2025

Community Forest Management Plan

City of Bayard

Photo shows local art on a dead tree in Hurley, another Mining District community. The project team has dubbed hin Tree Rex. He has become a bit of a mascot for the project.

Acknowledgments

City of Bayard Leadership

Mayor: John L. Ojinaga

Mayor Pro Tem: Eloy Medina

City Council: Gilbert Ortiz, Frances Gonzales, Eloy Gonzales

Village Administrator: Martha Salas

Chief of Police: Hector Carrillo

Fire Chief: Gabriel Gonzales

Maintenance Supervisor: Sam Arellano

Municipal Judge: Jose Diaz

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Stream Dynamics: Van Clothier, Jaclyn Bartlett

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Cover and current page photo show healthy, drought tolerant trees in Bayard Mining Park, providing shade and enhancing walkability on Central Avenue.

Summary

Welcome to Bayard's Community Forest Management Plan! This plan contains helpful information about Bayard's community forest, with specific recommendations for its growth and care. The plan is just one part of a greater effort to increase tree equity in southwestern New Mexico. Bayard, along with Santa Clara, Deming, Hurley, Lordsburg, and Silver City, is part of the Southwest New Mexico Community Forestry Network (CFN), a regional coalition that is designed to help coordinate efforts that advance urban forestry practices and share information between the six communities and project partners.

Definitions of Important Terms

Before getting started, here are **definitions for some important terms** that are used throughout this plan.

Community Forest: The word "forest" might suggest an area up in the mountains that is dense with trees. Just as a wildland forest is made up of all the trees and vegetation within a specific area, Bayard's community forest (also known as an "urban forest") is made up of all the trees and plants within the town's municipal boundaries. Viewed together as a whole, all the trees and other vegetation in parks and public spaces, residential and business lots, and open and undeveloped space compose Bayard's community forest.

Wildland foresters take a landscape-scale approach to evaluating and managing threats to forest health and productivity. The same principle applies to community forestry. Urban forests are managed by examining all of a town's trees and vegetation as a whole to assess the trends, patterns and priorities that emerge. This approach allows managers to respond with informed strategies to improve and protect the overall community forest, while still addressing the health needs of individual trees.

Wildland foresters manage forests to provide wood products, natural resources, ecosystem services, and public recreation opportunities. Similarly, Bayard's community forest can be strategically managed to provide multiple environmental, economic, and social benefits to the community.

Urban forests, and the individual trees they are comprised of, play a crucial role in enhancing the livability, sustainability, and resilience of our communities, particularly in the arid Southwest. Trees provide a wide variety of social, environmental and economic benefits that can be maintained or even enhanced through best management practices.

Urban: The term urban might not be particularly relatable for Bayard, but in the context of this plan, urban simply means an area that has a higher density of developed land for residential, industrial, commercial, and institutional uses.

Green Stormwater Infrastructure (GSI): Green Stormwater Infrastructure, or GSI, is an approach to stormwater management that creates many small, distributed green spaces that soak up rainwater where it falls, reducing stormwater runoff that carries pollution to waterways. GSI captures rainwater and recharges soil moisture, bringing much needed water to plants and trees that create shade for people and habitat for wildlife.

GSI features are designed to leverage the power of living, natural systems to provide the community with many benefits. By directing rainwater from roadways and other impervious surfaces to landscaped areas, GSI can reduce nuisance flooding and support irrigation of trees and other plants, which helps to grow more green space while conserving Bayard's drinking water supply.

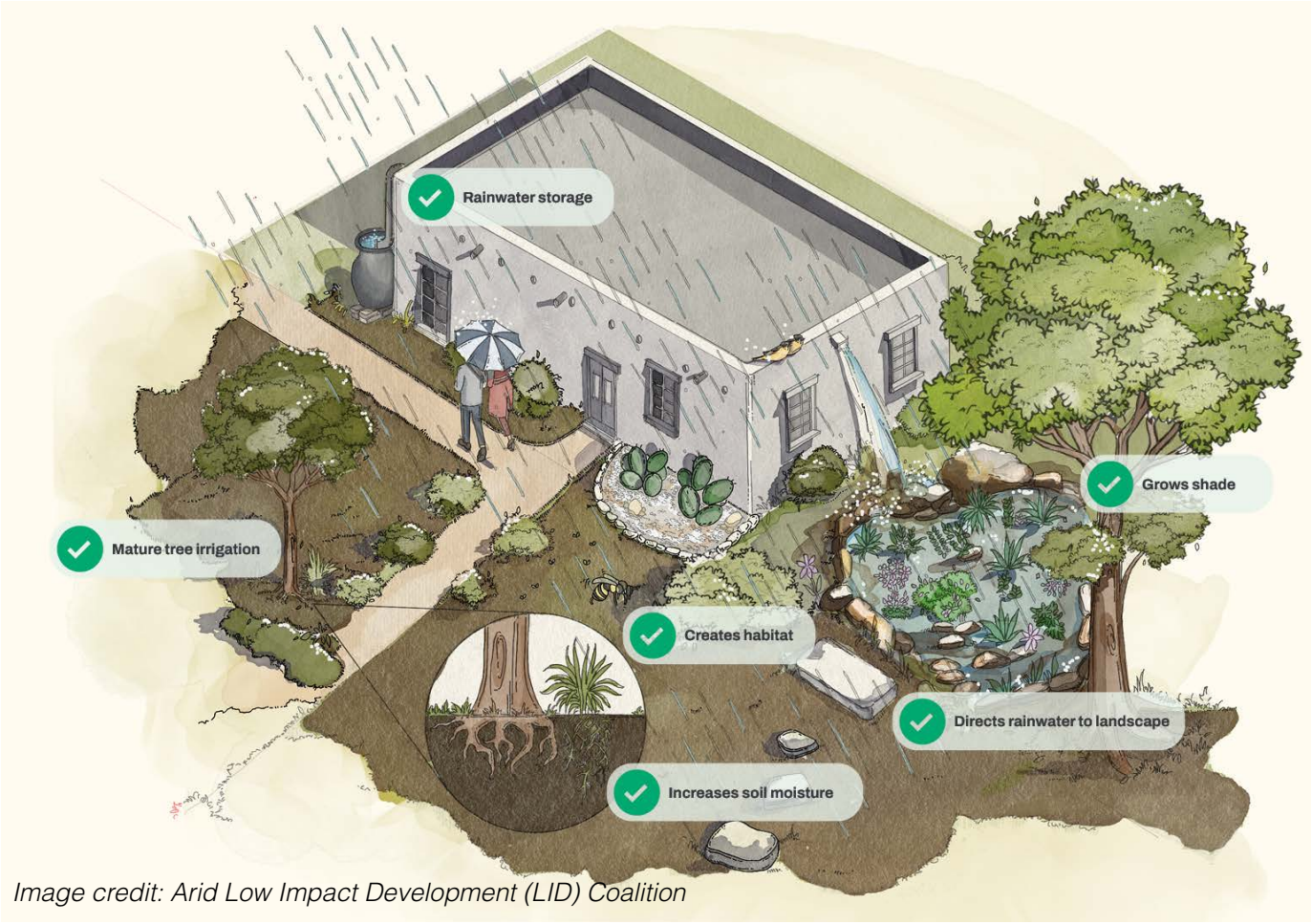


Image credit: Arid Low Impact Development (LID) Coalition

"Trees bring peace, calmness, tranquility, and they beautify an area."

-Bayard Resident

Southwest New Mexico Community Forestry Network

The USDA Forest Service awarded Western New Mexico University (WNMU) a 5-year grant to increase tree equity in six small, rural communities in southwestern New Mexico: Bayard, Deming, Hurley, Lordsburg, Santa Clara, and Silver City. While WNMU is the grant lead, Gila Resources Information Project (GRIP) and Integrated Biologial Solutions (IBIS) serve together with WNMU as the project team.

As part of the project, IBIS developed Community Forestry Management Plans for Bayard and each of the five other communities. **These management plans serve as the foundation to guide all project work in each community during the remainder of the project,** including tree planting and tree maintenance (e.g., tree pruning, irrigation, pest management). The project team is guiding the implementation of these plans by providing technical and capacity building support. GRIP is leading the planting of 1,000 trees across all six communities, and providing at least one week of tree maintenance work annually in each community, for the remaining years of the project. Prioritization of project work is informed by the assessments and recommendations in the Community Forest Management Plans.

One of the key outcomes of the project is the formation of the Southwest New Mexico Community Forestry Network (CFN), which is facilitated by the project team and includes all six communities. The CFN was designed to help coordinate efforts and share information between communities and project partners. The CFN website, swnmforestry.org, includes links to additional resources that are referenced in this management plan and a curated list of other useful resources. The network and the project team will continue producing tools and materials as needed to help the communities put their Community Forest Management Plans into action.

Community Forestry Network partners attending the Think Trees Conference in Albuquerque, February 2025.

The CFN's work is focused on:

- Providing guidance and on-the-ground support for tree planting and maintenance.
- Sharing educational resources for a variety of audiences, from community members to tree care professionals.
- Encouraging collaboration between communities in the region.
- Supporting municipalities to engage community members in the care and development of their urban forest.
- Connecting southwest New Mexico communities to statewide resources and other networks.
- Supporting communities to leverage the Community Forest Management Plans to obtain additional funding for implementation.
- Assisting communities to address resource shortfalls.
- Building municipal staffing capacity through training and program development.

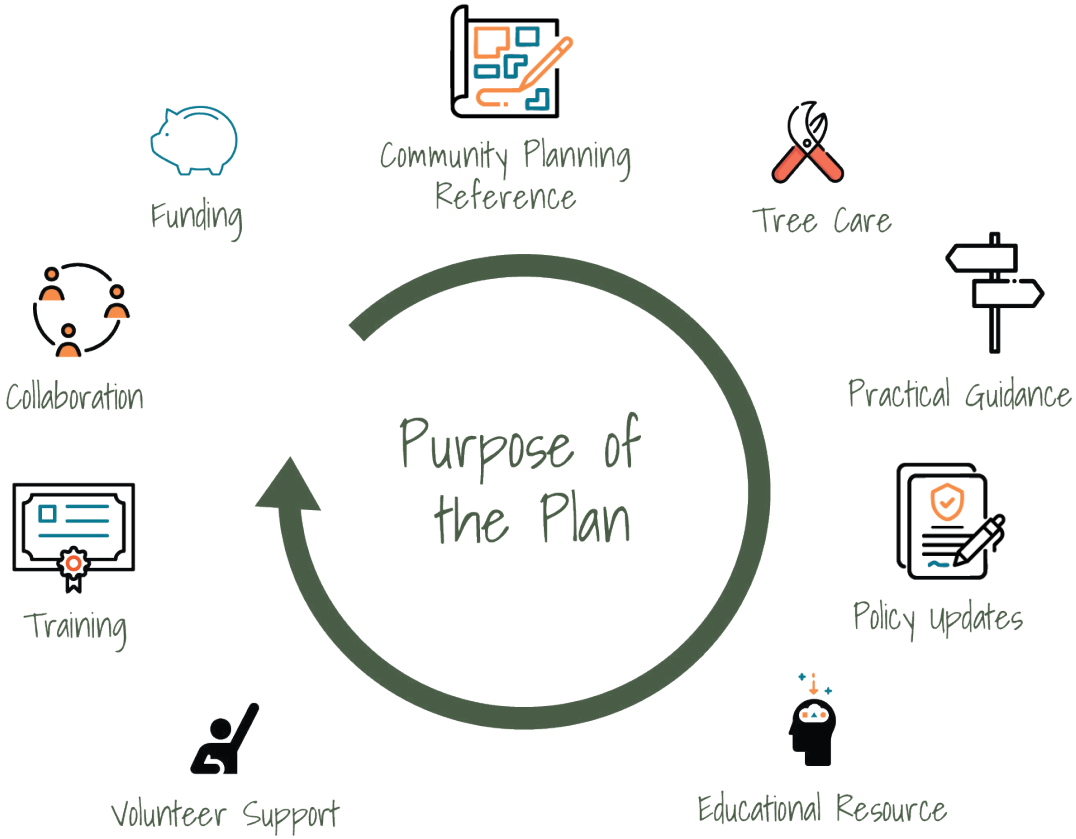
Southwest New Mexico COMMUNITY FORESTRY NETWORK

Purpose of the Plan

At first glance, it might seem as though a community forest management plan would only need one sentence: Plant more trees! As wonderful as they are, trees and other public green spaces require an investment of both money and time to make sure they produce maximum benefits without posing unnecessary risk, such as falling limbs and infrastructure interference. And in New Mexico's desert communities, the water requirements for planting additional trees must also be carefully considered and budgeted for.

A well-managed community forest can provide multiple benefits that support Bayard's long-term development goals. However, just like any infrastructure, urban trees require an ongoing investment of both time and money to ensure they remain healthy to provide these services that the community values. This plan strives to balance costs and benefits of urban trees within Bayard's unique community context, and identify opportunities for the CFN to support efficient community forest management.

This plan is designed to be a practical guide for the City of Bayard, outlining specific implementation strategies for the planting, care, and general management of the community forest. It reflects the community's stated values, plays to the town's strengths, identifies key challenges and opportunities, and charts a path toward achieving Bayard's goals for the development of both the urban forest and the city at large.



The purpose of Bayard's Community Forest Management Plan is to provide practical guidance to maintenance staff and municipal leadership, educational resources to staff and project partners, and provide a reference that will support all future community planning efforts.

"Trees are awesome and we need more throughout town!"

- Bayard Resident

Scope of the Plan

This plan defines Bayard's community forest as all trees and vegetation within its municipal boundaries, but **the focus of the plan is on trees, shrubs, and other woody perennial plants.** The reason for this is that these plants have a long-term presence and therefore represent the highest potential benefit to Bayard. However, they can also represent the highest cost and risk due to their size, requiring long-term planning and specialized management. Other vegetation, like grasses and flowers, are recognized as important components of a community forest and are often included in this plan's discussion, but they are not the primary focus.

For this plan, the area of analysis was limited to the densely populated or urbanized portion within the boundary of the city. While this plan considers Bayard's entire community forest, much of **the emphasis of the plan will be on assessing public spaces and providing municipal recommendations.** Due to Bayard's smaller size, this allows the plan to make some very specific recommendations, down to individual trees.

Bayard's Community Forest Management Plan cannot be static if it is to be successful. This plan must be a dynamic document that encourages the application of adaptive management practices (plan-do-check-fix) in order to respond to changing conditions and shifting priorities. **This plan was written with a five-year lifespan in mind (i.e., 2025-2030),** at which time it should be updated and adjusted based upon progress made and lessons learned over the coming years. Throughout the remainder of the project, the project team will develop supplemental, action-oriented resources that are designed to support Bayard staff with the implementation of the goals and strategies recommended in this plan. Additionally, the newly formed Southwest New Mexico Community Forestry Network (CFN), and the recently expanded New Mexico Tree Alliance can serve as community educational resources and technical or logistical support for Bayard's priority projects. As Bayard continues to work to strengthen its approach to community forest management, there is no shortage of resources available to aid in this effort.

"I loved the desert willow in my backyard growing up."

- Bayard Resident

Shade trees in Bayard Community Park, exhibiting a variety of health conditions and maintenance needs.

