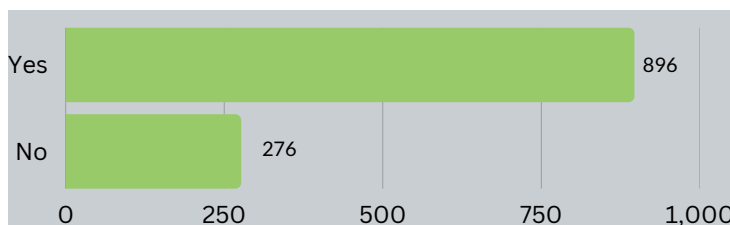
An implicit equity proposition is embedded within the idea of “public” lands. That promise, however, often does not extend to the idea of actually economically benefitting local communities. If anything, the leasing of public lands is mostly associated with subsidizing well-connected corporations and extractive industries like oil, gas and mineral conglomerates.

The surveys then considered active land management by local communities and the possibility for greater inclusion through governance, local empowerment and community ownership. Opening this dialogue, a survey question asked who local residents thought should be in charge of public lands in their local areas. Most respondents were interested in local control of public lands, first through local governments, then followed by members of the community, community organizations, and finally, state and/or federal government.

Moving further into multi-benefit stewardship of conservation spaces, the survey asked residents if employment or other benefits could be created in these green areas, what jobs or amenities would they prefer? The overwhelming response was for local youth employment followed by community farms. Respondents were also interested in extending the use of these spaces beyond only recreation toward broader benefits and purposes. Rather than a cause of conflicting purposes, these answers suggest opening multiple complementary agroecological services to residents that also benefit the natural environment.

As an invitation to action, the study included questions designed to spur agency, active engagement and to seed ideas of opportunities for community members. In this vein, the survey asked whether residents would be willing to help establish and maintain a conservation space. The majority affirmed their interest and consider this possibility of local control.

Extending beyond the survey’s original questions, the Alianza Ecologista team asked additional questions related to shared land ownership by referencing the historic cooperative landholding system of “ejidos” that followed the Mexican revolution. This systemic land reform was particularly attentive to indigenous tribes, and remains a culturally relevant frame to better understand the resident’s interest in stewarding land together through community.



WILLING TO ESTABLISH AND MAINTAIN A NATURE PRESERVE

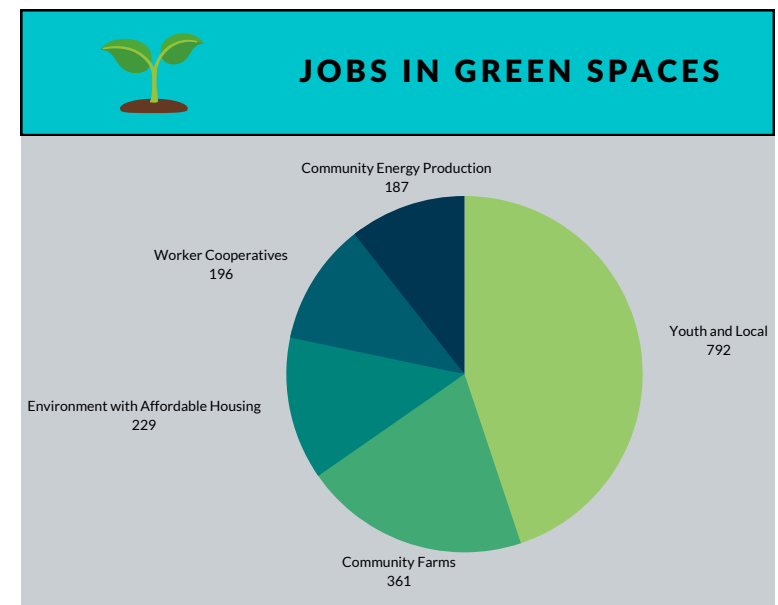
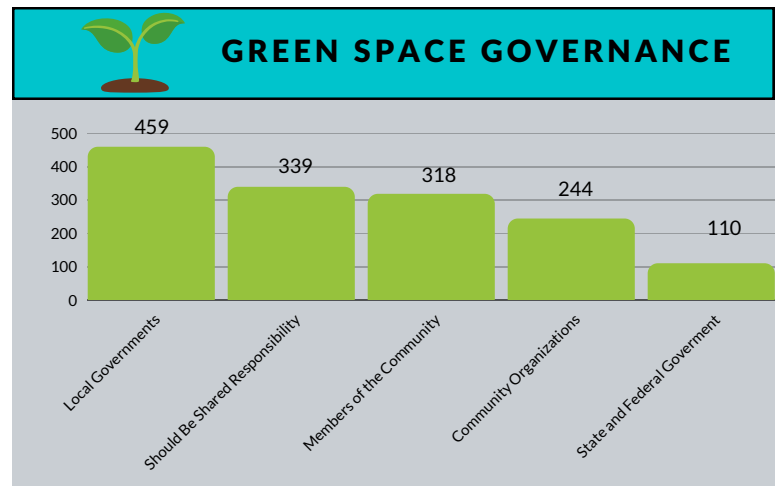




Figure 5: Volunteer Workday at Pixley Community Garden (Alianza Ecológica)

IV. EJIDOS

In Mexico, an ejido is a tract of land held in common by members of a town or community and farmed cooperatively. The specific functioning of these landholding institutions varies significantly from region to region, but it is broadly understood.

Given that such a large portion of the population in the Valley is of Mexican ancestry, we explored two related, additional questions in Tulare County: (1) whether residents were familiar with the concept of ejidos; and (2) would they be interested in having a similar system to ejidos to manage community land cooperatively in their current place of residence.

While the majority of respondents did not know what an ejido was, forty percent did, which is considered significant given the geographic distance from the place of origin to the San Joaquin Valley. While definitions of ejidos differed among these affirming respondents, overall the general meaning of the system was understood by them.

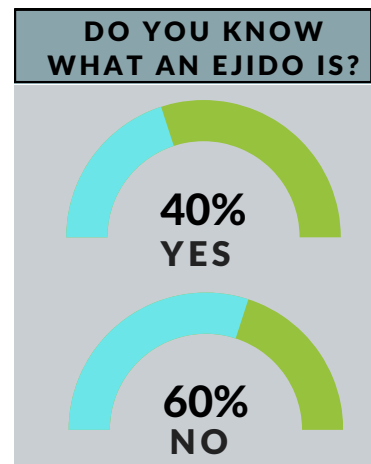


Figure 6: Recent meeting of ejidatarios in Ejido Kantunilkin, Quintana Roo, Mexico (Quinta Fuerza)

Just as significant, and perhaps more interesting, after explaining what an ejido was to those respondents who were unfamiliar with them, we asked whether they would be interested in belonging to an ejido and having their own land to work through such a cooperative system. Most, forty percent, said yes; a large portion, thirty-seven percent, answered maybe; and only twenty-three percent said no. Therefore, seventy-seven percent of all respondents affirmed some interest in belonging to an ejido and becoming ejidatarios.

A final question asked what people would grow in these plots of cooperative shared land. The replies emphasized produce for local consumption, including corn, tomatoes, onion, garlic, squash and similar crops.

Ejido-like land-sharing institutions can be adapted for use in California and the United States to achieve multiple benefits, including affordable housing for land stewards, community-based agroecological farms or the local co-management and hybridized ownership of conservation spaces.

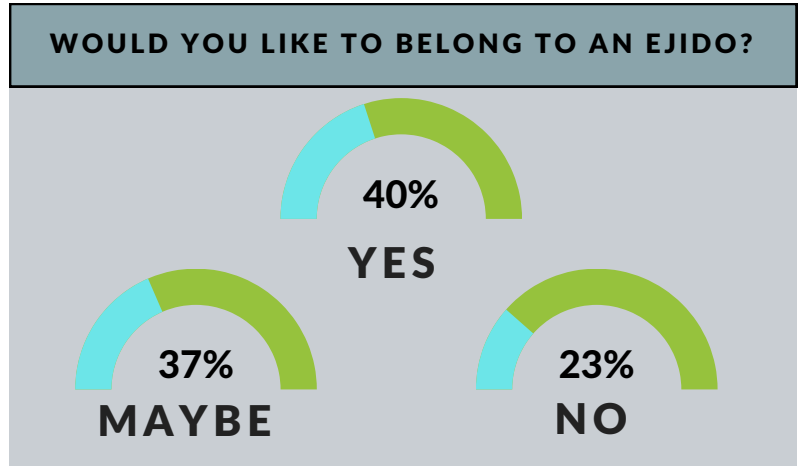


Figure 7: Volunteer Workday at CHMA Community Garden (Alianza Ecologista)

V. COMMUNITIES PRIORITIES MAP

Community survey responses emphasized the importance of protecting easily-reached spaces close to homes and families. In response, we developed maps to illustrate how conservation could be prioritized near existing communities.

Two geographies are highlighted as areas of policy focus and public investment. In the maps, the spheres of influence (SOI) of incorporated cities—areas that are already slated for annexation and development—are designated in light green. The lands in SOIs may be the most politicized areas in the region as they enter speculative markets for future development, yet they offer tantalizing possibilities for realizing equity outcomes. In such spaces, new land-acquiring infrastructures, like community land trusts and “ejidos” where local government may own and lease lands, promise multiple benefits for local communities.

A secondary area, just beyond the SOIs is shown in light blue, illustrates a density-sensitive, three-mile radius around urban areas. These are lands conducive to conservation easement acquisitions as corresponding smart growth policies are implemented by local municipalities.

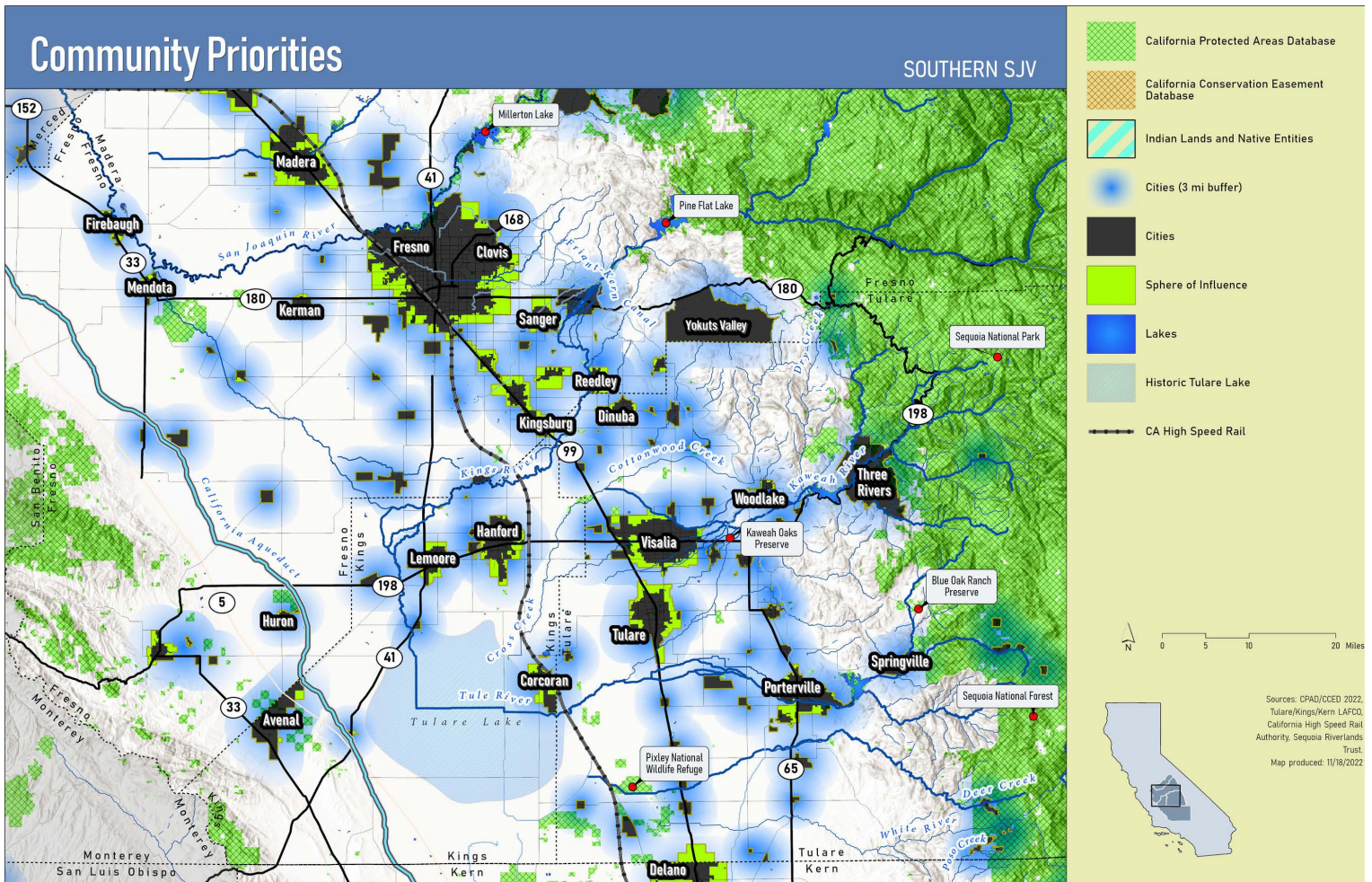


Figure 8: Community Priorities – Southern San Joaquin Valley

Until recently, inefficient low-density suburban sprawl development and large-scale agricultural production—decisions dominated by private interests with a modicum of public oversight—have characterized the land use planning of the region. Such development destroys both natural lands, prime farmland and groundwater recharge areas, while also undermining the economic integrity and property values of existing neighborhoods, major commercial corridors, and downtown centers.

Survey responses point policymakers to address these problems directly for community benefit. Residents identified local parks and green spaces (often asking for basic necessities like shade and bathrooms) which may be locally managed by community organizations or local government. Hybridized, multi-benefit conservation prioritizing work in the spheres of influence of cities can help to realize equity, economic and ecological outcomes.

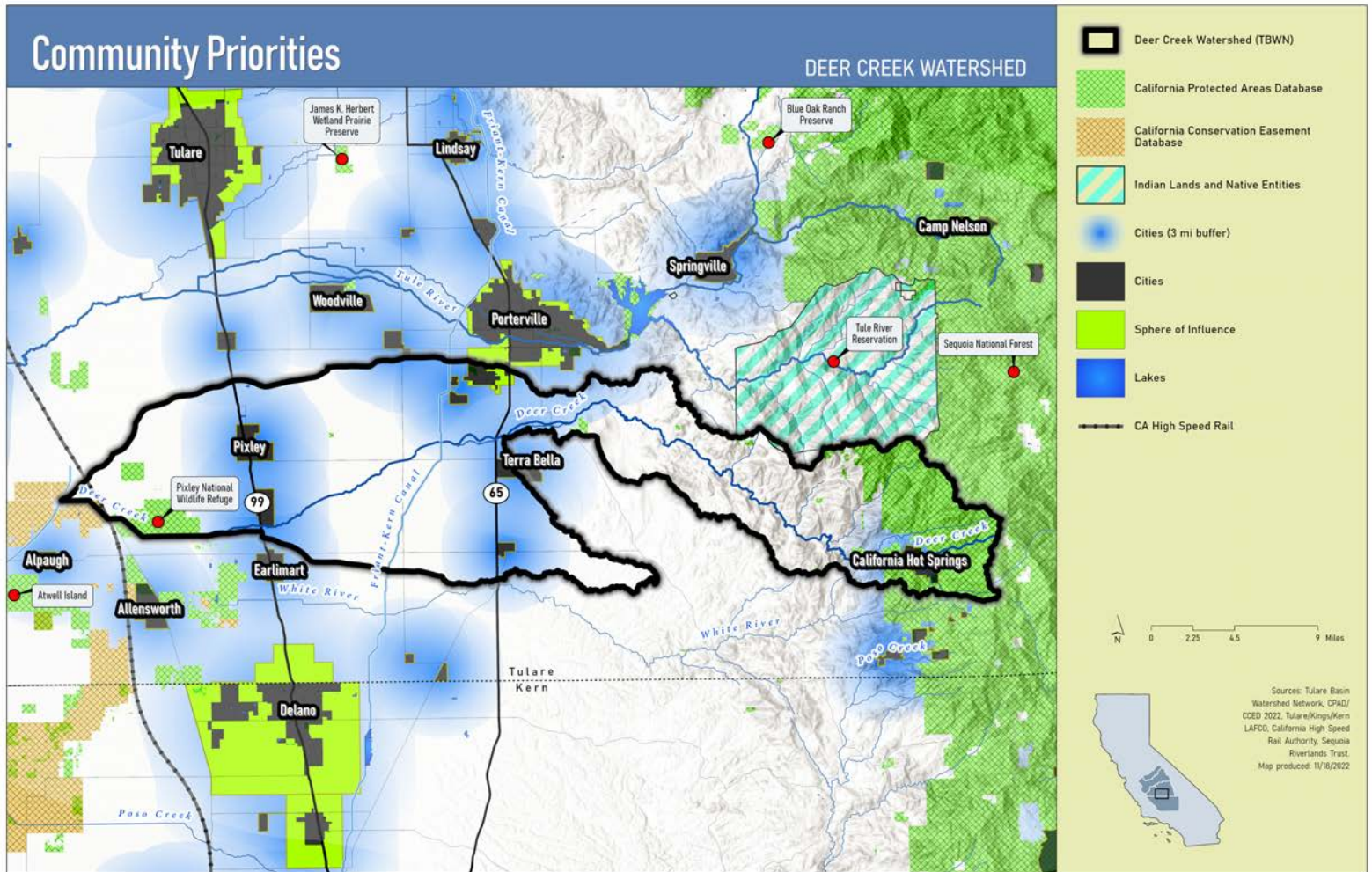


Figure 9: Community Priorities – Deer Creek Watershed

The areas surrounding homes and communities can be protected, stewarded and managed by requiring a vote of local residents to authorize annexations of land. Urban growth boundaries are a proven, effective policy mechanism that has stabilized development and protected agricultural resources in places like Ventura County.¹³

Additionally, natural resource conservation can align with equity outcomes for local communities. Recent legislation establishing oil-drilling buffers to protect local residents from toxic pollution shows that communities can effectively advocate for their safety and help to guide policy response.¹⁴ A number of practices may help achieve and ensure implementation of equity values, such as linking community benefit agreements to proposed development projects, incorporating robust inclusionary housing provisions and other affordable housing guarantees, and participatory planning that vests residents in future plans for their communities.

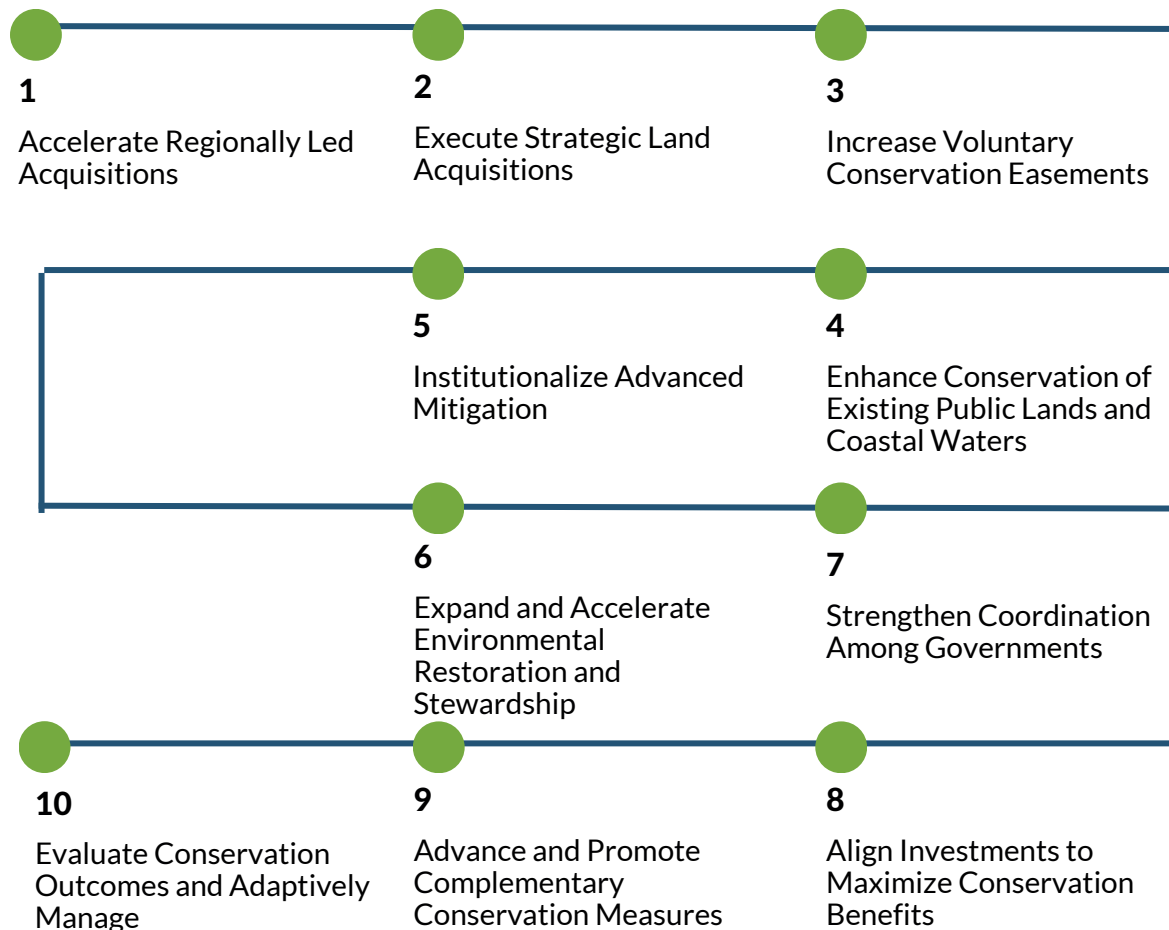
Equity-centered delano will produce multiple benefits for both people and the environment.