How to Use This Plan

Basis for the Plan

This section provides background information on how this plan was developed, including community context, analytical data regarding Bayard's urban forest, and methodologies for identifying key priorities and strategies. This section can help grant writers and project planners to **provide justification for proposed projects and budgets** and may be of interest to those actively engaged in Bayard and its community forest. However, it is not necessary to read this section to understand and implement the *Action Plan.*

Action Plan

This section identifies three broad goals for Bayard's community forest, strategies within each of these goals, and specific actions to achieve these goals. It provides tailored recommendations for the physical care of trees as well as recommendations on policy, funding, community planning, training, and municipal and volunteer support. **Bayard's *Action Plan* is meant to be a working "to do" list.**

Additional Resources

This section is an appendix to the plan and provides guidance and templates to support the implementation of activities identified within the *Action Plan.* It is meant to serve as an **educational resource** for anyone actively involved in Bayard's community forest. Many of these resources are linked on the CFN website **(swnmforestry.org),** which will continue to be updated as more resources are created and collected by the CFN.

"I grew up with trees and understand their importance to our environment, property value, and their beauty with the colors and shade they provide."

- Bayard Resident

Recommended Goals and Strategies

Bayard's Community Forest Management Plan sets three primary **Goals** that support a vision of a healthy community forest in Bayard and organize the work ahead. **Strategies** within each goal set actionable and measurable tasks to help realize those goals. The *Action Plan* near the end of this document expands upon these Goals to recommend **Actions** within each Strategy, including timelines, partners and collaborators, and available resources.

Goal 1

Bayard's community forest fosters economic development, community character and environmental health.

Strategies:

1A. Develop landscaping along US Highway 180 to beautify the entrance to Bayard, promote businesses, and attract visitors.

1B. Use streetscaping to formalize a "Main Street" along Central Avenue and Hurley Avenue, enhancing walkability and connectivity in Bayard.

1C. Manage a healthy community forest to conserve water resources, mitigate risk, and enhance environmental health.

Goal 2

Bayard's community forest enhances public health, recreation opportunities, and quality of life for residents.

Strategies:

2A. Focus resources on improving and expanding the urban forest in community parks, gathering spaces and recreation areas.

2B. Enhance landscaping at Bayard's school campuses and facilities to contribute to a vibrant community forest.

2C. Engage residents in the care and development of the community forest.

Goal 3

Bayard cultivates a well-managed community forest through staff support, collaboration, and comprehensive planning.

Strategies:

3A. Invest in building staff expertise to further strengthen Bayard's community forest management.

3B. Develop a streamlined landscape maintenance program for efficiency and consistency.

3C. Establish municipal policies and plans that support Bayard's community forest goals.

Community Forest Best Management Practices for Bayard

The assessments and recommendations presented in Bayard's Community Forest Management Plan are rooted in science-based best management practices in the field of urban forestry. To produce the goals, strategies, and actions featured in the *Action Plan,* the following best management practices were considered in the context of Bayard's vision, capacity, strengths and ongoing challenges.

Planning

- Select a wide variety of tree and plant species adapted to thrive in local conditions to conserve water, increase biodiversity, and improve forest health.
- Establish and implement an irrigation plan for all new plantings.
- Select the right tree for the right place, considering both plant and site characteristics.
- Stagger tree plantings over time to grow a resilient, community forest with a distributed age structure.
- Prioritize planting in underserved neighborhoods and high-use pedestrian spaces.
- Incorporate trees and irrigation into public infrastructure projects whenever possible to maximize opportunities for greening public spaces.
- Integrate Green Stormwater Infrastructure with community forestry projects to reduce flooding, provide trees with supplemental irrigation, and promote water conservation.

Plants

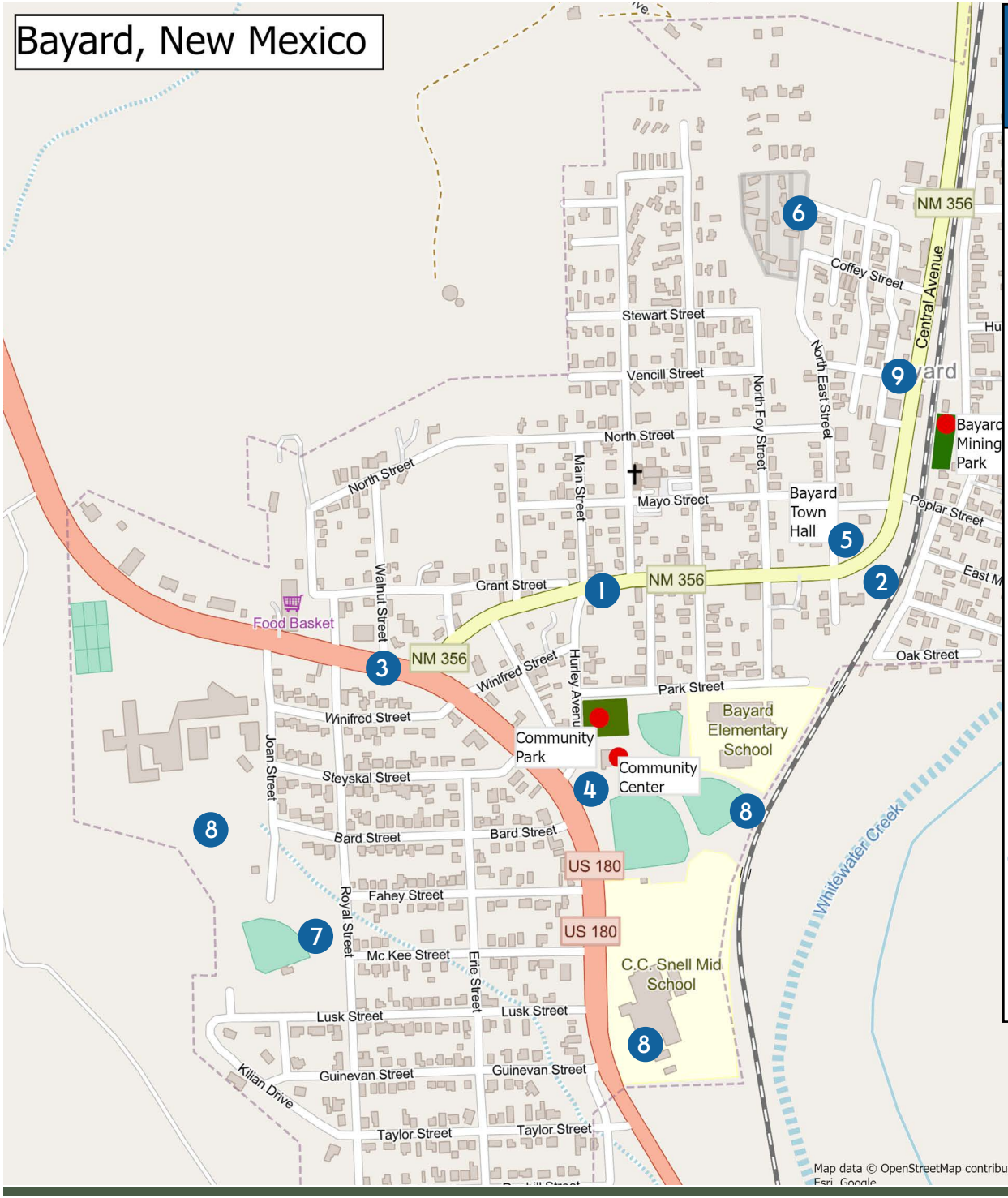
- Prioritize the maintenance and health of mature trees to retain canopy and maximize tree benefits.
- Create and maintain an urban tree inventory to actively monitor tree health and prioritize work.
- Support soil health by using organic mulch and reducing soil compaction.
- Use correct pruning techniques, eliminating tree "topping" (a harmful pruning practice where the tops of trees or large branches are indiscriminately cut off, often leaving stubs behind) and other common mistakes.
- Address public safety concerns by proactively identifying and mitigating high risk trees through trimming or removal.

People

- Engage and empower community members to support community forest goals on both public and private property.
- Invest in workforce development and ensure tree care workers are trained in proper maintenance, monitoring and integrated pest management techniques.
- Establish city policies, ordinances, programmatic workflows, and budgets that support the goals of sustainable community forest management.
- Collaborate with regional and statewide forestry programs and networks to leverage resources, expertise, and funding opportunities.

"Plant trees to love Mother Earth. They always bring me comfort. I am an Earth Keeper."

-Bayard Resident



Bayard's Priority Community Forest Project Locations

1. **Central Avenue Streetscaping**
   Irrigated street trees & landscaping at publicly owned sites. Pruning & irrigation at Bayard Mining Park.

2. **Bayard Community Garden Initiative**
   Streetside landscaping, shade trees, pollinator habitat.

3. **US-180 & Hurley Avenue Streetscaping**
   Street trees & landscaping to enhace the gateway to Bayard, welcome sign & Hurley Avenue business discrict.

4. **Bayard Community Park & Community Center**
   Tree replacement, pruning, new plantings & irrigation.

5. **Old Fire Station Park**
   Tree replacement, pruning, new plantings & irrigation.

6. **East Street Park**
   Additional tree plantings, irrigation improvements.

7. **Cobre Golf Park**
   Tree replacement, pruning, new plantings, explore GSI.

8. **School Campuses**
   Shade trees & living ground cover at drop-offs, walking paths, play areas; support new outdoor learning areas.

9. **Bayard Public Library**
   Additional plantings, pruning, GSI behind the building.

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0 0.05 0.1 0.2 Miles

Basis for the Plan

To develop Bayard's Community Forest Management Plan, the project team gathered information in multiple ways:

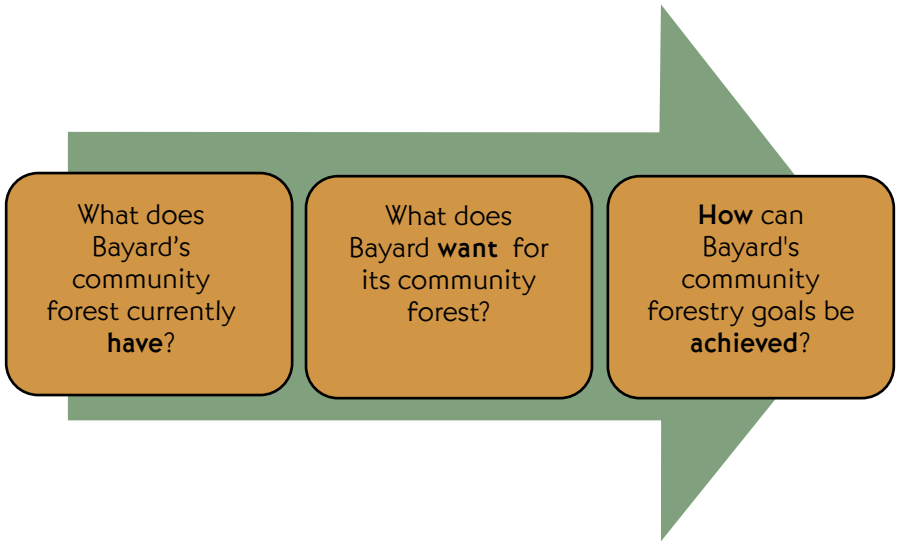
- Conducted multiple interviews with City of Bayard officials, staff, and local experts to introduce them to the project, get initial input on priority areas, and understand the basics of the City's current approach to landscape management.
- Reviewed the Bayard Comprehensive Plan Update (2021), Infrastructure Capital Improvement Plan (ICIP), and other available planning documents to identify community goals and opportunities to integrate with upcoming community forestry projects.
- Reviewed and analyzed data regarding Bayard's community forest such as climate conditions, natural vegetation types, socioeconomic measures, and existing policies and ordinances.
- Met with partners frequently between September 2024 and June 2025 to conduct a broad assessment of existing trees, irrigation and public spaces to identify opportunities and challenges for planting and maintenance.
- Worked closely with the project team to glean local knowledge and incorporate their implementation and training experiences to help shape goals, strategies, and actions.

Public Survey for Bayard's Community Forest Management Plan

One of the key community engagement strategies used by the project team was a public survey open to all Bayard residents. Twenty eight Bayard residents responded to the public survey, which was open for a period of three months. To ensure that all community members in Bayard had an opportunity to contribute, the team used a range of outreach strategies. The public surveys were made available in both English and Spanish.

The survey requested information about potential priority tree planting locations, tree maintenance locations, and locations with flooding that could benefit from green stormwater infrastructure. Participants also had the opportunity to share which benefits of trees are most important to them, to give opinions about their preferred plant palettes for community forest projects, and to share their personal "Tree Stories". Responses to the survey questions highlighted that **Bayard residents deeply value their existing trees and strongly believe the city will benefit from having more.** The survey revealed overwhelming support from the community for this initiative. According to the survey, Bayard residents were most interested in community forestry projects that prioritize shade trees, native and drought tolerant plants, and trees that add color and beauty to the city. Bayard residents were also particularly interested in using trees to help improve air quality in town and to help provide habitat for native pollinators and wildlife.

Community input in these various forms was integrated into a broader assessment of the City of Bayard, which is discussed in the following sections: the **Community Profile**, the **Community Forest** and the **Community Vision**. This assessment was guided by three key questions:



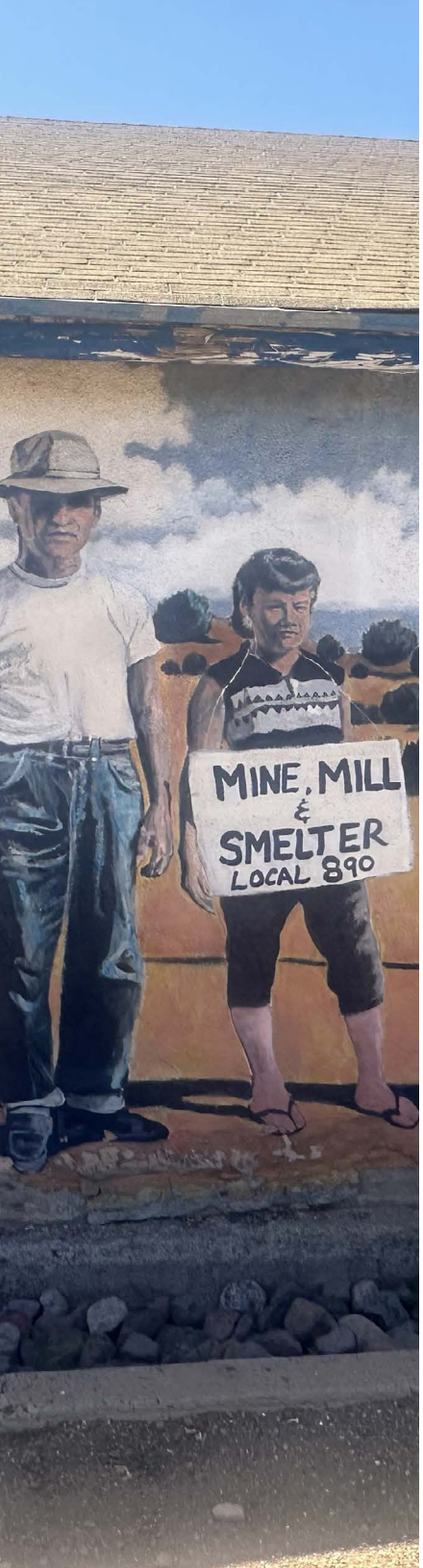


Photo shows part of the mural on the historic Union Hall building.

Community Profile

The City of Bayard is located within Grant County at the crossroads of New Mexico Route 356 (NM-356) and US Highway 180 (US-180). Bayard sits at the northern end of the Cobre Mountains. Together with the nearby Town of Hurley and Village of Santa Clara, these three communities comprise what is locally referred to as the "Mining District," named in reference to the historical and cultural significance of mining in the region. Indigenous communities mined copper in the area long before the arrival of Spanish colonists, who began mining the Santa Rita deposit around 1799. Their discoveries led to the establishment of several settlements in the area, including the City of Bayard.

Bayard has been known as the "Hub of the Mining District" throughout its history. It was initially established to support operations of the region's first open pit copper mine located nine miles to the northeast. The Santa Rita mine, now referred to as the Chino Mine, is New Mexico's largest known porphyry copper deposit. The mine is still operating today, most recently by Freeport-McMoRan and employs about 950 people, many of whom live in Bayard or the surrounding communities. The local economy is heavily dependent on mining activities, and the population in Grant County and the City of Bayard fluctuates somewhat with employment at the mines. The history of mining in the area is a deep part of the community's identity and character, and is a point of cultural interest for tourists and travelers passing through.

Bayard has an area of 1.0 square mile with a population of approximately 2,200 residents. With 1,031 housing units and an 63.3% homeownership rate, a large portion of Bayard is privately owned. The City of Bayard is surrounded by Freeport-McMoRan property and Bureau of Land Management land to the north and northwest and by private land to the west. As a result, the City has very limited ability to expand geographically.

Bayard spans US-180 (also known as Tom Foy Boulevard through Bayard), with the highway running through the middle of the city and serving as one of Bayard's main streets. NM-356 run from north to south, transecting the northern area of town, where it is referred to as Central Avenue, and this corridor forms Bayard's other primary business district. The residential neighborhood south of US-180 contains Cobre High School, which is adjacent to a golf practice course that is also used as a neighborhood park. To the north of US-180, there are a few distinct neighborhoods, several parks and ball fields, the Middle School, the Elementary School, the Bayard Housing Authority complex with its adjacent park, and the majority of Bayard's community services. In addition to the city's parks, three drainage arroyos run through the city and form riparian corridors that provide linear open space with some existing social trails. These arroyos flow to Whitewater Creek, which runs along the eastern boundary of the city.

"In the sixties, a rope and an old car tire hung from a firm tree branch made a fun swing for kids."

- Bayard Resident

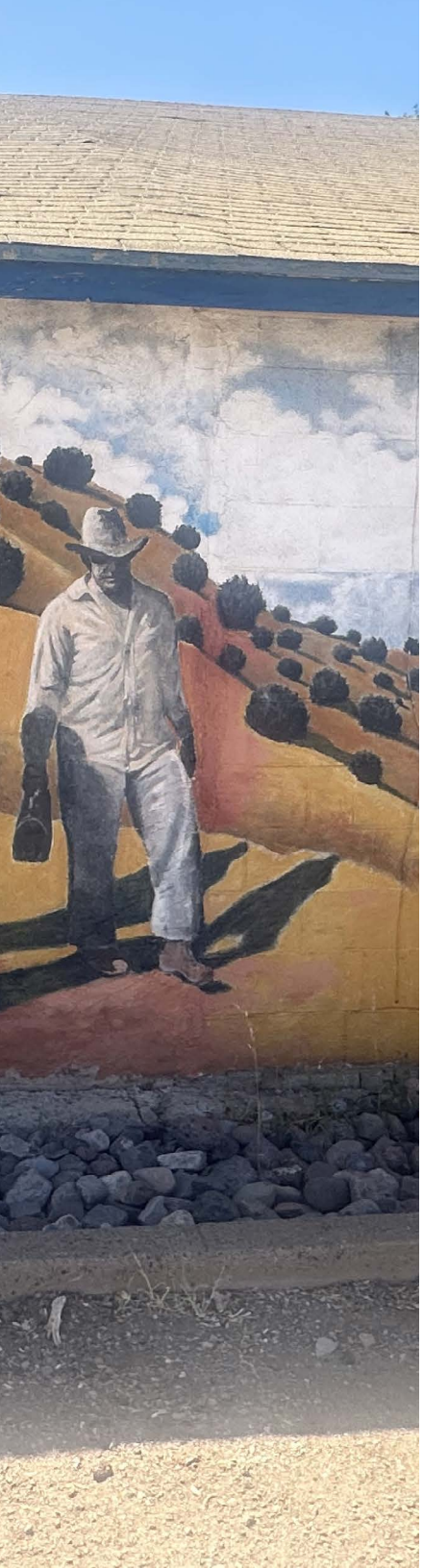


Photo shows part of the mural on the historic Union Hall building.

Bayard's community services are centered in two locations:

» **The US-180 corridor (Tom Foy Boulevard)** is lined with a few restaurants, goods stores, a gas station, a bank, and a medical facility. The historic Union Hall building is located on Tom Foy Boulevard The Bayard Community Park complex just off US-180 on Hurley Avenue is the City's largest multi-use recreational area, including the Community Center, Bayard Community Park, Bayard Elementary School, Snell Middle School and ball fields.

» **The NM-356 corridor (Central Avenue)** includes local restaurants and businesses for goods and services. Most of the City's government offices and public facilities are located along Central Avenue, such as City Hall, the Police Department, the Library, and the Cobre Consolidated Schools Administration building. The Post Office has an adjacent small park area, known as Old Fire Station Park. Also located along Central Avenue is the historic Railroad Depot and Bayard Mining Park.

Today, Bayard continues to serve as the "Hub of the Mining District" by providing public amenities and services that are utilized by residents of Bayard as well as by residents of nearby communities. For example Bayard is the only town in the Mining District with a Public Library, which has served at least 4,000 cardholders from around the region. As home to the Mining District's only Middle School and High School, many students and families from neighboring communities visit Bayard regularly. The recently completed Multi-Use Trail project from Bayard to Santa Clara provides a connection between the two communities, recreational travel opportunities, and access to the schools for students. The community has discussed the potential for a future similar multi-use trail project to connect Bayard with the Town of Hurley.

Bayard Governance and Landscape Management

The City of Bayard is led by a Mayor, a Mayor Pro Tem, and three City Councilors. There is also a Beautification Committee in Bayard that is focused on improving town aesthetics.

The City of Bayard currently has a team of five maintenance staff, plus a supervisor, who oversee all maintenance needs for the community, including but not limited to parks and other landscape maintenance. The staff reports spending approximately two days out of the week on outdoor maintenance issues, fluctuating seasonally. All tree work is done by maintenance staff without contractor support, unless trees conflict with utility lines.

Bayard's maintenance program is doing a remarkable job for their limited capacity, and there is strong support from municipal leadership to further improve the program. Maintenance staff currently do not receive any training specific to tree care, and they expressed an interest in building knowledge and skills in community forestry through participation in the CFN. **Active participation in the CFN is a good investment of Bayard staff time and will support the implementation of this Community Forest Management Plan.**

The City of Bayard has a set of municipal ordinances but none that directly govern vegetation, aside from a water conservation ordinance that is evoked rarely during times of drought to regulate outdoor water use. **The adoption of landscaping policies and ordinances can contribute to effective and proactive management of urban trees in Bayard.**

"I love the garden at the library"

- Bayard Resident

A view of the Chino mine and the mountains surrounding Bayard.

Climate and Geography

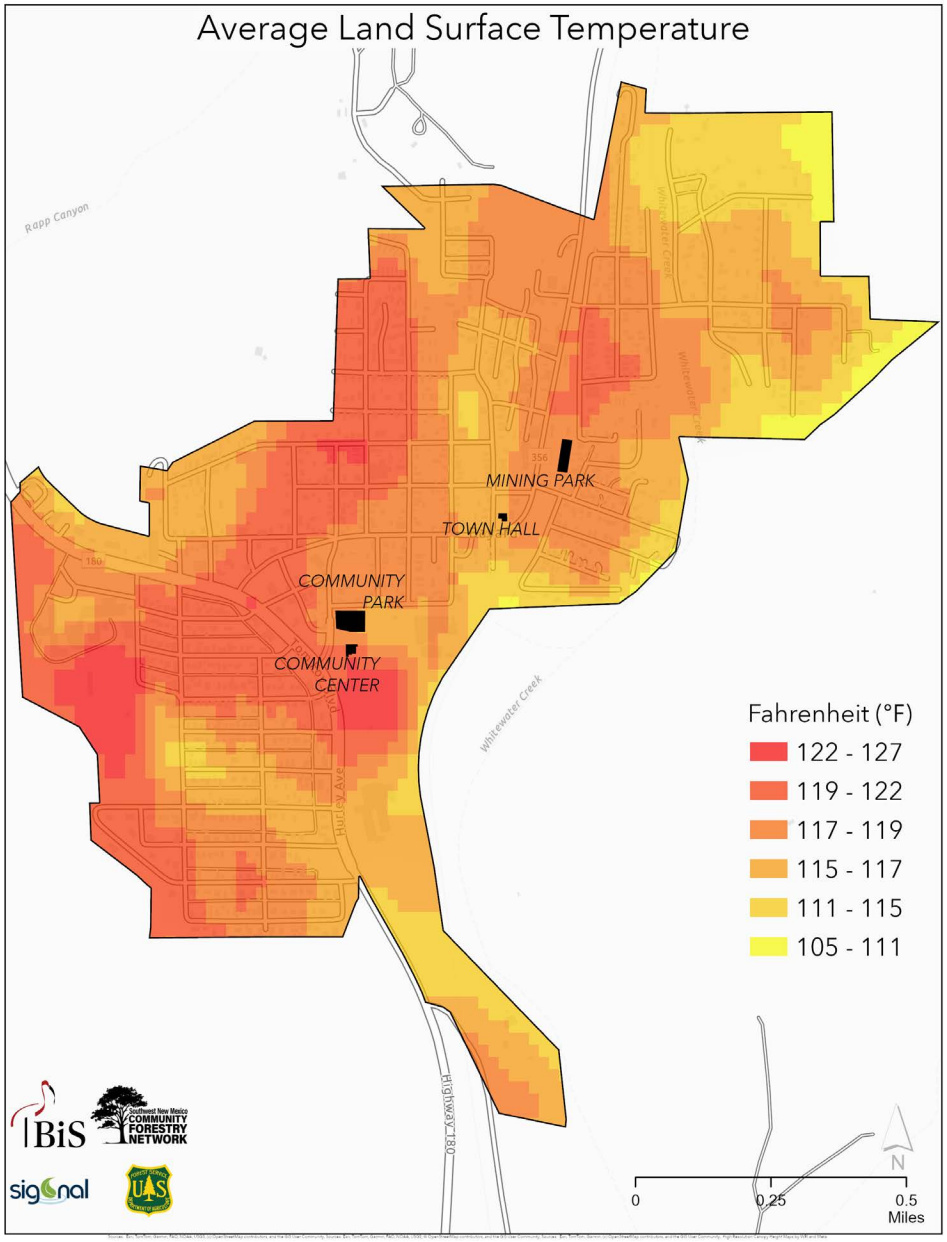
Bayard sits among rolling hills in an area steeped in copper and other mined metals, just east of the Continental Divide. At an elevation of approximately 5,800 feet, the landscape surrounding the city is considered a semi-desert grasslands biome at its lower elevations and a Great Basin conifer woodland biome to its north and east. Great Basin conifer woodlands are characterized by the dominance of piñon pine and juniper trees with an understory of native bunch grasses. Semi-desert grasslands were historically punctuated by native bunch grasses within a matrix of bare ground and minimal trees. More recently, changing temperature and precipitation patterns, combined with a legacy of grazing practices, has reduced grass cover in both vegetation communities, leaving more bare ground open to wind and water erosion. There are three narrow riparian channels that bisect Bayard with high tree density that serve valuable ecological functions but also bring risk of fire and flooding to several residential neighborhoods. These riparian forests were historically dominated by cottonwood and willow species, but have since shifted to predominantly non-native plants including salt cedar (*Tamarix sp.*) and Siberian elm (*Ulmus pumila*).

Winter temperatures are mild in Bayard, with short freezes and occasional snow. Summer temperatures are increasingly getting warmer, flirting with triple digits. Like many southwestern communities, Bayard's precipitation primarily comes in the winter and during summer monsoonal rain events. Winter and spring rain events appear to be declining in recent years, leading to earlier and more intense seasonal drought periods. The monsoon rains help cool ambient temperatures during the heat of summer. Generally, monsoon weather patterns are active in this region between July and September, but these patterns are becoming more variable as is the total amount of rain that falls during each event.

Bayard isn't the only community experiencing these changes. Average temperatures across New Mexico have increased by 2°F since the beginning of the 20th century, causing many communities to reexamine what types of vegetation are prudent choices for new planting projects. The annual number of days reaching 100°F in New Mexico has increased from an average of 12 days (1900 - 2020) to nearly 20 days per year (2015-2021). This same pattern is seen in increasingly warm evening temperatures, with the number of nights above 70°F nearly doubling in recent decades compared to the previous century.

To plan for a long-lived, resilient urban forest, tree species selected for planting must be drought tolerant to perform well in Bayard's arid environment, and should be adapted to withstand the range of temperatures in Bayard - both summer highs and winter lows. The USDA Plant Hardiness Zone designations help guide the selection of trees and plants that will have the best chance of succeeding in Bayard throughout their lifespan. Each Zone designation is based on the 30-year average of recorded temperatures, with an emphasis on the lower threshold of temperatures. The 2023 Hardiness Zone map classifies Bayard within Zone 7b. Trees have a multi-decade lifespan, and because the temperature is projected to increase substantially over the next several decades, it is prudent to prioritize planting tree species that function well in the current zone designation but will also be able to thrive in the projected zone designation of the future: 9a.

Developing and using a diverse, regionally native-focused plant palette that is well adapted for Bayard's specific climate and geography will help prepare Bayard's community forest for a resilient future as summers become hotter and drier.



This map of land surface temperatures during the summer months (May through September, 2019-2024 mean values) illustrates how hot it can get in Bayard. Extreme heat can have significant human health impacts. Image credit: SIG-NAL

Land Surface Temperature

Land surface temperature refers to how hot the "surface" of the Earth feels to the touch, as opposed to the ambient air temperature. This data is collected by satellite, and so the "surface" from the satellite's perspective could be pavement, rooftops, plant leaves, bare ground, or other surfaces.

Land surface temperature data demonstrates how hot Bayard can get, with mean surface temperatures in many parts of town reaching 119 – 126 degrees Fahrenheit in the summer. **This level of heat can have serious human health impacts,** particularly for vulnerable populations. Heat is the number one weather-related cause of death in the United States. New Mexico's Department of Health estimates that heat related deaths will double between 2020 and 2030, based on climate models that project an increase up to 111 days of extreme heat per year (90° or higher).

The land surface temperature map shows that **areas with lots of natural vegetation have lower surface temperatures than areas with more development,** illustrating that trees and other plants can help mitigate high temperatures. Cooler land surface temperatures around Whitewater Creek, Bayard Canyon and the other naturally vegetated arroyos are apparent on the map as ribbons of yellow and light orange. In contrast, the hotter areas of Bayard (appearing in red or dark orange) coincide with where there is more development and less vegetation. The hottest surfaces are the High School football field and the Middle School baseball diamond. As these facilities are important community gathering spaces, this data helps identify these as potential priority sites for planting shade trees.

While the land surface temperature map shows where Bayard's "hotspots" are located, the satellite data is not a fine enough resolution to prioritize specific tree planting locations. However, knowing that areas with a multitude of heat absorbing surfaces (like roadways, sidewalks, and buildings) will have higher surface temperatures indicates that **recreation areas, pedestrian walkways and bike paths should be prioritized for tree planting** to help lower harmful heat levels in high-use areas.