BIODIVERSITY CONSERVATION IN THE TULARE BASIN

On April 22, 2022 (Earth Day), the State of California released its Pathways to 30x30 report to conserve thirty percent of its lands and coastal waters by 2030. Described as a call to action, the initiative is embedded within similar federal and international policies to conserve nature across the planet.¹⁵

California leads this global campaign to achieve conservation and climate goals. Its 30x30 objectives to “protect and restore biodiversity, expand access to nature, and mitigate and build resilience to climate change” may be achieved here first, learning implementation lessons for broader application. Breaking with earlier siloed environmental approaches, the strategy corresponds to aligned state commitments to: advance justice; promote equity, diversity and inclusion; strengthen tribal partnerships; and sustain our economic prosperity, clean energy resources and food supply.¹⁶ An integrated policy framework aims to directly impact daunting crises in more holistic ways.

California’s Pathways to 30x30



The development of Pathways strategies involved regional workshops to understand more specific geographic priorities, challenges and opportunities. Each are detailed in its Appendix A: Regional Insights.¹⁷

Here the anomalies and possibilities of the San Joaquin Valley are illustrated in the state's statistics. Approximately ninety-two percent of the Valley's land is held in private ownership with significant areas dominated by industrial-scale agricultural production.¹⁸ Maps and datasets in the Pathways appendix describe looming threats to the region including rising temperatures, longer dry seasons, snowpack decline resulting in water scarcity, and increased risks of catastrophic flooding and more frequent wildfire.

Regional nature-based solutions are named to address and mediate these problems including riparian forest and floodplain restoration, prescribed and cultural burning, and the restoration or regeneration of fallowed farmland. It also invites an expansion of agricultural practices to achieve broader public benefits including local food security, economic sustainability, carbon storage, water quality, water storage and biodiversity.

Pathways to 30X30 San Joaquin Valley Conservation Challenges

- Competing priorities of agriculture, green energy and conservation
- Lack of access to nature for urban and rural communities
- Urban expansion as communities like Merced, Fresno and Bakersfield grow
- Habitat fragmentation from rural residential and suburban development
- Need for improved outreach, education, partnership and collaboration with private landowners

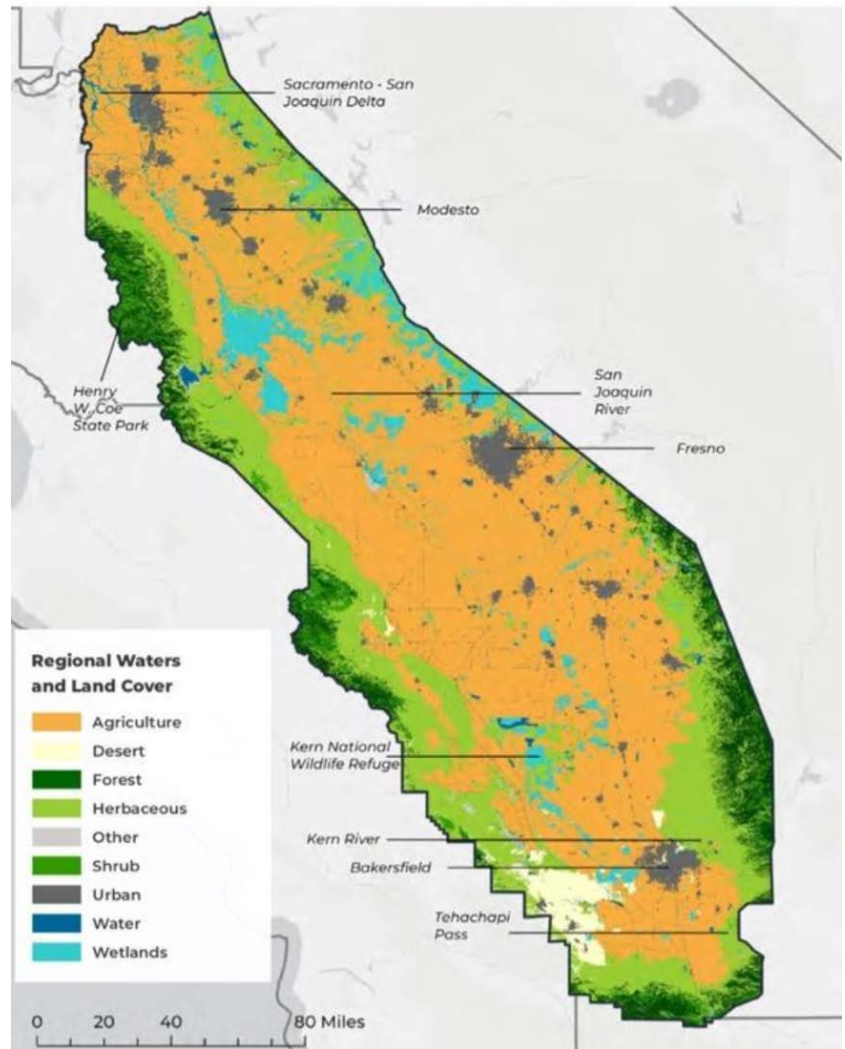


Figure 10: Regional Waters and Land Cover - San Joaquin Valley (Pathways to 30x30 Strategy, Appendix A – Regional Insights)

In the region's Statewide Biodiversity Ranking from the Final Pathways to 30x30 Strategy, the San Joaquin Valley is characterized by low biodiversity rankings and a dearth of high ranking lands.

This frames the region based on its current land uses and does not account for potential restoration of habitat. In *Rewilding Agricultural Landscapes: A California Study in Rebalancing the Needs of People and Nature*, an opportunity to "rewild" retired farmland is introduced as an opening dialogue on the region's ecological future.

Given climate projections, land repurposing will be a central component of future conservation planning in the region.

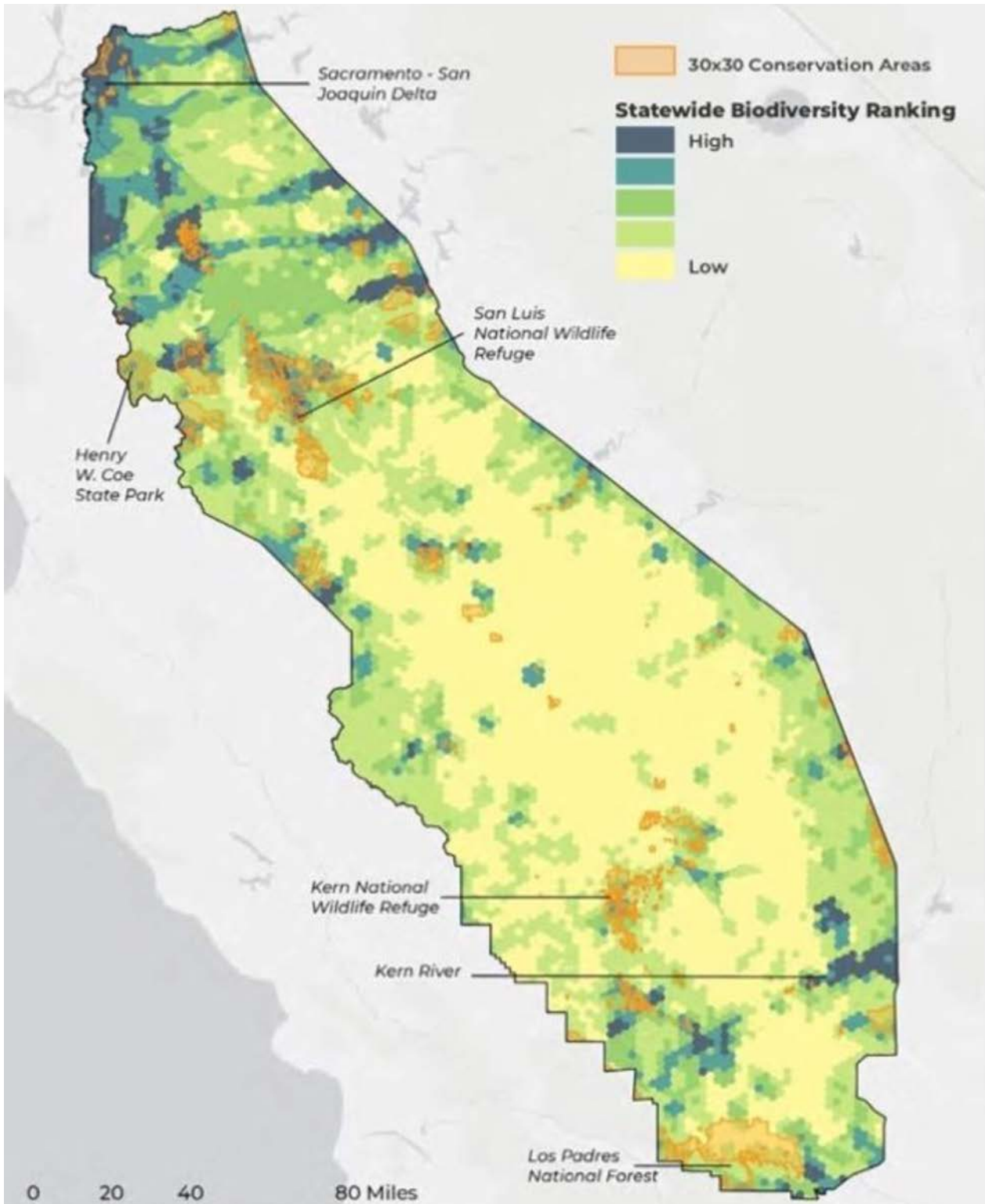


Figure 11: Statewide Biodiversity Ranking - San Joaquin Valley (Pathways to 30x30 Strategy, Appendix A - Regional Insights)

Land Repurposing Conservation Area

The Land Repurposing Conservation Areas map (Figure 12) developed by our team, uses a number of existing plans and data layers to examine where agricultural land repurposed to less water-intensive uses may have potential for conservation and restoration.

The map suggests strategic conservation possibilities as it combines Endangered Species Recovery Program data developed by CSU Stanislaus,¹⁹ a study from The Nature Conservancy that examined where threatened and endangered species habitat overlapped with recently-fallowed farmland,²⁰ and the Tulare Basin Watershed Network's Sequoias to the Sloughs project. The juxtaposition of recent land retirement (in dark green) aligns with endangered species recovery sites.

These lands, mostly on the westside of the valley, open a conservation opportunity, particularly with areas adjacent to or providing linkages with currently protected public lands. As realistic water projections temper current intensive land uses, the Valley's western landscapes may be transitioned into natural habitat conservation and renewable energy production.²¹

Whether these investments come from existing funding streams, such as the California Department of Conservation's new Multi-benefit Land Repurposing Program,²² or other sources, it is essential to ensure that those who now make their living from the land have an equitable stake in being part of the solution, so that landscape-scale conservation and restoration of retired farmland benefits people and nature alike.

Land Repurposing Conservation Areas

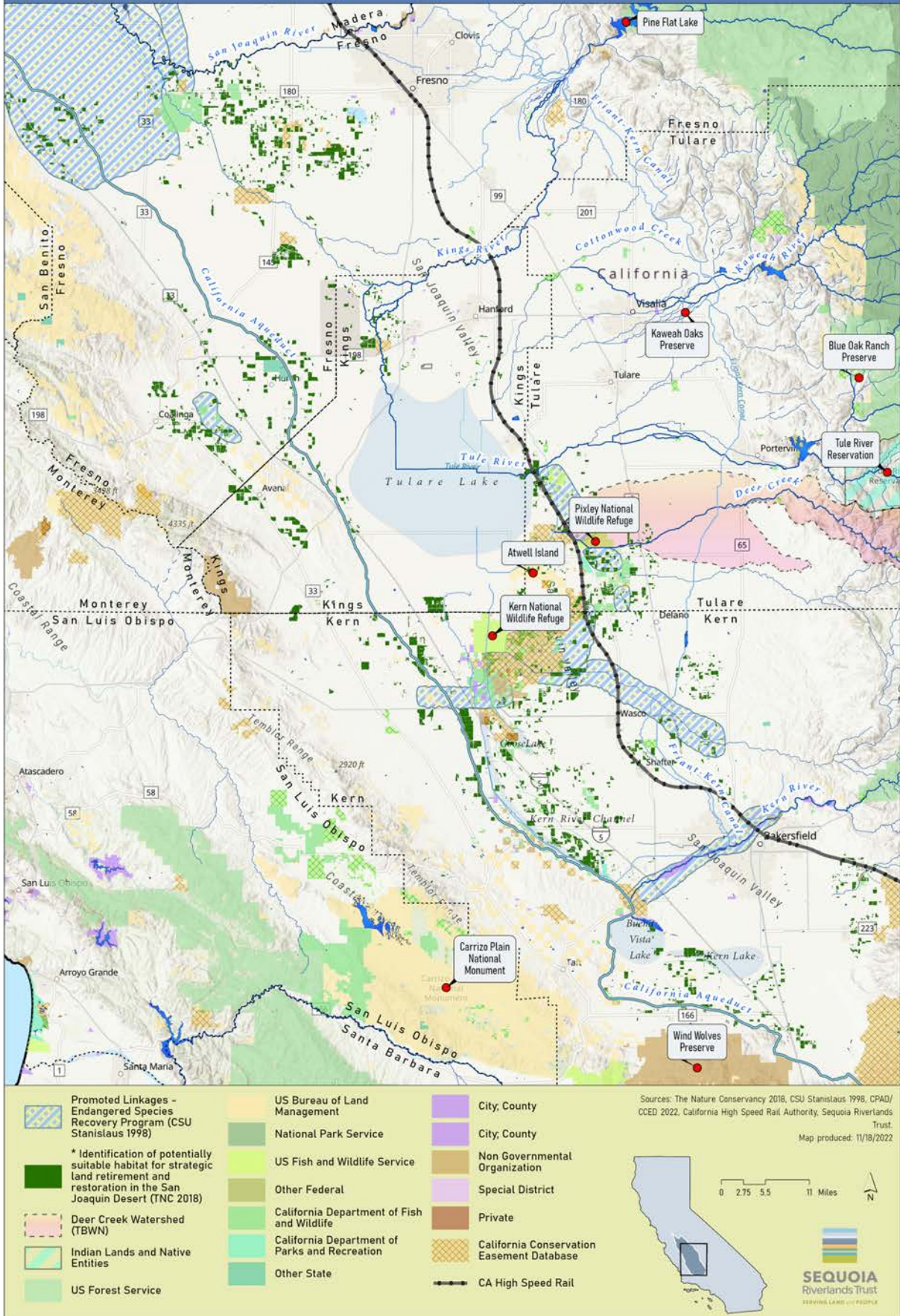


Figure 12: Land Repurposing Conservation Area

CONSERVATION MAPS OF THE SOUTHERN SAN JOAQUIN VALLEY

The advent of California's 30x30 initiative sparked a push for actionable acquisition projects by local conservationists seeking to leverage the policy's targeted goals and potential investments. In the San Joaquin Valley these have been difficult to compile due to hesitancy over broadcasting acquisitions that are under negotiation and other constraints. In response, rather than list particular projects, we have developed Conservation Area maps that coalesce already completed conservation plans.

The initial three maps focus on Fresno-Madera, Tulare and Kern Counties. Existing conservation plans from the Southern San Joaquin Valley were used to create a compilation of overlays to highlight priority areas. The final two maps integrate values—both social and ecological—as an exploratory bridge of conservation and community priorities. The first of these maps is on a region-wide scale of the Southern San Joaquin Valley, while the second focuses upon a key local watershed around Deer Creek on the Tulare-Kern County border.

I. Conservation Areas - Fresno and Madera Counties

This Fresno and Madera County Conservation Areas map (Figure 13) combines publicly available data layers on conservation areas in Fresno and Madera Counties with existing protected areas, including federal and state public lands and conservation easements held by land trusts.²³