Trees and plants can help combat heat, but heat can also be extremely detrimental to tree health. Trees planted near roads, sidewalks, and other heat absorbing surfaces must survive both ambient heat and additional heat reflected from the pavement. **Using light-colored, organic mulch materials and/or planting living ground cover around trees, and providing adequate irrigation, are key to helping trees survive heat stress.**

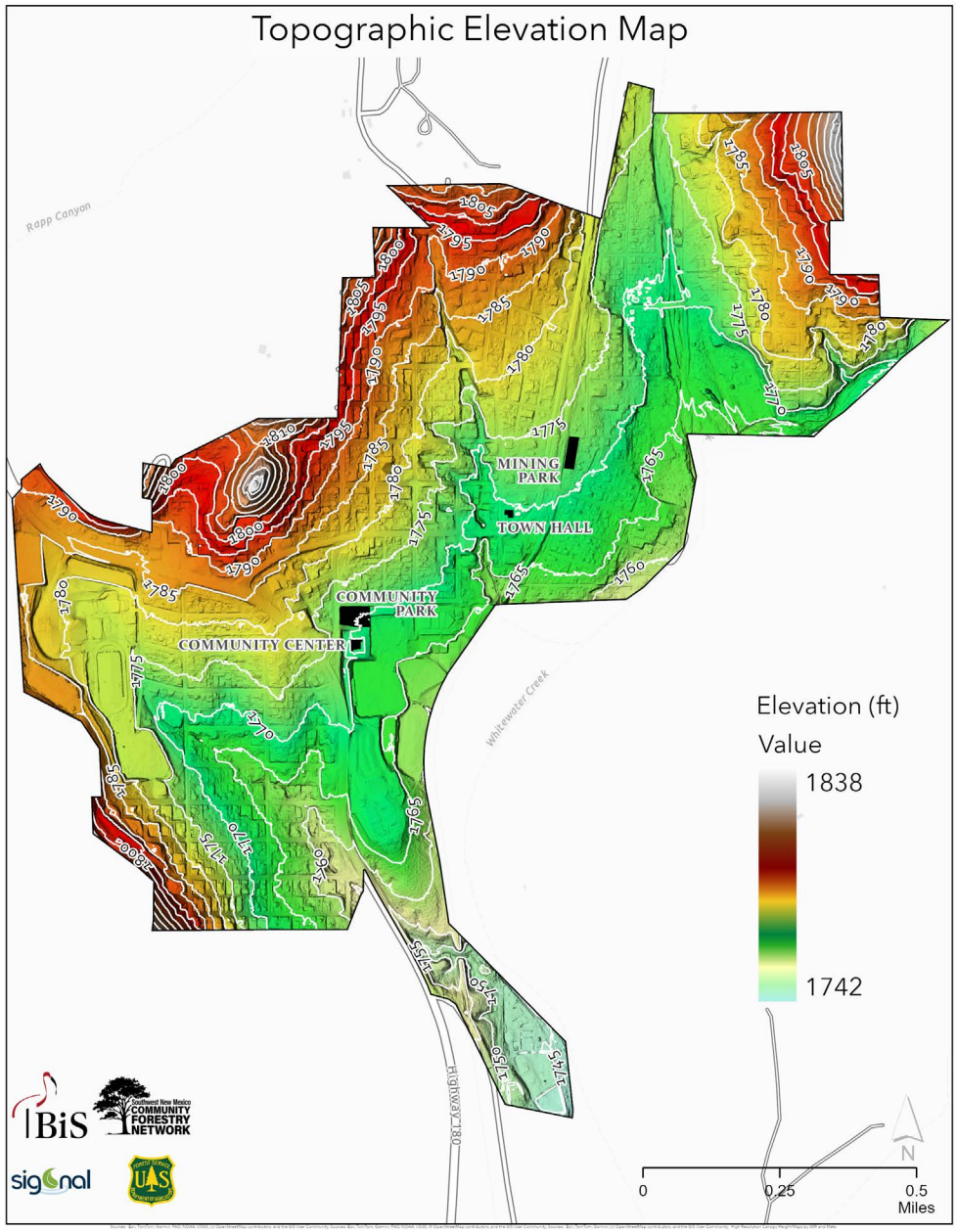
Water Sources

Bayard's primary source of water is subsurface groundwater aquifers. Frequent and persistent drought conditions have led to decreased groundwater recharge and increased pumping to meet residential and commercial water demands, depleting the aquifer over time. Water supply is a long-term concern for all communities in the Grant County area, and the City of Bayard cites efficient use and management of water resources as a top priority in its Comprehensive Plan. While significant improvements in water conservation efforts have been made to date and additional water infrastructure through the Grant County Regional Water Supply Project is planned, Bayard has little water to spare. This requires careful planning when considering planting additional trees and plants, both at a municipal and residential scale.

The City of Bayard manages its own water supply through a system of wells, water tanks, and water lines. During emergencies or on an as-needed basis, Bayard also has an agreement to supply water to the Hanover Domestic Consumers Association, though activation of this agreement is not common. In the region, the greatest owners of water rights are the agriculture and mining industries.

In addition to persistent drought conditions, residents are experiencing increased flooding issues in the main roads during monsoon rain events, as only two percent of the community has storm drainage. As new development is charted, the increase of impervious surfaces from buildings, sidewalks and streets will only add to the problem. Green stormwater infrastructure (GSI) practices are an increasingly common solution in this region to mitigate flooding from runoff. **GSI can repurpose this underutilized water resource to irrigate plants and create a more vibrant and beautiful city while helping to address flooding problems.**

All trees and landscaping will need some form of irrigation throughout their lives, especially during the first 3-5 years of establishment and during periods of drought. Water conservation is another benefit of co-locating GSI with tree plantings, which can minimize the use of drinking water for landscaping irrigation.



The elevation map for Bayard clearly shows how stormwater flows from high elevation (red) to low elevation (green), resulting in flooding in the central village area. Using GSI practices can help alleviate flooding and irrigate plants. Image credit: SIG-NAL

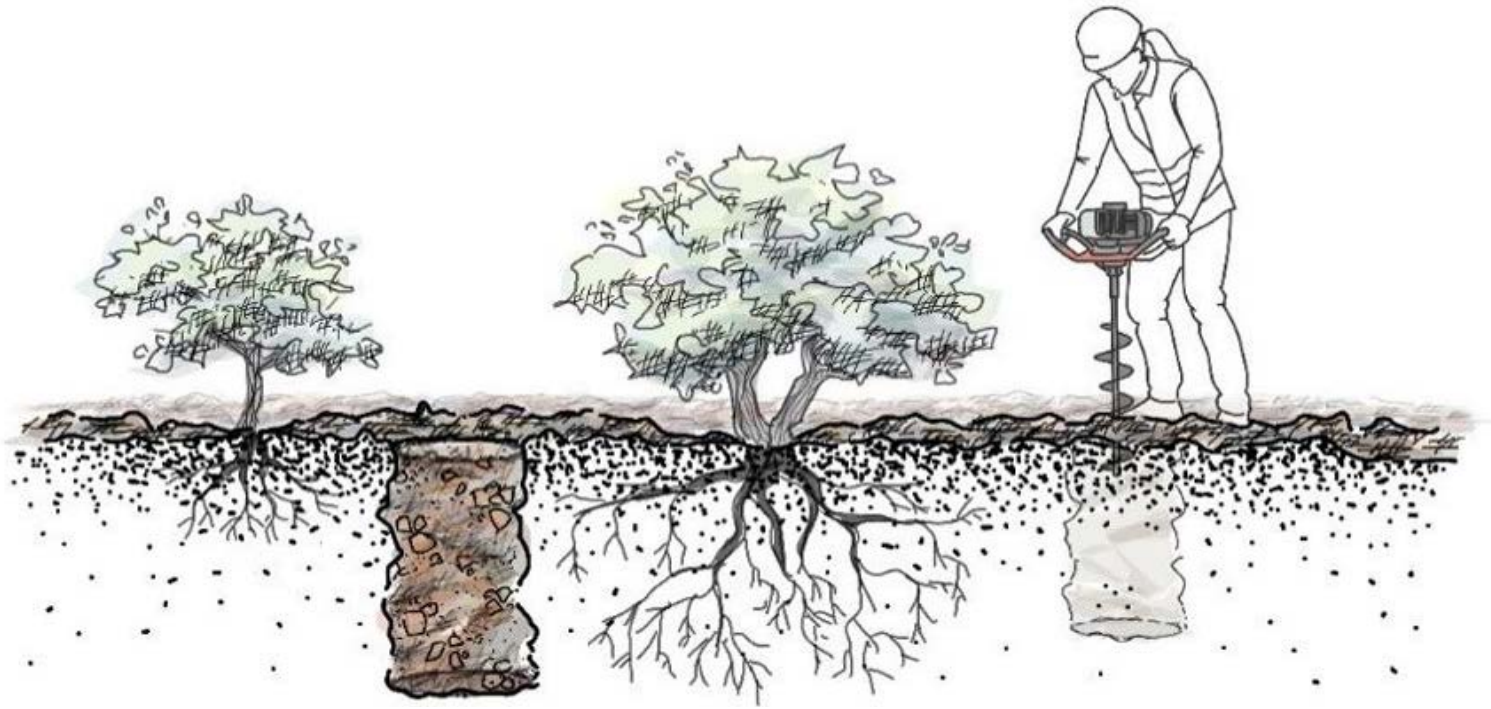
Soils

The USDA Natural Resource Conservation Service Web Soil Survey provides complex geo-referenced information about soils. The data is not precise at small municipal scales, and urban soils are often very different compared to surrounding natural areas. However, the soil survey provides useful insight into potential challenges with soils related to community forest management in Bayard.

The commercial and residential areas of Bayard are mainly comprised of shallow, well-drained gravelly clay loam. Loamy, well-drained soils are generally good for tree planting. However, large trees need at least two feet of soil to establish structural roots, and roots will not travel through the hard, underlying rock layer that can sometimes be found in this region.

During tree planting in the commercial and residential areas of Bayard, extra care may be needed to ensure there is adequate soil volume available for the tree, considering the expected mature size of the tree species being planted. Roots generally extend several feet beyond the canopy drip line of the tree (see page 26), and these fine root tips are where the tree pulls in most of its water from the soil. Soil sponges, an excavated hole filled with a particular mix of pumice, compost, and wood chips, should be considered to improve infiltration and support tree health by storing water in the soil.

Bayard's soil has low organic matter content. Organic matter is critical to plant growth and also helps stop soil degradation and erosion. It is possible to add organic matter to soil, such as manure and compost. However, because organic matter will decompose at a faster rate than the surrounding soil, too much organic matter can eventually cause destabilized soils. **Using organic mulch around trees and plants allows nutrients and water to seep into the soil slowly and be held longer where they are available for uptake by roots.**



Soil sponges, shown here in a graphic from the NM DOT GSI Maintenance Manual, can help improve water infiltration and storage.

Community Forest

Bayard's community forest is made up of both naturally-occurring and human-introduced trees. The native piñon and juniper trees of the mountain foothills are also found in the higher elevations of the city. Three riparian corridors, which transect the city and flow toward Whitewater Creek along Bayard's eastern boundary, contribute significantly to the city's overall tree canopy. The riparian areas include both native cottonwoods and ash trees, as well as non-native salt cedar (*Tamarix species*) and Siberian elms (*Ulmus pumila*) which have spread into surrounding areas.

Trees on city property are mainly limited to parks, where Bayard has invested in planting trees and shrubs and maintaining naturally-occurring trees. The residential areas of town have some beautiful trees and landscaping, with both established trees and new plantings, indicating that trees were an active part of establishing Bayard and continue to be valued by residents today.

"I love trees because of their beauty, providing shade and making the earth a better place to live!"

-Bayard Resident

Photo of a healthy tree in Bayard Community Park.

Tree Canopy Cover

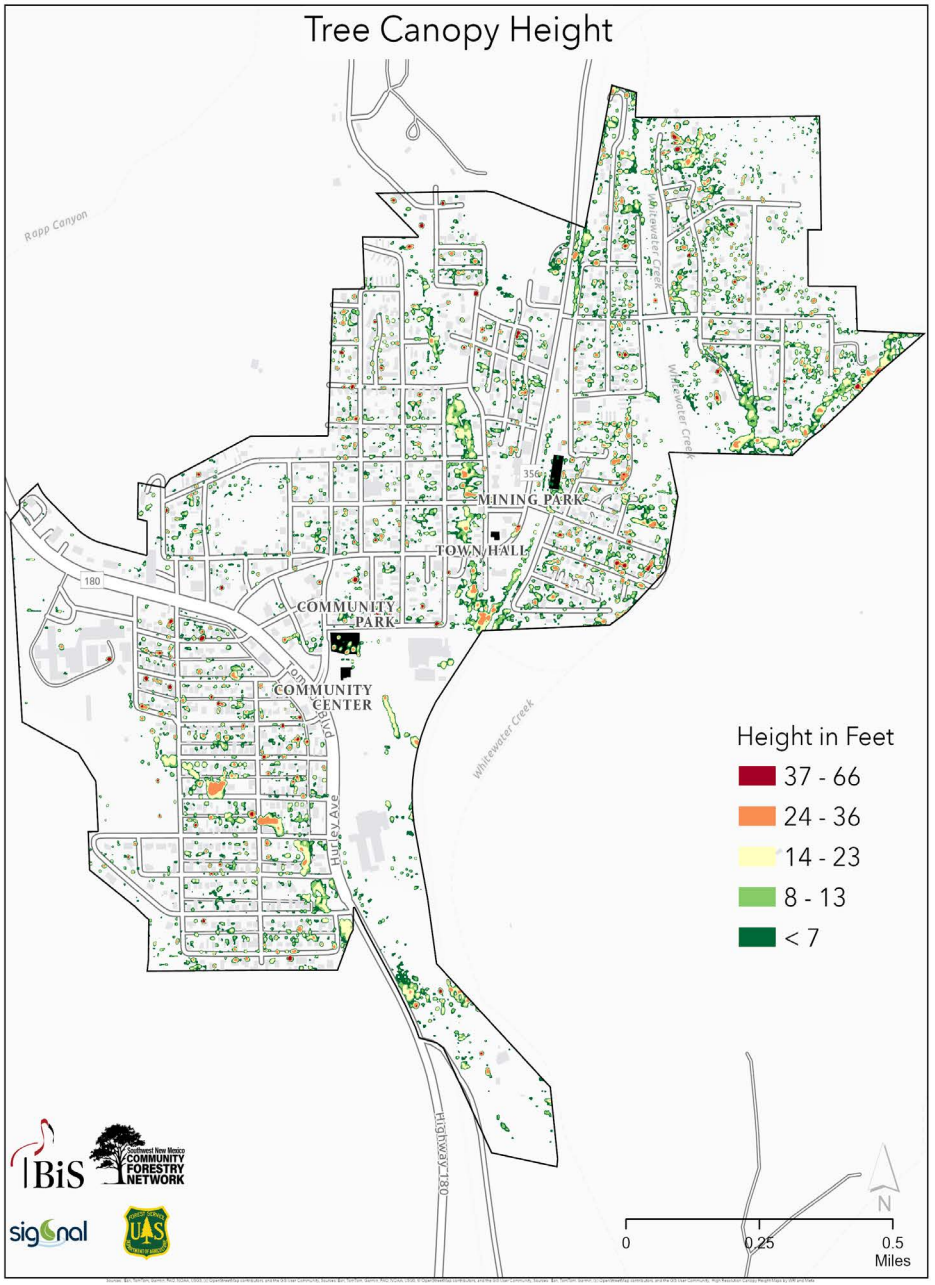
One way to assess the overall condition of an urban forest is to review tree canopy cover data. The canopy cover of a community is the percentage of land area that is covered by the leaves, branches, and stems of trees and plants when viewed from above. Satellite imagery provides both total canopy cover and data to assess the range in height of vegetation in Bayard. The total canopy analysis includes all the trees and plants greater than one meter tall (3.3 feet) across the whole community, in both public and private spaces.