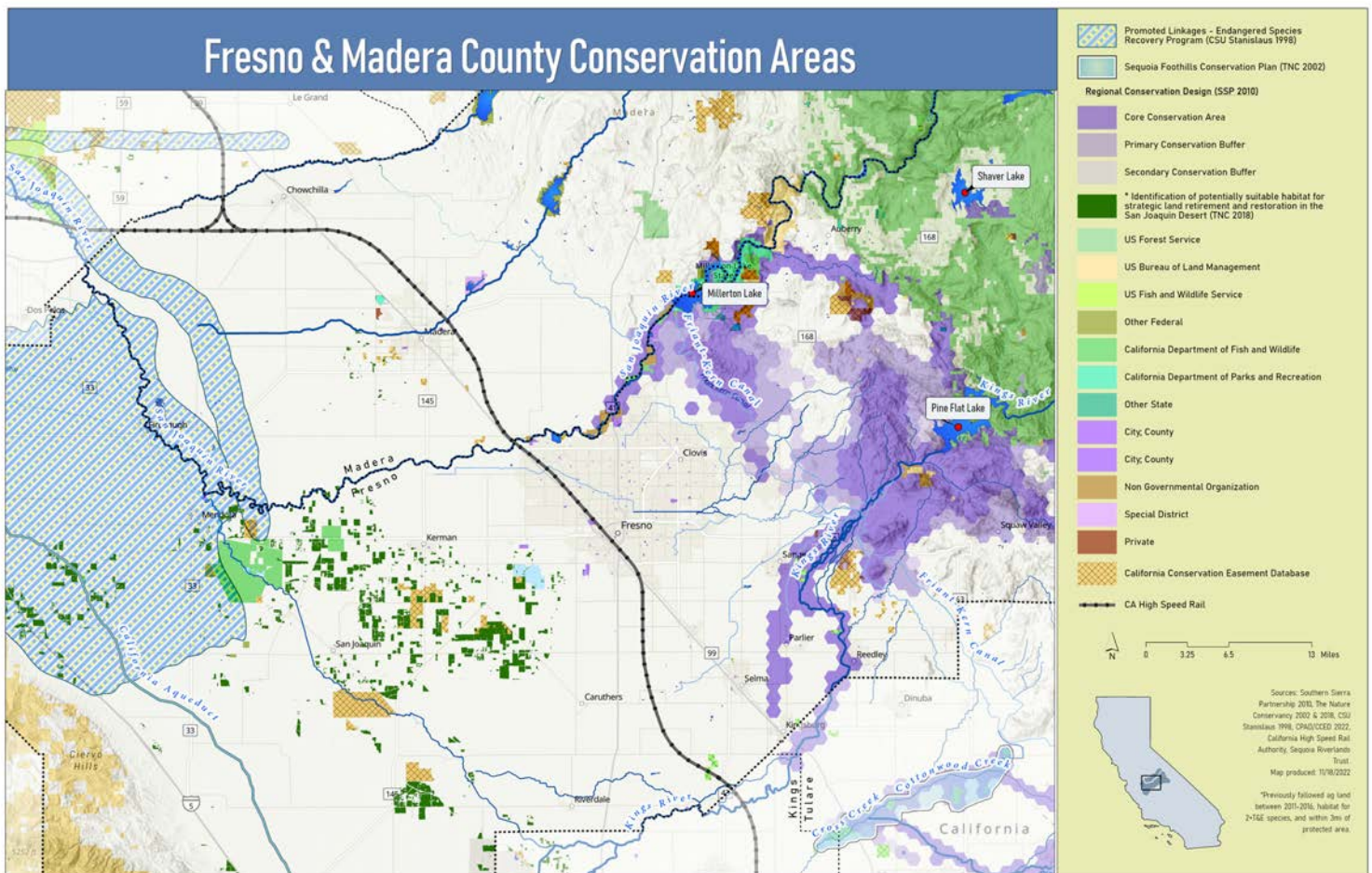


Figure 13: Fresno & Madera County Conservation Areas

In the Sierra foothills and the eastern portion of the valley floor, this includes the Southern Sierra Partnership's (SSP's) Regional Conservation Design, the result of a nationally recognized conservation and climate study encompassing a seven million acre region of the Southern Sierra and San Joaquin Valley.²⁴ The SSP Regional Conservation Design takes into account factors ranging from shifting habitats for migratory and endemic species in a time of rapid climate change to the need to maintain ecosystem services such as forage and groundwater recharge, and provides a blueprint for a network of protected areas linking the Sierra Nevada and San Joaquin Valley.²⁵ In the lower foothills, where the San Joaquin River flows from Millerton Lake, there is significant overlap between the SSP Regional Conservation Design and longstanding Endangered Species Recovery Program (ESRP) recommendations developed by CSU Stanislaus.²⁶ While these data layers were developed at different times, based on different criteria, both emphasize the importance of protecting contiguous habitat along this stretch of the San Joaquin River and in the zone where the Fresno and Madera foothills meet the Valley floor.

Further west, the map incorporates a recent study from The Nature Conservancy that examines where threatened and endangered species habitat overlaps with recently fallowed farmland.²⁷ Water scarcity and SGMA implementation are likely to entail the repurposing of hundreds of thousands of acres of agricultural land to less water intensive uses, particularly in areas that have historically relied solely on groundwater. With adequate funding and coordination mechanisms, a portion of this land could be conserved and restored, providing long term benefits ranging from landscape scale habitat connectivity and groundwater recharge to improved air quality and opportunities for outdoor recreation.

The Kings and San Joaquin Rivers, as well as other riverlands, are linchpins upon which to focus biodiversity conservation on the Valley floor.

II. Conservation Areas - Tulare County

This Tulare County Conservation Areas map (Figure 14) incorporates publicly available data layers on protected lands and conservation areas in Tulare County,²⁸ including The Nature Conservancy's Sequoia Foothills Conservation Plan,²⁹ the SSP Regional Conservation Design,³⁰ and the boundary of the Tulare Basin Watershed Network's ongoing Sequoias to Sloughs project.³¹ It also includes Endangered Species Recovery Program (ESRP) contiguous lands, which overlap significantly with the Sequoia Foothills Conservation Plan and SSP Regional Conservation Design, and further west, ESRP-promoted linkages, which intersect with ecologically important fallowed farmland identified by The Nature Conservancy.³²

While the conservation areas maps span two decades and emphasize different criteria, they converge on key watersheds and riparian areas that have the potential to provide habitat connectivity, outdoor recreation and other benefits across the Valley floor, including the Kaweah, the Tule and Deer Creek. They also suggest areas where strategic investments in conservation can build linkages between existing protected lands, such as the public lands, land trust preserves and conservation easements of the Kaweah Watershed or, further south, Pixley National Wildlife Refuge and conserved lands along Deer Creek.

The Tule River Reservation is centrally located within the geography, and the Tribe's priorities can further inform conservation planning.

Tulare County Conservation Areas

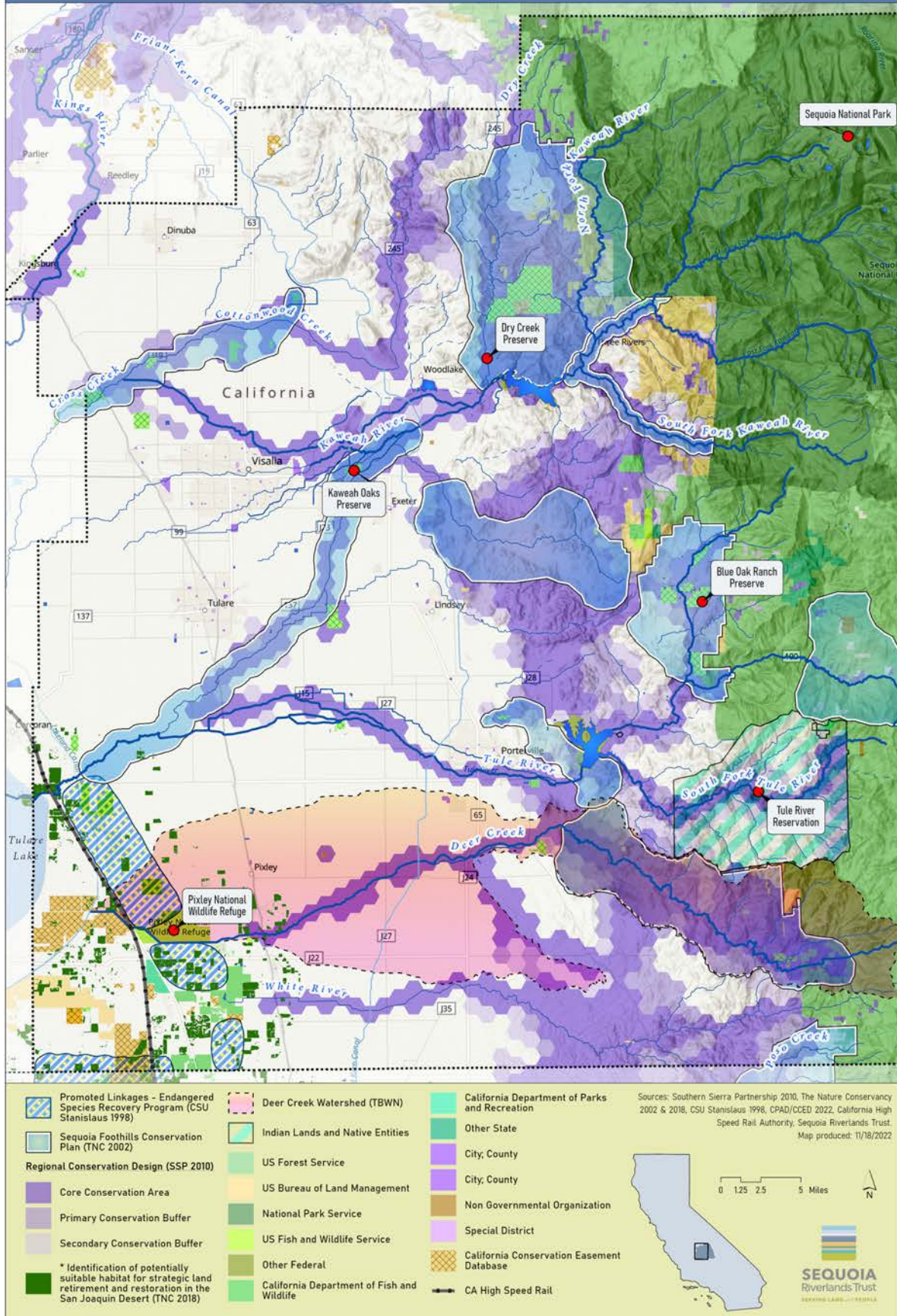


Figure 14: Tulare County Conservation Areas

III. Conservation Areas - Kern County

The map of Conservation Areas in Kern County (Figure 15) combines many of the datasets described above, including the Sequoia Foothills Conservation Plan, the SSP Regional Conservation Design, Endangered Species Recovery Program contiguous lands and linkages, ecologically important fallowed farmland, and existing protected areas.³³

As in the Tulare County map, conservation layers developed at different points in time and emphasizing different criteria converge on specific watersheds and linkages. Particularly important areas for maintaining habitat connectivity include the Kern River Watershed, Poso Creek and lands to the northwest that connect with Kern National Wildlife Refuge. Further south, the Tehachapi Linkage –where the Sierra Nevada and the southern end of the San Joaquin Valley connect with the Mojave Desert, the Los Angeles Basin, and the Southern Coast Ranges—is a critical conservation priority not only for our region, but for much of Central and Southern California.

The Carrizo Plain National Monument is an already renowned nature preserve of “super blooms” and endangered species protection.