The satellite imagery analysis shows Bayard's total canopy cover (the percentage of land covered by plants and trees greater than 3 feet tall) is 12.3%. Bayard's tree canopy (plants taller than 10 feet) is 6.4%, while smaller understory plants (between 3 and 10 feet tall) contribute an additional 5.8% to the total canopy. Bayard's cemetery was analyzed separately, and shows a 0.2% total canopy cover for that area.

Larger tree height and a more dense tree canopy are generally associated with greater benefits, such as providing more shade and heat mitigation. The canopy cover map shows that the highest density and tallest trees in Bayard occur naturally along the riparian and drainage arroyos. The adjacent residential neighborhoods also have a higher density of trees than other neighborhoods in town, indicating more water availability and invasive species spread (e.g., Siberian elms). There is very little tree canopy at the schools or along US-180 and NM-356.

"My grandfather was a teacher and planted trees on Arbor Day."

-Bayard Resident



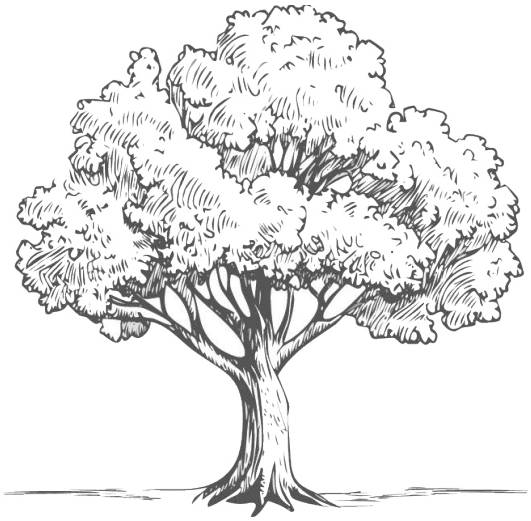
Map of total canopy cover and tree height in Bayard, including all trees and plants within municipal boundaries that are more than one meter (approximately three feet) tall. Image credit: SIG-NAL.

Photo shows street trees in Bayard Mining Park.

USDA Forest Service research shows that in a desert community, a tree canopy of 15% is a realistic goal. While it can be motivational for a community to set tree canopy goals, and it's clear that it would be beneficial to increase Bayard's tree canopy from its current rate of 6.4%, it is important to consider this goal in the context of the region's limited water availability. **To conserve water resources while increasing tree canopy for maximum community benefit, it is recommended to concentrate on increasing canopy in high use areas where people need shade the most,** rather than aiming to reach a 15% tree canopy cover across the entire city.

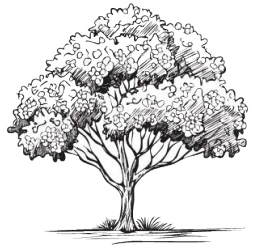
It is also important to consider that much of Bayard's land area is privately owned, and is the determining factor for the town's overall canopy cover. **Engaging Bayard residents in planting, growing, and caring for trees on their property can play a critical role in enhancing the overall health of Bayard's community forest.**

The CFN will provide resources to help Bayard in engaging residents, including educational resources on plant selection and irrigation recommendations. The network can also provide guidance on community engagement strategies such as establishing a volunteer program for tree maintenance and planting, and establishing a Tree Board to lend expertise to community forest initiatives.



Large Trees

6.4%



Small Trees & Shrubs

5.8%

In Bayard, 12.3% of the land area is covered by the leaves, branches and stems of the trees and plants over 3 feet tall, when viewed from above. 6.4% of Bayard's canopy cover comes from trees over 10 feet tall, while 5.8% comes from trees and plants between 3 and 10 feet tall.

Tree Inventory

While tree canopy cover data is useful, it does not tell us much about the health of individual trees in Bayard's community forest. For example, riparian areas in Bayard have a higher canopy cover, but many of these trees are less desirable invasive species. Conducting a tree inventory is a common management technique that provides more detailed information about the overall health of the community forest and informs decision making.

Tree inventory efforts can be scaled depending on the resources available and the information most needed for urban forest management. The CFN project team conducted basic tree inventories for Bayard's parks, Community Center, and other priority public sites to assess tree species, height, and condition. This was completed to inform detailed management recommendations for these priority community areas.

The tree inventory data was entered into Tree Plotter, an online tool for urban forest asset management. The New Mexico Forestry Division has supplied a license for communities within the state who wish to use this software as a tool to map, manage and enhance the care of their urban forest. **It is recommended that the City of Bayard develops and maintains its tree inventory data to support effective and efficient management of the community forest.**

For each tree that was inventoried in Bayard, the following data was collected:

- **Tree genus/species**
- **Tree height**
- **Tree health condition**
- **Tree risk**

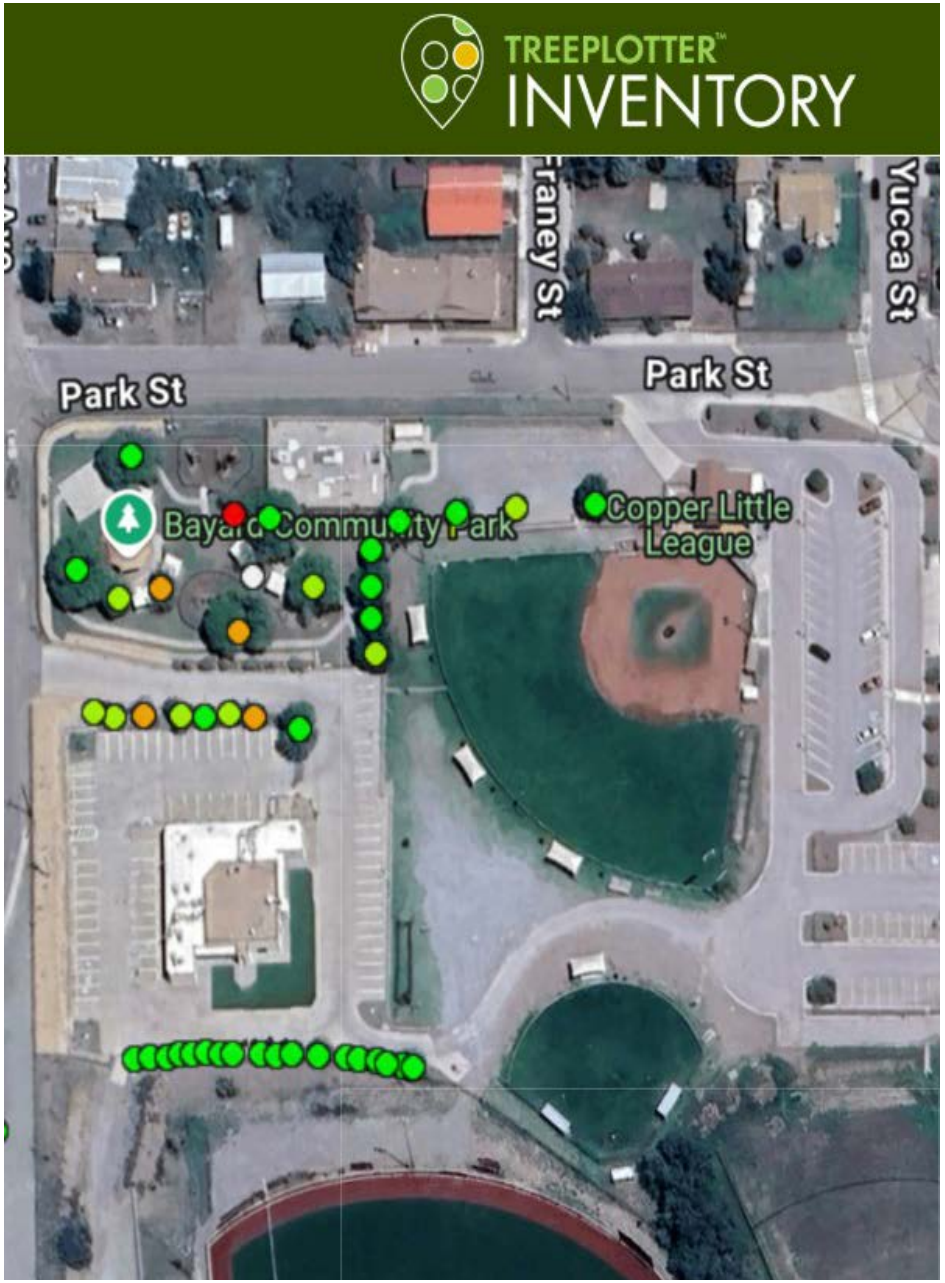


Image shows a view of Bayard Community Park and Community Center in Tree Plotter, an online software available to New Mexico communities to support tree inventory efforts. A tree inventory is a common management technique that provides urban forest health information and informs decision making.

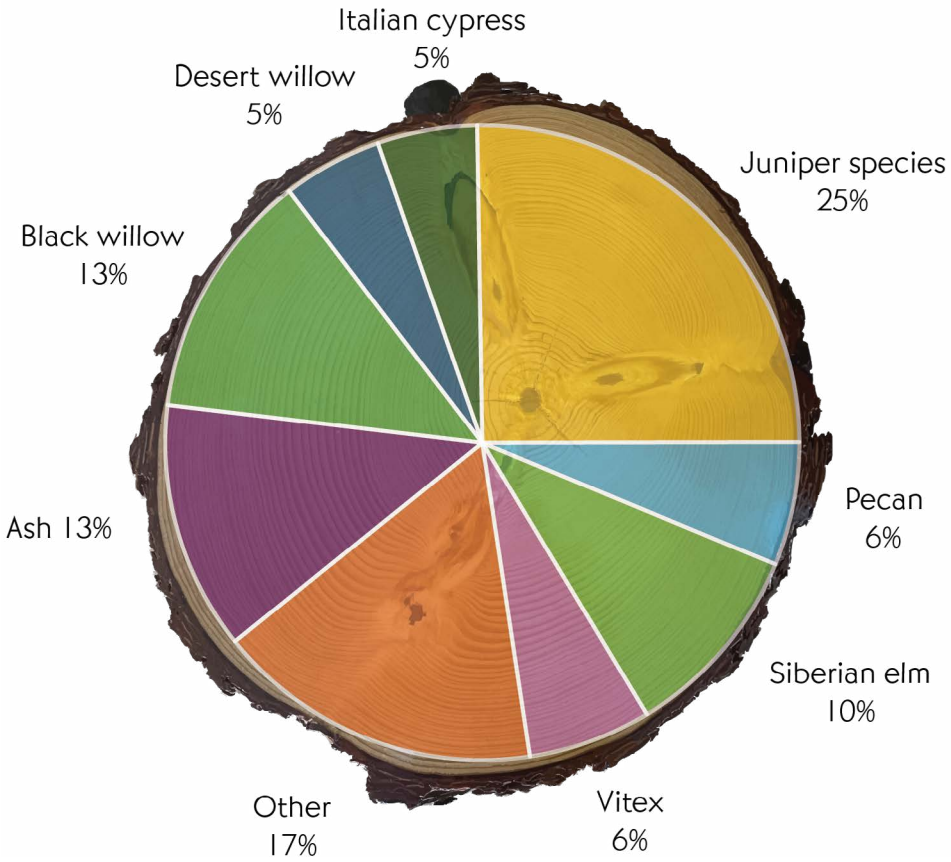
Photo shows lack of species diversity in windbreak trees near Little League fields.

Tree genus or species. A diverse community forest is considered healthier compared to a forest dominated by just a few species. Increased biodiversity allows an ecosystem to better adapt to changing environmental conditions, maintain ecosystem functions, and provide a wide range of ecosystem services and habitat for wildlife.

Tree pests generally target trees by genus or species, and therefore having a community forest with low diversity makes that forest particularly vulnerable to outbreaks that could cause wide-spread tree mortality. In the field of urban forestry, a standard goal is that a healthy urban forest should be made up of no more than 10% of any one species, 20% of any one genus, or 30% of any family of trees. Of the trees in Bayard's inventoried public spaces, there are over 20 species. Only junipers are over-represented, comprising 25% of the trees, but they are native to the area and often naturally occurring.

An emerging alternative goal for tree diversity is that there should be at least three or more species in any given group of trees in a community area. Many of Bayard's inventoried public spaces meet this goal. The Bayard Community Park is a notable exception, with only one species (black willow) in most of the park. The Old Fire Station Park is also dominated by a single species, in this case ash trees.

As new planting projects are developed for Bayard's public spaces, it will be important to **diversify the tree species used, prioritizing regionally native trees while simultaneously phasing out Siberian elms** (an invasive species that is considered to be a noxious weed in New Mexico). The nursery industry is creating new hybrid elm cultivars that have the best qualities of the Siberian elm without the invasive characteristics, providing new options for large, low water, drought tolerant shade trees.



The trees in Bayard's public spaces are a variety of different species and genera, a good health indicator for a community forest. The only dominant species is juniper, which is native to the area.

Tree of varying ages and heights in Cobre Golf Park, near a riparian area.

Tree height. Tree height data provides two pieces of information - the risk posed by a tree if it were to fail (larger trees can impart more damage), and an approximation for the age of a tree, or a group of trees. If an urban forest has a large proportion of trees in a similar age range, those trees are likely to die within the same range of time. Just as a lack of species diversity can cause problems for a community forest, a lack of age diversity can result in inconsistent canopy coverage over time when mature trees die off without the presence of slightly younger large trees to replace them.

Satellite data shows that tree height is generally well distributed across Bayard, with a mean tree canopy height of 11.6 feet. Bayard has some very tall shade trees and windbreak trees in parks and residential neighborhoods, as well as tall trees in its riparian areas, but also has many shorter stature native trees and shrubs. It is evident that at certain sites, many of the trees were planted at the same time - for example, the trees in Bayard Community Park and in the park next to the Post Office - and may therefore reach the natural end of their lives around the same time. There is also a lack of young trees in Bayard public spaces, indicating the potential for a future canopy gap.

To ensure future generations can consistently enjoy the benefits of a robust community forest**, Bayard should employ the concept of succession planting.** This requires long term planning to space out planting projects over time to cultivate a diverse age range of trees in key areas of town. The CFN project, for example, will result in a surge of tree planting in Bayard in a relatively short period of time. Planning for the future, Bayard managers should **monitor these landscapes and supplement them with new plantings in the coming decades to avoid a single generation community forest.**

"I love trees. Oxygen, spiritual refuge, shade, food."

-Bayard Resident

East Street Park, next to Bayard Housing Authority, currently has just one tree. The is an opportunity for additional plantings in this irrigated park to increase shade and outdoor recreation opportunities in this neighborhood.

Tree health condition. An assessment of the health condition of individual trees gives an idea of the overall health of Bayard's urban forest. During the basic tree inventory conducted by the CFN team, tree health conditions were assigned using a simple scale:

- *Excellent* - nothing is apparently wrong with the tree
- *Good* - the tree has minor issues, routine monitoring and maintenance needed, with no need for immediate care
- *Fair* - the tree has issues which will require maintenance to bring it back to good health and form
- *Poor* - the tree has issues that will likely not be able to be corrected to bring it back to good health and form
- *Dying/Dead*

It is important to note that in Bayard, tree condition was evaluated by a cursory visual assessment and without tree health assessment tools. Assigned conditions may not accurately reflect the actual health of individual trees. As the tree inventory is being completed, **a thorough tree health assessment should be conducted to gain a more accurate understanding of Bayard's overall tree canopy health.** This information should inform the development of a maintenance schedule, prioritization and replacement or succession planning. Tree Plotter can be used to keep track of specific trees in priority locations for this purpose.