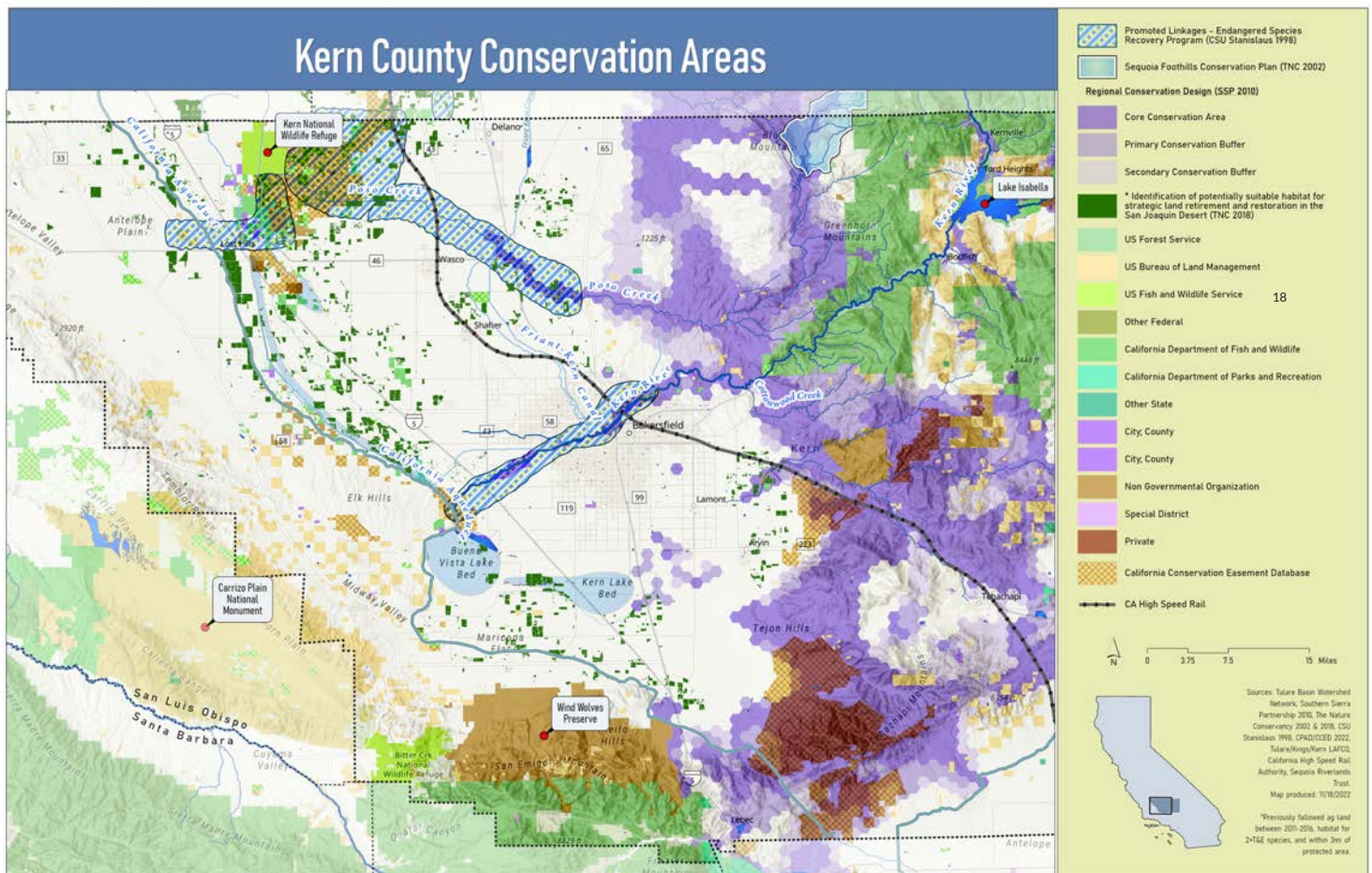


Figure 15: Kern County Conservation Areas

IV. Conservation-Community Priorities - Southern San Joaquin Valley

The Conservation-Community Priorities map for the Southern San Joaquin Valley accentuates conservation opportunities in closer proximity to population centers, including considerations for multi-benefit projects within spheres of influence of cities.

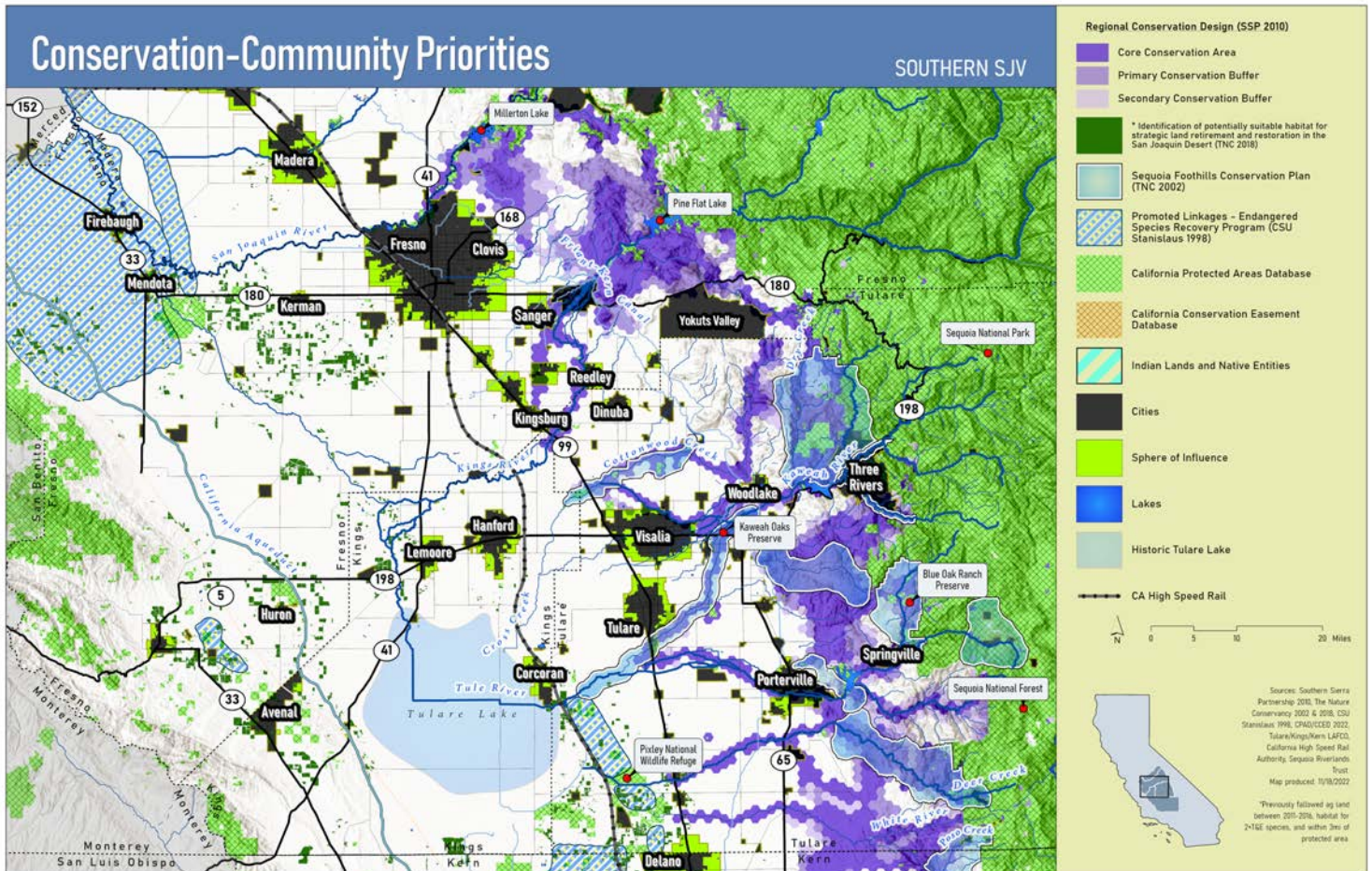


Figure 16: Conservation-Community Priorities – Southern San Joaquin Valley

As the survey responses indicated, access to the outdoors depends in part on having a robust network of parks and protected areas near where people live. Respondents also identified poor air quality as one of the region’s most pressing environmental concerns. By limiting low-density, car-dependent development, conservation around population centers helps to support compact development patterns that reduce the need for long commutes, thereby promoting improved air quality and reinvestment in existing communities.

This Conservation Community Priority Map map highlights proximity to urban centers suggesting where conservation investments could help to advance ³⁴equity goals.

The areas with the greatest potential to expand access to outdoor recreation while supporting compact growth and improved air quality are those in close to where people live. In Fresno County, for example, conserving land between Reedley, Dinuba, Selma and neighboring communities, and between this grouping and the City of Fresno, could expand access to outdoor recreation for many nearby residents and help to prevent these communities from sprawling into one another. The currently proposed Southeast Development Area (SEDA) in the City of Fresno's sphere of influence will convert 9,000 acres of family farms and small-scale agriculture into a mix of urban spaces. Such areas deserve higher levels of environmental analysis and scientific due diligence to assess potential long-term adverse outcomes.

A generation ago, the cities of Clovis and Fresno grew into each other, beginning a process similar to what occurred in the Los Angeles basin during the last century. If we are to learn lessons from the past, now is the time act to retain the distinct character of the valley's communities. A greenbelt between the Cities of Visalia and Tulare, and greenbelts between them and other neighboring communities, would have similar benefits for residents of Tulare County.

V. Conservation-Community Priorities - Deer Creek Watershed

The Deer Creek Conservation-Community Priorities map focuses on conservation opportunities in close proximity to population centers around the Tulare-Kern County boundary.