The trees in areas that have been inventoried in Bayard show a distributed mix of tree health conditions from "Dying" to "Good". Out of 101 trees currently inventoried in Tree Plotter, only about 11% are reported to be in "Poor" or "Dying/Dead" condition, 18% are in "Fair" condition, and 71% are in "Good" condition. Junipers, cypress, and vitex trees have the best overall condition compared to other species, indicating these species are well adapted to Bayard's climatic conditions.

WNMU and GRIP hosted a workshop for Bayard maintenace staff in April 2025 to teach proper tree pruning techniques.

Tree risk. Assessing tree risk is a good approach to prioritizing the maintenance work that needs to be done in a community forest. Tree risk is a combination of tree condition, tree height/size, and potential consequences should the tree fail (such as causing injury to people or damage to utility lines, buildings/infrastructure, vehicles, etc.) Accurate risk assessment of individual trees is most reliably done by qualified professionals who are trained in tree health assessment and in understanding site conditions. **Training Bayard landscape maintenance staff on basic tree risk assessment principles** will allow them to provide risk management recommendations, proactively plan the city's tree maintenance needs into the future, and identify when the help of a professional arborist may be needed.

There are several large trees in Bayard Community Park, Fire Station Park and the Cobre Golf Park that are dead or are in poor condition that should be considered high priority for removal because of their location in high pedestrian use areas. **All trees in Bayard's parks and community gathering spaces should be considered higher priority for maintenance due to their potential to impact people should they fail.**

"We had six big poplars when I was a kid. I spent more time in them than on the ground."

-Bayard Resident

Irrigation Infrastructure

All trees and landscaping will need irrigation throughout their lives. Automatic irrigation systems are generally most effective, since manual watering often results in inconsistent or insufficient water for trees and shrubs. Therefore, understanding the existing irrigation infrastructure is an important indicator of the sustainability of Bayard's community forest. **Bayard can employ strategies to increase irrigation efficiency and ensure adequate watering in areas with trees to improve plant health and maximize community forest benefits.**

Bayard uses a wide range of irrigation strategies in its public spaces.

- The Old Fire Station Park, Bayard Mining Park, Bayard Community Park and Bayard Community Center are on drip irrigation systems with low-flow emitters located at each plant. These systems should expand periodically with plant growth and additional plantings. City maintenance staff routinely maintain these systems to ensure they are functioning. These drip irrigation systems are good models for future projects in Bayard with similar drought-tolerant landscaping.
- Bayard Public Library Garden is watered manually. While manual watering can be excellent for customizing irrigation needs, this approach can be time intensive and is entirely dependent on individuals to consistently deliver the correct volume of water to the landscape at the correct frequency. It is recommended that Bayard look for opportunities to automate irrigation in any planted areas that currently rely on hand watering.
- Cobre Golf Park and the Bayard Housing Authority Park have spray irrigation that delivers water through pop-up spray nozzles. These systems are maintained by the school district and the housing authority, respectively. The advantage of spray irrigation is that it concurrently irrigates turf grass and trees. However grass, shrubs and trees have different watering volume and frequency needs, and grass usually wins in the competition for available water, often leaving trees under-watered. Additionally, spray irrigation systems are not always ideal for water conservation. They result in significant water loss to evaporation and runoff and/or inefficient set-up of spray nozzle zones. Routine checks of these systems are needed to optimize their efficiency.

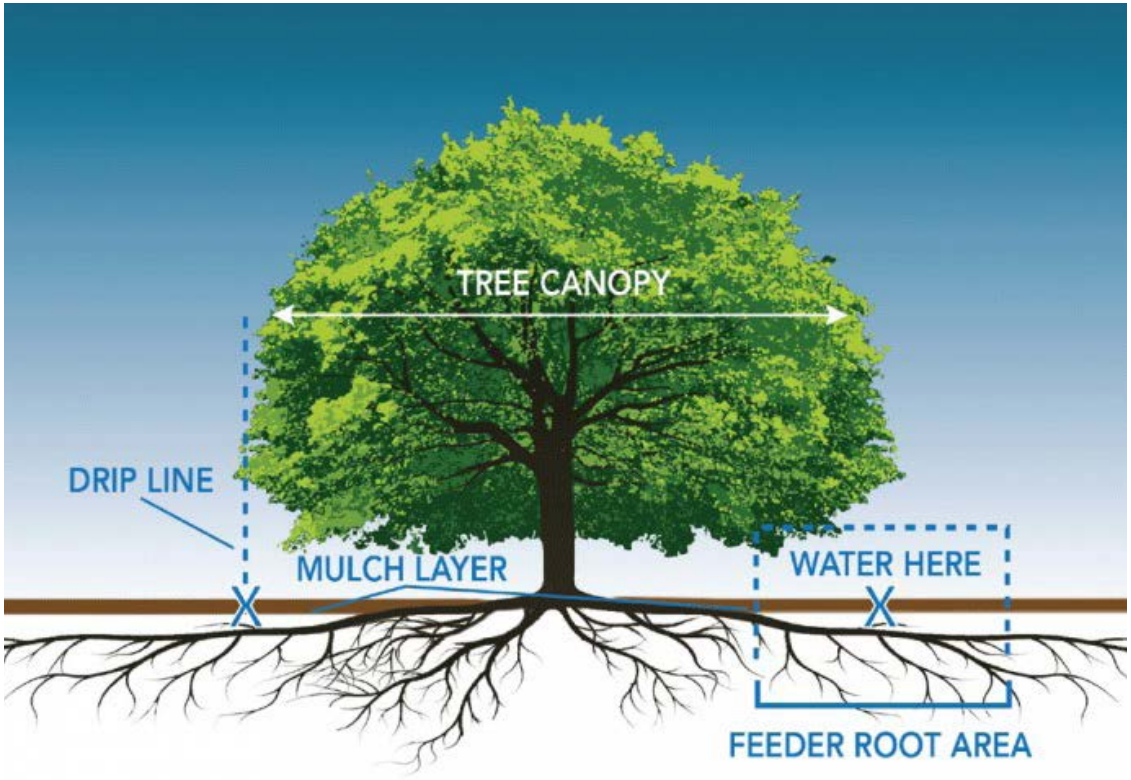
There are many great irrigation resources available including the Bernalillo County guidelines and instructions on how to build an efficient watering system for mature trees. See the additional resources section of this plan for links to this and other resources.

Insufficient irrigation is a very common cause for poor tree health in urban areas. Trees need slow, deep watering to saturate the soil deep into the root zone (about 18-24 inches). Trees should be watered near the canopy drip line where its fine roots are located, rather than at the base of the trunk. The volume and frequency required for proper tree watering is dependent on a number of factors, including the time of year, the age and size of the tree, and the tree species. Soil moisture should be monitored regularly to ensure sufficient irrigation and avoid over-watering, which can also be harmful to the tree. Placing a ring of organic mulch (with a radius of at least 3 feet) can help conserve water in the soil and reduce evaporation. **For more information and resources to support proper tree irrigation in Bayard, visit swnmforestry.org.**

Bayard can maximize the efficiency and effectiveness of its irrigation systems by evaluating the function of current systems, addressing maintenance needs, and investing in efficient irrigation systems at new planting projects. Areas with existing irrigation systems may benefit from expanding and adjusting the spray or drip zones replacing ineffective nozzle spray heads. **It is recommended that Bayard establish irrigation standards in their community forest management program** so that all irrigation infrastructure is the same, simplifying irrigation system maintenance and minimizing staff time required to make upgrades or repairs.

"My favorite tree is the mighty oak tree. I love the shade they provide and some have beautiful shapes and colors."

-Bayard Resident



Trees take up most of their water using fine roots located near the tree canopy drip line (Graphic credit Denver Water).

Curb cut, bioswale and basin complex in Silver City constructed by Asher Gelbart, Green Energy Now, that will allow stormwater to irrigate the landscape and reduce flooding in streets during storm events.

Green Stormwater Infrastructure

With steep topography and only two percent of the community having storm drainage, large storm events have been known to cause flooding and road maintenance issues in Bayard. When combined with green stormwater infrastructure (GSI) features, trees can help mitigate flooding issues by slowing the flow of water, infiltrating stormwater runoff, and intercepting participation on leaves and branches before it hits the ground. GSI features such as curb cuts, bioswales, and stormwater harvesting basins can be implemented alongside tree planting projects to catch stormwater and repurpose it for irrigation, mitigating nuisance ponding while also improving watershed health and providing a range of other benefits to the community.

Residents who participated in the community survey identified a few locations that would benefit from the addition of GSI, such as the garden behind the library, around the high school, and in the northwest neighborhoods of Bayard, particularly the area behind the Food Basket. A series of GSI features have recently been installed at the historic Union Hall along Steyskal Street and US-180 as part of the Five Points Initiative. These features are meant to capture runoff from the road to irrigate new plantings and protect the historic building from water damage.

Cobre Golf Park functions as stormwater infrastructure to some extent, with a creek running through the center of the park that is fed by run-off from the high school and the neighborhood uphill. This green stormwater feature could be enhanced by installing a series of basins and swales along the creek in the park, and expanding the GSI system to include the ditch and large stormwater basin next to the high school.

The most effective way to reduce flooding at lower elevations in Bayard is to intercept runoff at higher elevations. **As streetscapes and walking paths are revitalized in Bayard, look for opportunities to incorporate GSI into the landscape design,** particularly in and uphill from areas that experience flooding during storms.

"I'd love to see some permaculture - shallow basins with curb cuts to collect runoff for all the tree plantings."

-Bayard Resident

Tree Equity Score

American Forests created a Tree Equity Score tool to "help address damaging environmental inequities by prioritizing human-centered investment in areas with the greatest need." By assessing tree canopy in relation to demographic statistics at a census block scale - such as poverty, race, age, languages spoken, health burden index, unemployment and heat disparity- this tool aims to assess how equitably the urban forest is distributed across a community. If a census block has a lower Tree Equity Score (a number assigned out of 100), this indicates an area with less canopy and a higher concentration of vulnerable populations and should therefore be prioritized for new planting projects.

Bayard, as part of the Mining District, has been assessed under this methodology. While the Tree Equity Score has significant limitations for identifying priority sites in small, rural areas like Bayard with only a few census blocks, the tool does provide useful data and statistics that may be helpful for grant writers as they are developing funding proposals for new projects. The Tree Equity Score National Map can be accessed via the web at treeequityscore.org.

"I have several pine trees that provide shade and promote a peaceful environment for my family and friends."

-Bayard Resident

Opportunities for additionally plantings in the garden at Bayard Public Library.

Rendering of Central Avenue imagining streetscaping to promote walkability and enhance the Bayard Community Garden Project. Renderings by Anthropopulus Design + Planning.

Community Vision

Bayard's community vision is set forth in the Bayard Comprehensive Plan (2021) and the Infrastructure Capital Improvement Plan (ICIP). Bayard's Community Forest Management Plan is built upon strategies that advance many of the goals in these complementary plans, including town beautification, development and revitalization of Bayard's business districts, providing pedestrian-friendly amenities that encourage walking and recreation, and promotion of water conservation landscaping practices.

The community forest can be a key component in achieving these goals and further developing Bayard's small-town character and identity, helping to make it a pleasant place to live and visit. Trees have been shown to have economic benefits for communities, enhance social cohesion, promote a sense of place and community pride, and even strengthen social bonds and trust between neighbors.

The creation of this plan was informed through review of existing planning documents, interviews with City of Bayard leadership and staff, and distribution of a public survey to collect input from residents. The following sections expand upon how Bayard's vision for its community, the current conditions in Bayard's community forest, and best practices in the field of urban forestry have been woven together in order to produce the tailored recommendations that are featured in Bayard's *Action Plan.*

Additional plantings near the "Welcome to Bayard" would enhace the gateway to the city.

Economic Development and Revitalization

Bayard's Comprehensive Plan clearly outlines a strong commitment to revitalize the city and develop economic opportunities. The presence of trees in business districts has been shown to have economic benefits for communities by attracting more visitors, encouraging them to stay longer, and ultimately increasing foot traffic for local businesses. Strategically developing cohesive and complementary landscaping projects along key streets can assist with Bayard's goals for economic development.

» **US Highway 180/ Tom Foy Boulevard** is the gateway to Bayard, and the first opportunity to make a good impression on visitors and residents alike. The businesses here currently maintain very few trees and landscaped areas. To advance Bayard's vision to improve beautification and promote economic activity, there is an opportunity for trees and landscaping along this highway to highlight the city's unique character, complement existing signage, and draw travelers to stop and visit businesses. This may be a challenging initiative because of the NM DOT rights-of-way along US-180, and private ownership of the lots along this road. As development continues, Bayard can proactively identify opportunities to collaborate with other property owners and agencies to enhance streetside landscaping.

» **NM Highway 356/ Central Avenue** serves as the city's "Main Street." Additional trees and landscaping can serve to connect community services in a more cohesive manner, increasing walkability and fostering a distinct sense of place. This street has had recent sidewalk improvements and contains a mix of commercial and government buildings. Aside from Bayard Mining Park and Old Fire Station Park, there are very few trees and landscaped areas along this corridor. Integrating tree plantings and GSI into future "Main Street" projects, such as the Bayard Community Garden initiative (planned for the field next to the Police Department), presents opportunities to create more vibrant streetscapes and more comfortable outdoor spaces for the community.

Bayard's Vision Statement

"Bayard's future lies in our ability to thrive as a small town that serves as the heart of the Mining District. Bayard is a special place to Native Americans, Spaniards, miners, and ranchers. We preserve our history while we create a place that is peaceful and family oriented.

We are a community that supports our youth and seniors, where we know our neighbors and have a sense of belonging. We strive to sustain a high quality of life through respecting our historical roots, creating vibrant multigenerational neighborhoods, and promoting locally based economic development while we maintain the special quality of our small-town character."

» **Hurley Avenue** is another high-use corridor that connects community services in Bayard. **The intersection at US-180** contains the "Welcome to Bayard" sign and leads directly to the largest multi-use recreation area in town which contains the Community Center, Bayard Community Park, the Little League field, and both the middle school and elementary school. Additional landscaping and trees could enhance and beautify the Hurley Avenue corridor, giving travelers a warm welcome to Bayard and creating another attractive area for new businesses.

» **The intersection of US-180 and NM-356** is the busiest intersection in town and is the connection point between Bayard's two business districts. This could be another site for future consideration of tree planting projects in collaboration with other landowners.

Landscaping projects that modify streetscapes can be challenging, often requiring removal of pavement, new irrigation infrastructure and/or green stormwater infrastructure, and treatment of compacted soils. Adequate irrigation is paramount for plant survival in streetscapes, where large areas of heat-absorbing surfaces like pavement increase the risk of heat stress for trees. However, if done carefully and well, adding trees to the main streetscapes in Bayard would be transformative for the city by improving environmental conditions, enhancing aesthetics and ultimately supporting the city's economic growth.

Bayard faces additional challenges in developing landscaping along its two main corridors because these roads are state highways. **The City of Bayard will need to develop strong relationships and strategies for collaboration with the New Mexico Department of Transportation (NM DOT) to advance their goals** while ensuring that traffic safety requirements are met. Currently the NM DOT is creating a statewide aesthetics plan, providing a potential opportunity to highlight the needs of Bayard and other towns in the area for roadside improvements.

Bayard might also consider introducing policies to support this effort, such as **incentive programs for local businesses to invest in landscaping, or baseline landscaping requirements** for larger developments and national retailers. By encouraging and investing in well-designed landscaping along key corridors, Bayard can create a more inviting atmosphere to attract both entrepreneurs and national chains looking to do business in the area.

Photo shows a lack of street trees on Central Avenue Adding trees along this main street would provide shade to mitigate heat, increase pedestrian comfort, and enhance walkability and beautification in the heart of Bayard.

"I enjoy trees that change color with the seasons and attract wildlife and pollinators."

-Bayard Resident

Walkability and Connectivity

It can be challenging to make a small community like Bayard feel cohesive and pedestrian-friendly when it is divided into segments by state highways. Community forestry projects can help create a sense of connectivity in Bayard by visually linking key areas, improving walkability and softening the highways' impacts such as noise and poor air quality. **Implementing streetside plantings can connect business districts, community services, neighborhoods, and schools to help create a network of walkable streets.**

The Comprehensive Plan calls for creating more safe, pleasant and accessible places for residents to walk, and encouraging active transportation. Bayard residents who responded to the public survey said they would like to see more trees along walking paths such as Central Avenue, the trail to Santa Clara that runs along US-180 and side streets commonly used for walking between schools and other public spaces. There is also interest in formalizing trails along Whitewater creek and other arroyos in town, as well as continuing the Mining District trail system with a route that connects Bayard to Hurley.

Trees along these footpaths would improve pedestrian comfort and increase the use of these amenities by providing much needed shade. For multi-jurisdictional projects like these walking paths, it's important to work collaboratively with partners to ensure that the proper irrigation infrastructure is installed to support these trees and to maximize the benefits they provide for decades to come. As development continues, street-side trees could be included in a variety of projects to create pedestrian connections across town and improve quality of life for residents.

Rendering of Central Avenue imagining streetscaping to promote walkability and enhance the Bayard Community Garden Project. Renderings by Anthropopulus Design + Planning.

The walking path along Central Avenue between the road and the train tracks is a priority area for community forest initiatives that could have a transformative effect on the city. Developing a series of cohesive tree planting projects along this corridor would help formalize the city's "Main Street" area and establish a sense of place.

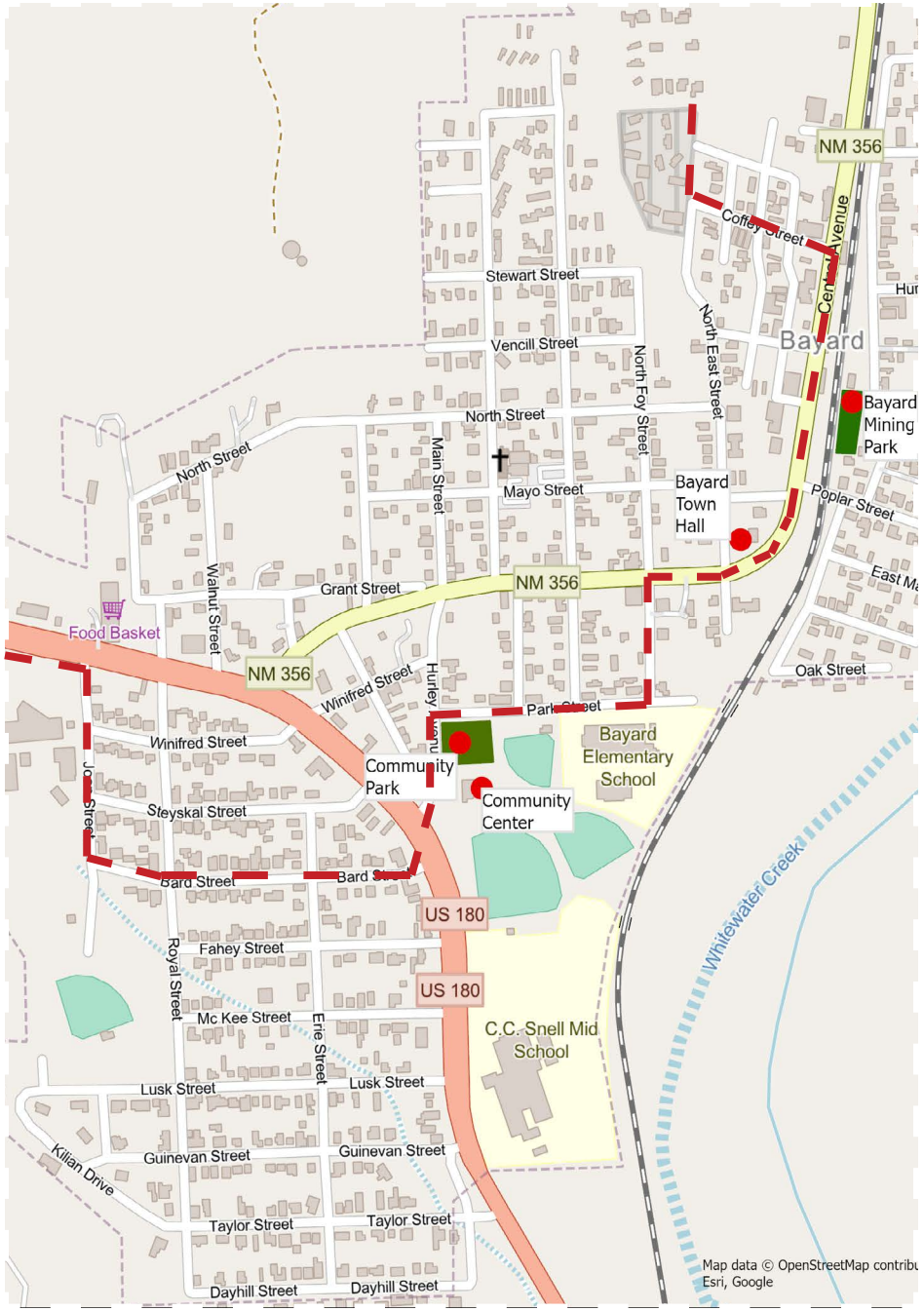
Investing in landscaping at city owned properties and streetscapes located on main walking corridors can dramatically improve walkability in Bayard. For example, adding trees around the Train Depot, Public Library, Cobre Consolidated School District Administration building, the Magistrate Courthouse, the Police Department and City Hall would create a continuously shaded and aesthetically pleasing route along Central Avenue

This pedestrian corridor could be continued along Foy Street, Park Street and Hurley Avenue to connect to Bayard Elementary School, the Bayard Community Park Complex, and Snell Middle School. This imagined walking route could continue across US-180 - with the addition of crosswalks for safe passage across the highway- and travel down Steyskal Street or Bard Street towards the high school and Cobre Golf Park, eventually tying into the walking path along US-180 that leads to Santa Clara.

By implementing a string of urban forestry projects along key corridors, pedestrians and cyclists can enjoy a beautiful, shaded route that connects the majority of Bayard's community services and recreation areas.

"Trees keep us alive, improve our daily overall wellbeing, allow us to recreate and are good for our psyche."

-Bayard Resident



A pedestrian corridor could be formalized with trees and plants to promote walkability and connect community services and recreation areas in Bayard.

Beautification and Placemaking

In addition to supporting goals for economic development and environmental health, Bayard's community forest can promote social cohesion by facilitating meaningful and positive interactions between community members. Research shows that residents are more likely to spend time in public spaces that include trees and plants, and that residents who live in areas with more green space report feeling a stronger sense of neighborhood safety and community pride.

Trees and vegetation contribute to the beauty, identity, and spirit of a place. Their colors, textures, and seasonal changes bring visual interest to otherwise plain areas and soften the appearance of less attractive urban infrastructure. **For 40% of Bayard residents surveyed, city beautification was identified as a top motivation for enhancing the city's community forest.** A well-tended community forest can strengthen Bayard's small-town character and charm by creating inviting spaces where people can relax, gather with friends and family, and enjoy a connection to nature. As future projects are planned, it will be important to keep aesthetics and the concept of "placemaking" in mind.

Developing cohesive plant palettes for different types of community forest planting spaces (such as parks, streets and medians, commercial landscapes, GSI locations, planters, etc.) will help Bayard to develop a distinct visual aesthetic. When combined with thoughtful elements like signage, public art, benches, and walking paths, landscaping can promote cultural expression and create more pleasant outdoor spaces for both residents and visitors.

Example of a regionally appropriate plant palette for Bayard.


Arizona Ash
Fraxinus velutina


Chinese Pistache
Pistacia chinensis


Italian Stone Pine
Pinus pinea


Eastern Red Cedar
Juniperus virginiana


Evergreen Sumac
Rhus virens


Desert Wolfberry
Lycium fremontii


Texas Red Oak
Quercus buckleyi


Texas Mulberry
Morus microphylla var. buckley


Autumn Sage
Salvia greggii


Globe Thistle
Echinops spp.


Desert Four O'Clock
Mirabilis multiflora


Golden Columbine
Aquilegia chrysantha

Bayard Public Library has a beloved community outdoor space which already has established landscaping and some rainwater harvesting features. There is an opportunity to add GSI behind the building, with additional plantings.

Community Gathering Spaces

Located at the heart of the Mining District, Bayard takes pride in its ability to provide community facilities and events where people come together. Research has shown that community forests can enhance social cohesion by promoting a sense of place and community pride, and can even strengthen social bonds and trust between neighbors.

There are several recent and upcoming projects that expand and improve Bayard's community gathering spaces. As revitalization efforts continue throughout the city, trees and landscaping are important features that enhance public use of Bayard's community spaces.

The Bayard Public Library is an important cultural hub for the community, and is the only public library in the entire Mining District. The recent library renovation included landscaping improvements, a new outdoor reading patio and a community garden, making it a favorite location in town for many residents. However, there are very few trees currently on the property and some of the landscaping is in need of maintenance. The area behind the Public Library was a popular choice for a tree planting site, as suggested by residents who responded to the public survey. Survey respondents also suggested this as a possible GSI location to mitigate some nuisance flooding during storms and provide supplemental irrigation to future trees on site. Adding more trees and GSI features to the library grounds would provide shade, support walkability along Central Avenue, and improve the overall quality and character of this important gathering space.

The Bayard Community Garden project is currently in the planning stage, led by the National Center for Frontier Communities, the Frontier Food Hub, and The Commons: Center for Food Security and Sustainability. The proposed project site is an open field located along the railroad tracks next to the Police Department and across from the Post Office. This project would create a multi-use space for community activities, including a community garden, greenhouse training center and a food pantry. Landscaping at this site would help formalize Bayard's Main Street along Central Avenue, adding linear green space. While the project plans already include adding some trees to this site, there is an opportunity to expand the urban forestry component of this project to include tree-lined sidewalks and shade trees, which would need to be supported by a new irrigation system.

The historic Bayard Union Hall, located along US-180/ Tom Foy Boulevard is a current Five Points Initiative project, one of five cultural destinations within Grant County being revitalized by Southwest New Mexico Arts, Culture and Tourism (SWNM ACT). Serving as the union hall for Mine-Mill Local 890 since 1948, the City of Bayard recently acquired the property and is working with local partners to create a new community space and cultural center. SWNM ACT has already installed some GSI features on the north side of the parking lot and along Steyskal Street to harvest rainwater from the highway, which helps to irrigate new plantings provided by the CFN and mitigates water damage to this historic building. Trees will be an important part of the revitalization of this property and should be thoughtfully considered as project implementation progresses. The Union Hall project presents an excellent opportunity to support Bayard's goals for economic development, beautification and walkability through landscaping improvements at the gateway to town.

The Bayard Cemetery, located on the east side of US-180 to the south of the city, is a relatively new development with only a few established grave sites. To proactively create policies that will aid in the management of the new cemetery, Bayard can look to other cemeteries in the Mining District for lessons learned. In the Hurley cemetery, for example, community members have planted individual grave sites over time with flowers, shrubs, and small trees. Without an established cemetery tree policy or maintenance program, it is up to the individual families to water and maintain these trees. As a result there are several struggling or dead trees in common gathering areas of the Hurley cemetery that need maintenance or removal. To avoid these issues, Bayard may want to consider establishing a cemetery tree planting policy to help manage the planting, maintenance and irrigation of trees in the cemetery. Furthermore, reliable irrigation infrastructure will need to be established before any investment is made in planting trees in this area. The City has been using treated wastewater from the Bayard Wastewater Treatment Plant for irrigation and is considering a backup water tank for irrigation to ensure continuous water supply to the cemetery for irrigation, should the reuse system temporarily go down.

Tree planting event at the historic Bayard Union Hall in 2024, as part of the Five Points Initiative project.

Air Quality, Urban Heat and Public Health

Bayard residents highly value trees for their ability to enhance public health by improving environmental conditions. Air quality was the number one concern for residents, with 68% of survey participants citing improved air quality as the most critical benefit provided by the urban forest. **Urban trees act as natural air filters** by absorbing pollutants such as carbon dioxide, nitrogen oxides, ground-level ozone, and airborne particulate matter. They also release oxygen and improve the overall air quality. This is particularly important in mining communities like Bayard where air pollution can be a major health concern, especially for the most vulnerable populations.

Perhaps the most impactful area for tree planting to improve air quality is along US-180/Tom Foy Boulevard, where trees can help absorb pollution from vehicles and provide a windbreak to the neighborhoods. Furthermore, **prioritizing tree plantings in areas that serve vulnerable populations is a strategic way to provide equitable access to the human health benefits of trees.**

Heat is another major concern for residents, with 65% of survey respondents citing heat mitigation as a highly important urban forest benefit. **Trees play a key role in mitigating urban heat and the associated human health impacts.** The American Public Health Association identifies heat-related illness as a leading cause of death nationally due to weather and environmental events. This is particularly acute in desert communities like Bayard, where hot summer temperatures are made more extreme in areas with a higher concentration of heat-absorbing surfaces like buildings, roads, and pavement.

By providing shade and releasing moisture into the air through the process of transpiration, urban trees provide a cooling effect that increases pedestrian comfort and reduces urban heat. **Prioritizing tree plantings in high-use pedestrian spaces like walkways, outdoor recreation spaces, and community parks is an efficient way to provide the cooling benefits of trees where people need it the most.**

"I'd like to see more trees planted at the entrances of Bayard and also the exits. Along the highway to the mine would help with the pollution and with the noise control."

-Bayard Resident

Natural wildflowers and tree canopy along Central Avenue.

Rendering of imagined improvements to East Street Park adjacent to the Bayard Housing Authority complex. Renderings by Anthropopulus Design + Planning.

Parks and Outdoor Recreation

The Bayard community deeply values outdoor recreation, and there is a strong interest in increasing access to parks, walking paths and outdoor spaces that provide recreation and leisure opportunities. With only about 2 acres of land currently dedicated to public parks and open space, Bayard's 2021 Comprehensive Plan includes the aspiration to meet or exceed the national standard ratio of 9.5 acres of park land per 1,000 residents and/or meet the Trust for Public Land's recommendation of ensuring every resident is within a 10-minute walk of a park.

Bayard residents emphasized the vital role these green spaces play in promoting the health and well-being of their community, with 32% of survey participants valuing the urban forest for providing spaces that encourage outdoor recreation. Research shows that residents who live in areas with more green space are three times more likely to exercise regularly, which may reduce risk of chronic illnesses like heart disease, obesity, and diabetes. Daily exposure to nature has also been shown to have positive effects on mental health, which was cited as a top priority for 54% of respondents.

"We have trees all over our property. Kids like to play underneath, and I like trees as bird habitat."

-Bayard Resident

The City of Bayard has a number of recreation areas that are well loved by the community. Urban forestry projects can help enhance these existing spaces and contribute to the creation of additional recreation opportunities. Recreation areas are a high priority for tree pruning and when necessary, tree removal, to reduce risk in areas of high public use.