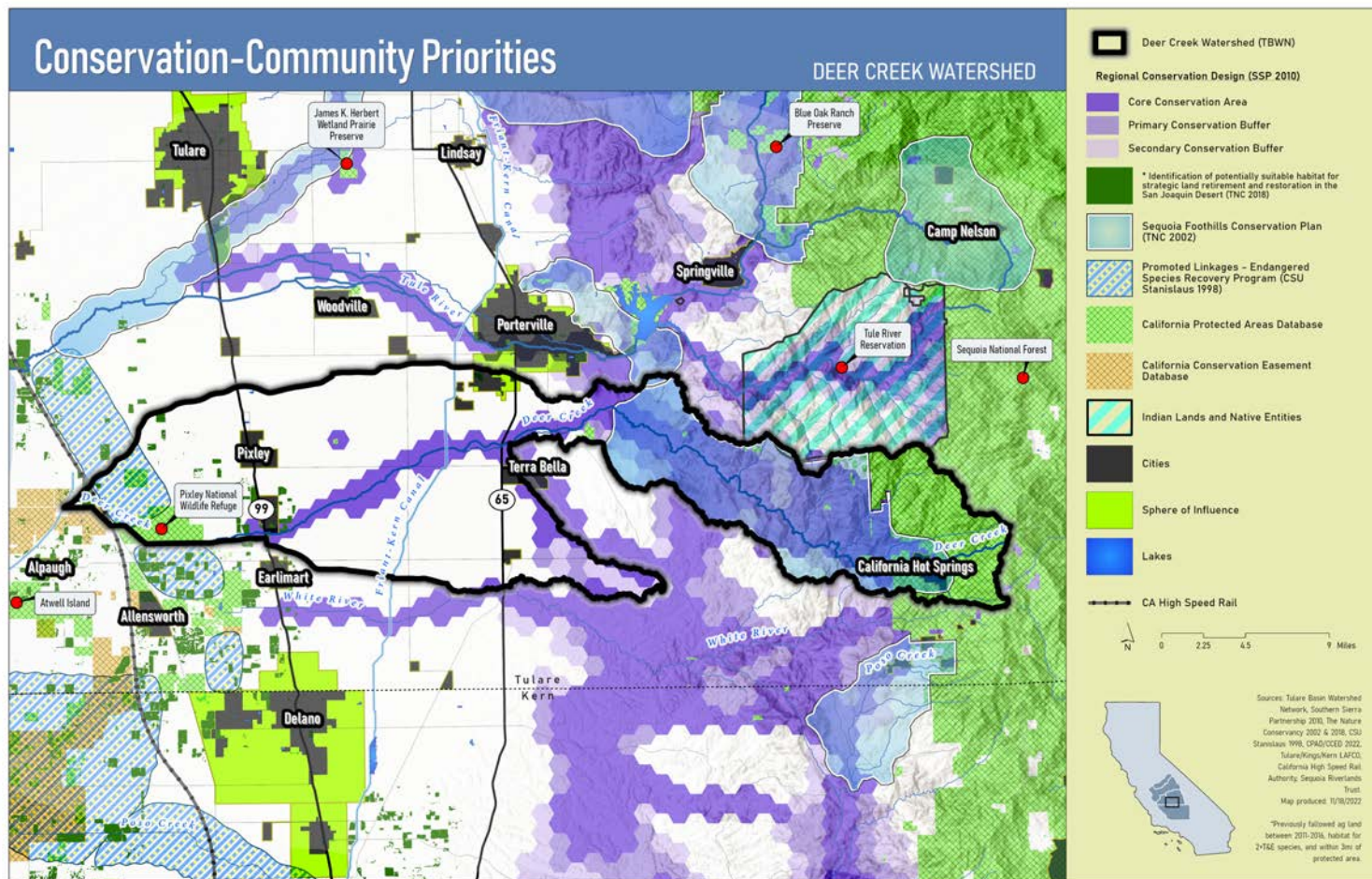


Figure 17: Conservation-Community Priorities - Deer Creek Watershed

This map again highlights proximity to city limits and urban spheres of influence to illustrate where conservation investments could help to advance multi-benefit goals. These areas show the greatest potential to expand access to outdoor recreation while supporting compact growth and improved air quality for those in a number of proximate communities.

Residents expressed interest in joint management of public lands together with community organizations and local government. Policy mechanisms such as urban growth boundaries and community benefit agreements to development projects can also secure equity outcomes, increase public input and promote direct democracy on land use decisions.

Finally, equity-promoting institutions like community land trusts and worker cooperatives promise tangible, real-world benefits to local migrant and farmworker communities.

CONCLUSION

As California's environmental policy agenda moves into on-the-ground implementation and strategic investments, regions like the San Joaquin Valley will be key to understanding how to achieve them in ways that benefit local residents.

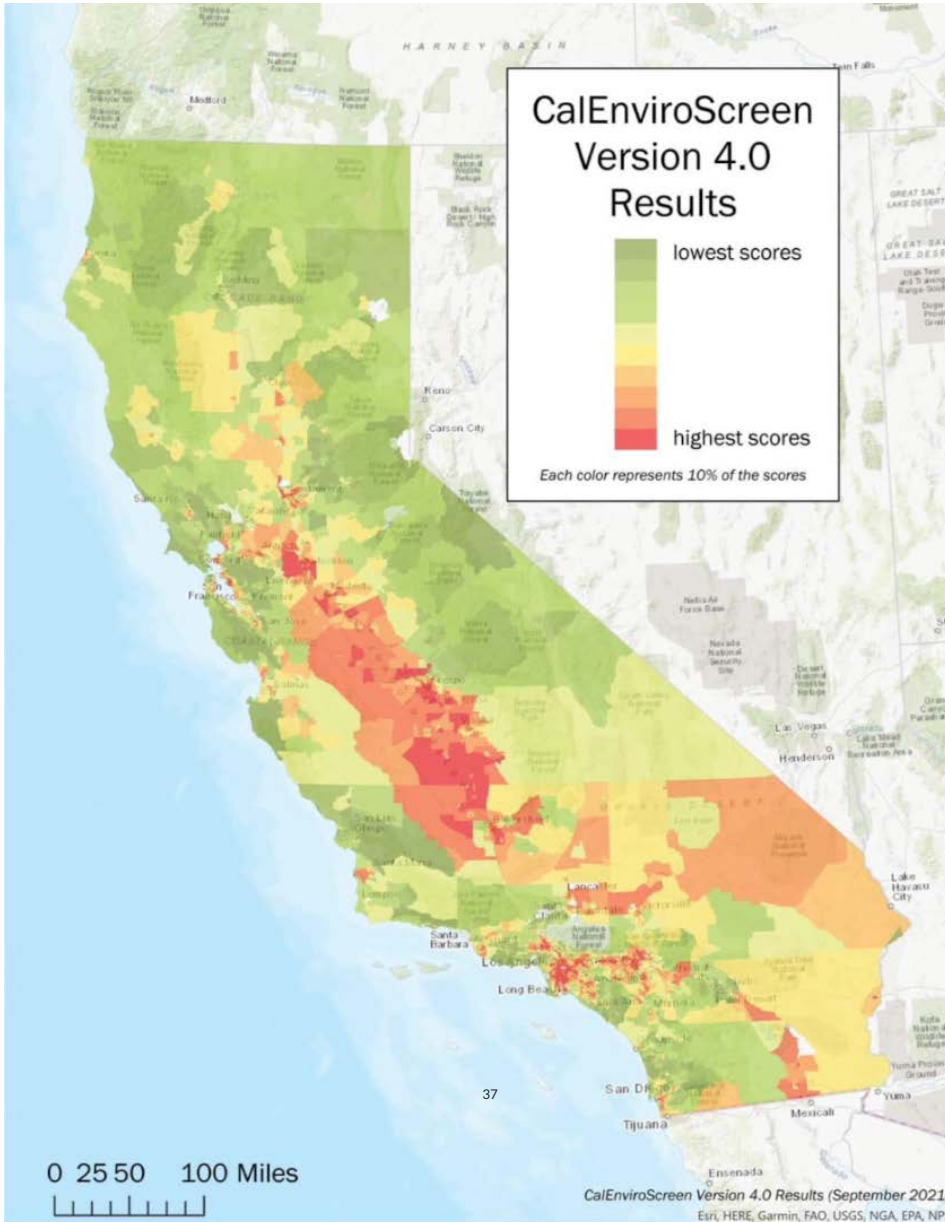


Figure 18: CalEnviroScreen 4.0

By the state's own analysis, the Valley represents an economic system premised upon extraction of both human labor and environmental resources. The costs and outcomes of past policy are now clearly evident.

With CalEnviroScreen 4.0, a science-based screening tool to assess impacts of both pollution burdens and harmful socioeconomic factors such as poverty levels, the region is highlighted above all others for its unique adverse conditions of cumulative harm.³⁵

If CalEnviroScreen was developed to direct state policy and investment with explicit equity and environmental justice commitments, it can also inform conservation and natural resource management.

Taken together, the Valley is an important location to bridge policy response and public engagement to intersectional problems.

Finding Connection seeks to identify local perspectives and inform state policy on conservation opportunities in the San Joaquin Valley. Its particular focus bridges nature conservation with equity outcomes for farmworker and climate vulnerable communities.

Conservation-Community Priorities ³⁶ Recommendations

1. Prioritize conservation within neighborhoods, near communities and adjacent to urban areas, especially within the spheres of influence of cities.

The key geography for equity-centered conservation is the spheres of influence of cities and lands surrounding unincorporated communities. A higher threshold of democratic inclusion and participatory planning, such as utilizing urban growth boundaries around cities and community benefit agreements connected with development projects, will broadly secure equity outcomes across the region. Community land trusts are well positioned to achieve multi-benefit outcomes on property acquisitions in urban and peri-urban areas. An “ejido”-inspired system suggests that any form of government—city, county, state or federal—may lease land to community residents for shared economic benefit and collective ecological stewardship.

2. Expand conservation of wetlands, riparian corridors and groundwater recharge areas, particularly in the eastern San Joaquin Valley.

Riverlands offer a fundamental connection between local communities, natural habitat and the potential for agroecological stewardship. Many of the major urban centers in the region are integrally connected to rivers, and other rural communities are often situated near riparian areas. These areas provide an array of ecosystem services and other benefits including recreation, improved water quality, groundwater recharge, carbon storage, wildlife corridors and biodiversity hotspots. These vital linkages can be protected and expanded through conservation easements, expansion of public parks and creation of additional nature preserves.

3. Invest in conservation and restoration of retired agricultural lands.

Achieving groundwater sustainability is likely to entail the repurposing of hundreds of thousands of acres of agricultural land. Investments in conserving and restoring that land, particularly in key locations that connect with existing conservation areas, can provide benefits ranging from landscape-scale habitat connectivity and more accessible outdoor recreation opportunities to groundwater recharge, carbon sequestration and improved air quality.

The advent of major California state climate policies opens an invitation to consider not only landscape-level conservation, but also practical agroecological possibilities for local residents. The state’s Pathways to 30x30 initiative is such an opportunity to vision and realize multi-benefit outcomes. As one of the Pathways aims to “Align Investments to Maximize Conservation Benefits,” it acknowledges “more nuanced conservation measures that are too small to map.”³⁷ It is precisely such parcels that local residents identified when asked about conservation priorities for their lives in our report. Their feedback also reinforced an identified “Access Barrier” specific to the San Joaquin Valley: “Physical distance to nature, especially in rural communities.”³⁸ An emerging land ethic, relevant to the conditions of the Valley, can benefit local communities and natural systems linking them in mutual care.

The San Joaquin Valley presents geographies of inequity and opportunities for action.³⁹ The region invites different solutions because of the unique intensity of its problems, including decades of unsustainable groundwater use, combined with a historical pattern of low-density growth and disinvestment in existing communities. The Conservation and Community Priorities maps in this report broadly identify geographies for future acquisition, increased stewardship and more sustainable management. Our work now is to integrate past planning with ongoing resident feedback and dialogue into a coherent conservation framework.

As we face the challenge of repurposing land and redefining growth, we look for ways that give everyone—especially those who have been disproportionately harmed by the current system—a stake in being part of the solution.



Figure 19: Ecological Restoration at Tule River Parkway Native Plant Garden (Alianza Ecologista)

FOOTNOTES

¹ On April 2, 2018, the Governor’s Office of Planning and Research, Integrated Climate Adaptation and Resiliency Program (ICARP), Technical Advisory Council action defined climate vulnerable communities: “Climate vulnerable communities describe the degree to which natural, built, and socio-economic systems are at risk of exposure to climate change impacts. Vulnerable communities experience heightened risk and increased sensitivity to climate change, and have less adaptive capacity to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by one or more physical (built or environmental), social, political, and economic factors, which are exacerbated by climate impacts.”

² In October 2020, Governor Newsom signed the Nature Based Solutions Executive Order N-82-20 committing California to the goal of conserving 30 percent of its land and coastal waters by 2030. [The Pathways to 30x30 Strategy](#) describes and defines the policy’s implementation.

³ Hanak, E., Escriva-Bou, A., Gray, B., Green, S., Harter, T., Jezdimirovic, J., Lund, J., Medellin-Azuara, J., Moyle, P., & Seavy, N. (2019). “Water and the Future of the San Joaquin Valley.” Public Policy Institute of California. Available at: <https://www.ppic.org/publication/water-and-the-future-of-the-san-joaquin-valley/>

⁴ In *Rewilding Agricultural Landscapes: A California Study in Rebalancing the Needs of People and Nature*, see Chapter 3 – “Lessons Learned from Over Twenty Years of Habitat Restoration on Retired Farmlands in the San Joaquin Valley,” Chapter 9 – “Strategic Selection of Lands for Rewilding to Optimize Outcomes and Minimize Costs” and Chapter 10 – “The Role of Diversifying Farmland Management in Rewilding the San Joaquin Valley.” As regional comparison to Midwestern agriculture, see *The Farm as Natural Habitat: Reconnecting Food Systems with Ecosystems*.

⁵ Muir, J. (1916). *A 1000 Mile Walk to the Gulf*; see also reference to Muir’s 1868 letter to Mrs. Carr, available at: http://www.johnmuir.org/walk/muir_journal/IV.SJochinValsyn.htm

⁶ Tachi Yokut Tribe website, “Historical Documents: A Short History of California Indians,” available at: <https://www.tachi-yokut-nsn.gov/history>

⁷ Serrano, F. and O’Connell. D. (2020). “Public Lands Advocacy and Local Communities in the San Joaquin Valley,” conducted for the Central Valley Partnership by Alianza Ecologista and Valley Forward in May of 2020

⁸ Rowland-Shea, J., Doshi, S., Edberg, S., and Fanger, R. (2020). “The Nature Gap: Confronting Racial and Economic Disparities in the Destruction and Protection of Nature in America,” by the Center for American Progress and Hispanic Access Foundation in July of 2020.

⁹ Recent census data from Tulare County has Hispanic/Latino population at 66.7% and white (not Hispanic/Latino) at 26.4%, available at: <https://www.census.gov/quickfacts/tularecountycalifornia>; and correspondingly, in Fresno County, the Hispanic/Latino population at 54.7%, white (not Hispanic/Latino) at 27.2%, and Asian at 11.6%, available at: <https://www.census.gov/quickfacts/fresnocountycalifornia>.

FOOTNOTES

¹⁰ California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0, available at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

¹¹ See, “Mapping Opportunity in California’s San Joaquin Valley” and “California’s San Joaquin Valley: A Region and its Children Under Stress.” Reports commissioned by the Sierra Health Foundation and conducted by the UC Davis Center for Regional Change.

¹² “Most Polluted Cities” in American Lung Association’s State of the Air Report, available at: <https://www.lung.org/research/sota/city-rankings/most-polluted-cities>; and also at: <https://www.lung.org/research/sota/key-findings/most-polluted-places>

¹³ Save Open Space and Agricultural Resources (SOAR), is a nonprofit organization that led urban growth boundary initiatives across Ventura County, at <https://www.soarvc.org>.

¹⁴ California’s SB 1137 was signed into law by Governor Newsom on September 16, 2022 will ban new oil and gas wells within 3,200 feet of homes, parks, hospitals and other sensitive areas.

¹⁵ White House, “Fact Sheet on Nature Based Solutions to Fight Climate Change, Strengthen Communities and Support Local Economies” prepared for the COP27 conference.

¹⁶ Pathways to 30x30 Strategy, pg. 3, 11, 17.

¹⁷ Pathways to 30x30 Strategy, Appendix A – Regional Insights, pgs. 60-68, available at: <https://www.californianature.ca.gov/pages/30x30>

¹⁸ Pathways to 30x30 Strategy, Appendix A – Regional Insights, pg. 61

¹⁹ California State University, Stanislaus. (1998). Endangered Species Recovery Program - Digital Geospatial Resources. Available at: <https://esrp.csustan.edu/gis/>.

²⁰ Butterfield, S., R. Kelsey, A. Hart, T. Biswas, M. Kramer, D. Cameron, L. Crane, and E. Brand. (2017). “Identification of Potentially Suitable Habitat for Strategic Land Retirement and Restoration in the San Joaquin Desert.” Available at <https://www.scienceforconservation.org/products/strategic-land-retirement>.

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²¹ Butterfield, S., Cameron, D., Brand, E., Webb, M., Forsburg, E., Kramer, M., O'Donoghue, E., and Crane, L. (2013). "Western San Joaquin Least Conflict Solar Assessment." Unpublished report. San Francisco, CA: The Nature Conservancy. Available at: <https://tnc.maps.arcgis.com/apps/TwoPane/main/index.html?appid=8a53b325116a4c3e88d2e8481b342123> and <https://www.scienceforconservation.org/products/western-san-joaquin-valley-assessment>. For interactive maps and additional analysis, see Pearce, D., Strittholt, J., Watt, T., and Elkind, E. (2016). "A Path Forward: Identifying Least-Conflict Solar PV Development in California's San Joaquin Valley." UC Berkeley: Berkeley Law. Available at: <https://escholarship.org/uc/item/543174qd#author>. Also, see, Ayers, A., Rosser, A., Hanak, E., Escriva-Bou, A., Wheelles, D., De Leon, M., Seymour, C., & Hart, A. (2022). "Solar Energy and Groundwater in the San Joaquin Valley." Public Policy Institute of California. Available at: <https://www.ppic.org/publication/solar-energy-and-groundwater-in-the-san-joaquin-valley/>.

²² A list of recently funded projects, including by the Pixley Irrigation District GSA, Kaweah Delta Water Conservation District, County of Madera, Kings River Conservation District & North Kings GSA, Merced Subbasin GSA, Westlands Water District GSA, and White Wolf GSA. Available at: <https://www.conservation.ca.gov/dlrp/grant-programs/Documents/grant/2022%20MLRP%20Project%20Summaries.pdf>

²³ GreenInfo Network. (2022). "California Protected Areas Database and California Conservation Easement Database." Available at: <https://www.calands.org/>.

²⁴ Southern Sierra Partnership. (2010). "Framework for Cooperative Conservation and Climate Adaptation for the Southern Sierra Nevada and Tehachapi Mountains." Available at: <http://www.southernsierrapartnership.org/ssp-framework.html>.

²⁵ Southern Sierra Partnership. (2010).

²⁶ California State University, Stanislaus. (1998). "Endangered Species Recovery Program - Digital Geospatial Resources." Available at <https://esrp.csustan.edu/gis/>.

²⁷ Butterfield, S., R. Kelsey, A. Hart, T. Biswas, M. Kramer, D. Cameron, L. Crane, and E. Brand. (2017). "Identification of Potentially Suitable Habitat for Strategic Land Retirement and Restoration in the San Joaquin Desert." Available at <https://www.scienceforconservation.org/products/strategic-land-retirement>. And also, The Nature Conservancy. (2020). "Roadmap to Restoration: Strategic Land Restoration in the San Joaquin Valley of California." Available at: https://www.scienceforconservation.org/assets/downloads/TNC1065_Roadmap_PolicyBrief.pdf, and for full study, reference, Bryant, B., Kelsey, R., Vogl, A., Wolny, S., MacEwan, D., Selmants, P., Biswas, T. and Butterfield, S. (2020). "Shaping Land Use Change and Ecosystem Restoration in a Water-Stressed Agricultural Landscape to Achieve Multiple Benefits." *Frontiers of Sustainable Food Systems* 4:138.

²⁸ GreenInfo Network. (2022).

FOOTNOTES

²⁹The Nature Conservancy began an early collaboration with Sequoia Riverlands Trust in December of 2000 when the “Sequoia Foothills Project” was launched. Available at: <https://www.nature.org/en-us/get-involved/how-to-help/places-we-protect/sequoia-foothills/>.

³⁰Southern Sierra Partnership. (2010).

³¹For more on TBWN’s work, see: <https://www.tularebasinwatershedpartnership.org/>.

³²California State University, Stanislaus. (1998); The Nature Conservancy. (2020).

³³CSU Stanislaus, (1998); The Nature Conservancy, (2002); Southern Sierra Partnership, (2010); GreenInfo Network, (2022); and Butterfield, S., R. Kelsey, A. Hart, T. Biswas, M. Kramer, D. Cameron, L. Crane, and E. Brand. (2017). “Identification of Potentially Suitable Habitat for Strategic Land Retirement and Restoration in the San Joaquin Desert.” Available at: <https://www.scienceforconservation.org/products/strategic-land-retirement>.

³⁴SOI shapefiles (current as of 2022) were attained directly from Madera, Fresno, Tulare and Kings

³⁵Counties.CalEnviroScreen 4.0. Available at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

³⁶The report does not take up aspects of Tribal inclusion in order for those positions to be forwarded by local Tribal leadership.

³⁷Pathways to 30x30: Accelerating Conservation of California’s Nature, pg. 56.

³⁸Pathways to 30x30: Accelerating Conservation of California’s Nature, Appendix A, pg. 66.

³⁹This frame references the title of a report commissioned by the UC Davis Center for Regional Change, “Kern County: Geography of Inequity and Opportunities for Action” completed in 2017 by a collaborative research team.

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