The Bayard Community Park complex is a community asset that provides multiple opportunities for outdoor recreation and leisure. In addition to Bayard Community Park, this complex includes the Community Center, Little League ball fields, playground equipment, a skate park area, picnic tables and a gazebo. The trees in the park provide high-quality shade, though a few are dying and should be scheduled for removal or replacement. The landscaped buffer strip between the park and the Community Center is also in need of maintenance, irrigation improvements and some tree replacement. Additionally, there is a line of trees between two of the baseball fields which is in need of maintenance and invasive species removal. Even though this planting strip was intended as a windbreak and not for public use, people tend to seek shelter here because there is very little shade for families and spectators who attend the Little League games. For this high-use facility, there is an opportunity to expand tree canopy and irrigation infrastructure to help cool air temperatures and enhance pedestrian comfort in this critical recreation area.

Bayard Mining Park is a linear park along Central Avenue with a collection of historic mining equipment, interpretive signage, a walking path and many healthy desert plants and trees that are fed by drip irrigation. This park demonstrates exemplary maintenance work by City staff and volunteers and is a point of interest for passing tourists and residents. The park is in good condition, and will benefit from some basic irrigation maintenance, invasive species removal, tree health assessments, and structural pruning.

Old Fire Station Park is a small park with turf, a handful of trees and a park bench. A few of these trees are in need of removal or replacement. This quaint public space is used regularly by residents, and would benefit from tree maintenance, additional plantings and picnic tables to fully reach its potential as a beloved community park.

Cobre Golf Park, Bayard's largest park area, is a relatively new facility that is owned and managed by the Cobre Consolidated School District. There are a number of healthy trees around the edge of the park's irrigated field, as well as a few trees that are in poor health or dead and in need of removal or

While Bayard Community Park has high quality tree canopy, there is a lack of shade in spectator areas at the Little League fields nearby.

replacement. This park has a stormwater-fed creek running through it, and abuts a natural riparian area which adds some shade and aesthetic value. As the only outdoor gathering space in the south section of town, Cobre Golf Park is a priority site for community forestry initiatives. In collaboration with the school district, this park could be enhanced with additional tree plantings, tree maintenance, and more efficient irrigation.

East Street Park, located in the Bayard Housing Authority Complex, is a small neighborhood park that contains a basketball court, exercise equipment, and one mature tree. The turf grass is watered by spray irrigation, which could be expanded to support additional tree plantings. Increasing shade and canopy cover would greatly enhance the usability of the space and draw more people to recreate in the park, creating an outdoor amenity in an area of town with limited green space.

In addition to the community parks, three drainage arroyos run through Bayard and flow into Whitewater Creek, forming riparian corridors that provide linear open space through the city with some existing social trails. Bayard's Comprehensive Plan identified an opportunity to link community parks and facilities with a network of trails and open space along the proposed rail trail and possibly along Whitewater Creek, to support the city's goal of expanding outdoor recreation opportunities. As these projects are considered in the future, community forest best management practices can be integrated to enhance landscaping along these walkways.

Rendering of imagined improvements to East Street Park adjacent to the Bayard Housing Authority complex. Renderings by Anthropopulus Design + Planning.

High quality tree canopy helps cool play areas for children at Bayard Community Park.

School Landscapes

Bayard's Comprehensive Plan emphasizes the strength of their school system, which is utilized by the entire Mining District community, and makes a commitment to supporting youth and families. Schools provide important outdoor recreational space for children. Currently, there are little to no trees in areas on the school campuses that students use the most. All three schools would benefit from additional landscaping near fields, play areas, and in the front of the buildings around the school drop off area. There is also a need for shade along walking paths between areas of the high school campus, and along paths connecting Bayard Elementary School and Snell Middle School.

Shade trees on school campuses would make play and outdoor learning more pleasant, provide sun protection, and allow outdoor activities to extend across all seasons. Additionally, research has shown that children who can see trees and plants outside their school windows have better focus, and score higher on standardized tests.

The school buildings and grounds are managed by the Cobre Consolidated School District, and facility improvements such as landscaping are managed by New Mexico Public Schools Facility Authority (NMPSFA). Before any planting projects are planned at schools, close coordination should be done to understand landscaping or building expansion projects that may already be planned, and what the funding prioritization is. If a project is already planned, but funding is not expected soon, a community group could coordinate a planting project with the CFN's help, with the understanding that the trees may be replaced during future school landscaping projects.

To support new planting projects on school campuses, Bayard can coordinate with school leadership to make plans for long term irrigation and maintenance, including sharing CFN training and tree care resources with school maintenance staff.

Wildlife Habitat and Watershed Health

Supporting urban wildlife habitat and biodiversity is of great importance for residents in Bayard, with 64% of public survey participants indicating that this is one of the benefits of the urban forest that they value the most. Community trees not only enhance the quality of life for humans but also serve as vital habitats for diverse native wildlife including birds, beneficial insects, and small mammals. **Planning for a community forest with an abundance and wide variety of regionally native species can support biodiversity in Bayard** by creating nesting sites, food sources, and corridors for wildlife to thrive.

Selecting native trees and plants for landscaping projects also supports water conservation efforts. These desert-adapted plants are drought tolerant and well suited to prosper in local climatic conditions and will therefore require less irrigation, helping to conserve water in underground aquifers. The presence of tree and plant roots also helps water infiltrate better where it can be stored in the soil, which can contribute to improved water quality, soil health and overall watershed health.

Bayard is transected by three narrow riparian channels with a high tree density, which contribute significantly to Bayard's community forest. These riparian forests were historically dominated by cottonwood and willow species, but have since shifted to a predominately non-native plant palette that includes salt cedar *(Tamarix spp.)* and Siberian elm *(Ulmus pumila).* Bayard's riparian areas serve valuable ecological functions but they can also pose a maintenance challenge. In addition to aiding the spread of non-native and invasive species, these drainage corridors bring risk of fire and flooding to several residential neighborhoods. To manage these risks, **it is recommended that Bayard develop a comprehensive approach to managing these riparian areas by coordinating with New Mexico Energy, Minerals, and Natural Resources Department (NM EMNRD) Forestry Division, the Natural Resources Conservation Service (NRCS), and other water agencies. The NM Forestry Division's Forest Action Plan provides detailed maps of fire and post-fire debris flow risk that can be helpful planning tools to safeguard smaller communities from wildfire events that occur higher in the watershed.**

With some of these drainage corridors running through or abutting private property, this management approach may include an ordinance to control how adjacent property owners can build in, alter or impact these riparian areas. A vegetation control ordinance that specifies the proper disposal of yard waste, limiting the discarding of green material into natural arroyos will help reduce fire hazard and flood risk to local and downstream properties. Bayard may also consider an ordinance that requires new developments to retain stormwater on-site, using GSI features when appropriate, to mitigate excess runoff that carries pollutants into waterways.

"I love flowering and fruiting trees and all forms of shade. The birds and squirrels live in my trees and we entertain each other."

- Bayard resident

Pollinator habitat at Bayard Public Library outdoor space.

Residential Landscapes

A majority of Bayard's land area is residential, which means residential trees are a significant contributor to the overall benefits that the community forest can provide. **Encouraging and incentivizing residents to plant trees will help beautify the community and create a network of walkable streets** that all residents can enjoy. Targeted outreach to residents who live along walking corridors or near schools would help enhance walkability and connectivity in key areas that have been identified in this plan.

Neighborwoods tree planting program in Albuquerque. This program is currently working to expand statewide. Image Credit: Tree New Mexico

Trees in the front yards of residential homes can benefit everyone by providing shade and cooler temperatures for pedestrians and cleaning the air near sidewalks and roads. **Residents should also be encouraged to install rainwater harvesting features on their properties** to help reduce stormwater runoff and provide supplemental irrigation for residential landscapes, reducing the use of drinking water for outdoor use.

The Bayard Housing Authority Complex is a residential area for low-income residents that would greatly benefit from tree planting projects. This complex is also an excellent opportunity to integrate GSI features to harvest rainwater from the roofs of all the housing units to help irrigate trees and other landscaping.

Partnering with organizations who support neighborhood tree planting programs and encouraging residents to maintain and plant trees on their property will expand Bayard's community forest much more than the City can do on its own. There is support for this idea among residents, with 83% of public survey respondents saying that exploring residential tree planting programs in Bayard is a good idea.

Bayard can encourage residents to connect with CFN partners and help provide them access to educational resources about tree care and connect them to tree planting opportunities. This engagement may also result in establishing a cohort of volunteers that can participate in Bayard's Beautification Committee, which can support maintenance of public landscapes and help advise the future of Bayard's community forest.

"My grandma has this huge apple tree that has been around for years and I have always loved it!"

- Bayard resident

Maintenance Staff Support

Proper maintenance of trees and landscapes is a key component of revitalization efforts in the City of Bayard. Over the remaining years of the project, significant investment will be made in expanding Bayard's community forest through the CFN, including the addition of irrigated landscapes and GSI. One of the primary objectives for the CFN is to support municipal staff with landscape maintenance to help ensure the long term success of this investment. Bayard staff will have the opportunity to engage with the CFN, which will offer additional access to training, resources and strategies that can help increase the efficiency and effectiveness of the community forestry program. **Active participation in the CFN is a good investment of Bayard staff time and will support the implementation of this Community Forest Management Plan.**

As Bayard's community forest continues to develop in public spaces, **it is recommended to establish streamlined internal processes that make sure landscaping needs do not exceed available human and financial resources.** The CFN can support Bayard in creating these processes, such as establishing a strategic maintenance and irrigation schedule, creating a prioritized list of tree removal, developing an integrated pest management program and providing specialized training to staff. These are all strategies that are achievable within Bayard's current capacity, and can support the city's goals for community forest management.

The adoption of landscaping policies and ordinances can also contribute to effective and proactive management of urban trees. **Establishing a basic vegetation ordinance gives municipal staff the authority to address community forest issues effectively**, such as vandalism, tree risks, invasives, and pest management. In the future, the city may want to consider more complex ordinances that can define residential and commercial responsibilities for landscapes and set landscaping requirements for new development.

Tree and plant maintenance and irrigation are specialized fields with regionally-based best management practices that are evolving based on emerging science. Some of the existing maintenance and irrigation practices in place in Bayard need to be updated in order to protect tree health and support a thriving urban forest. During interviews, Bayard staff agreed that they would benefit from additional training, mentorship and opportunities to engage with regional experts. **To further strengthen Bayard's ability to**

WNMU and GRIP hosted a workshop for Bayard maintenace staff in April 2025 to teach proper tree pruning techniques.

manage its community forest, investment in annual staff training in tree care, irrigation, and GSI is recommended.

Tree care sometimes requires highly specific expertise and can be dangerous work, especially when working at heights in large, mature trees - either by climbing or using bucket trucks. Working with arborists is valuable, but it is usually not cost-effective to have this level of expertise on staff full-time. It is prudent to proactively **establish a mechanism to access tree care expertise when needed**, either via an on-call contractor or by sharing regional personnel resources.

Bayard's Beautification Committee is a group of community volunteers who have supported some of the City's landscape projects in the past, and may be a good resource to support future community forestry projects. Additionally, Bayard may explore the formation of a Tree Board, a group of residents who are dedicated to enhancing the well-being of trees in a community and may be called upon for consultation and support.

The project team and CFN will continue to support the City of Bayard to implement the recommendations featured in this plan.

Future Plans and Projects

The City of Bayard is continuing the effort of revitalizing its community through several exciting initiatives. As Bayard continues to prosper and grow, the community forest should keep pace. The goals, strategies and actions included in Bayard's Community Forest Management Plan can help embed urban forestry best practices into the city's ongoing development and future initiatives. As new projects are planned to advance Bayard's broader community goals, look for opportunities to integrate trees and landscaping to simultaneously advance the city's goals for a thriving community forest.

Upcoming projects that present opportunities to enhance Bayard's community forest include:

- Developing a new Recreation Center and improving recreation facilities.
- Incorporating treescapes and GSI into street and drainage improvements.
- Incorporating street trees in conjunction with Hurley Avenue improvements.
- Revitalizing the Mill Museum and landscape.
- Expanding the outdoor library space and landscaping.
- Renovating the City Hall building complex and grounds.

Through this revitalization effort, Bayard is also working to address challenges including flooding, public health impacts, economic growth and aging infrastructure. The community forest can be a key component in addressing these challenges, contributing to environmental and human health and helping to create a sense of prosperity and civic pride.

As the historic "Hub of the Mining District," the City of Bayard is preparing for a strong future with goals for economic development, enhanced public and environmental health, and the revitalization of community spaces. The community forest can be a key component in achieving these goals, helping to make Bayard a pleasant place to live, work, and visit.

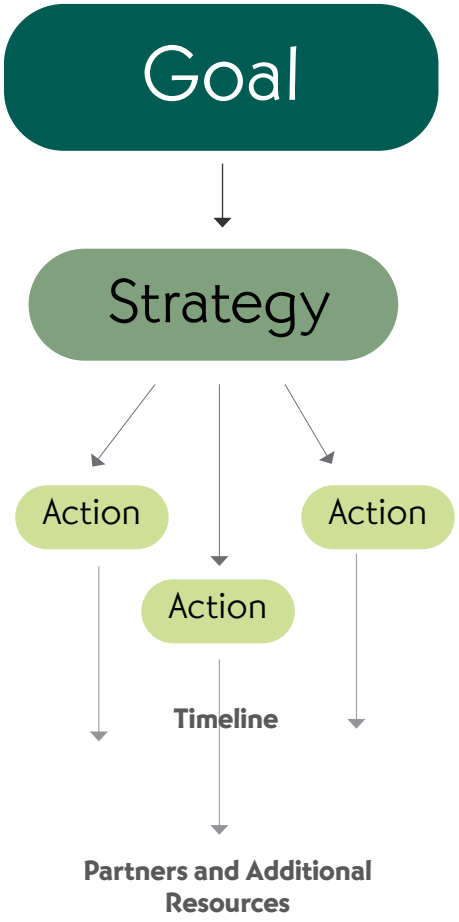
Trees in Post Office Park along Central Avenue.

Action Plan

A significant investment is being made to enhance Bayard's community forest through the Southwest New Mexico Community Forest Network (CFN). This *Action Plan* outlines the foundational steps necessary to guide, support, and sustain this effort in Bayard throughout the remaining years of the project.

The *Action Plan* sets **three primary goals that establish a vision of a healthy and resilient community forest in Bayard.** Each goal is supported by targeted, actionable strategies that work together to help Bayard make progress towards this vision. The strategies are further broken down into a series of specific actions with defined timelines for completion, which are outlined in the tables below. Additionally, each strategy is presented with a list of potential partner organizations and available supporting resources.

The goals, strategies and actions were informed through engagement with Bayard leadership, staff, and community members, Grant County staff leadership, and local experts. The project team also carefully reviewed Bayard's 2021 Comprehensive Plan and other available planning resources like the Infrastructure Capital Improvement Plan (ICIP). The results of this engagement and the analyses that informed the *Action Plan* are discussed in the previous section, *The Basis for the Plan.*



Goals are the foundation for any Strategic Plan. They are a collective vision for the city to aspire to. They organize strategies and actions to help fully realize the plan.

Strategies are measurable approaches of "how" to achieve a given goal.

Actions are individual steps or sets of steps to be taken to support a strategic approach to achieving the goal.

Timeline proposes a time frame for an action. This plan proposes Short Term actions (1-2 years), Mid Term (2-5 years), and Long Term (5+ years).

Partners and Additional Resources are vital to completing the *Action Plan.* Partners can support municipal staff with ongoing training, implementation of actions, and the creation of additional resources. Additional Resources can provide the specific guidance to help residents and municipal staff carry out the actions identified in the plan.

Action Plan

Goal 1

Bayard's community forest fosters economic development, community character, and environmental health.

Strategy 1A

Develop landscaping along US Highway 180 to beautify the entrance to Bayard, promote businesses, and attract visitors.

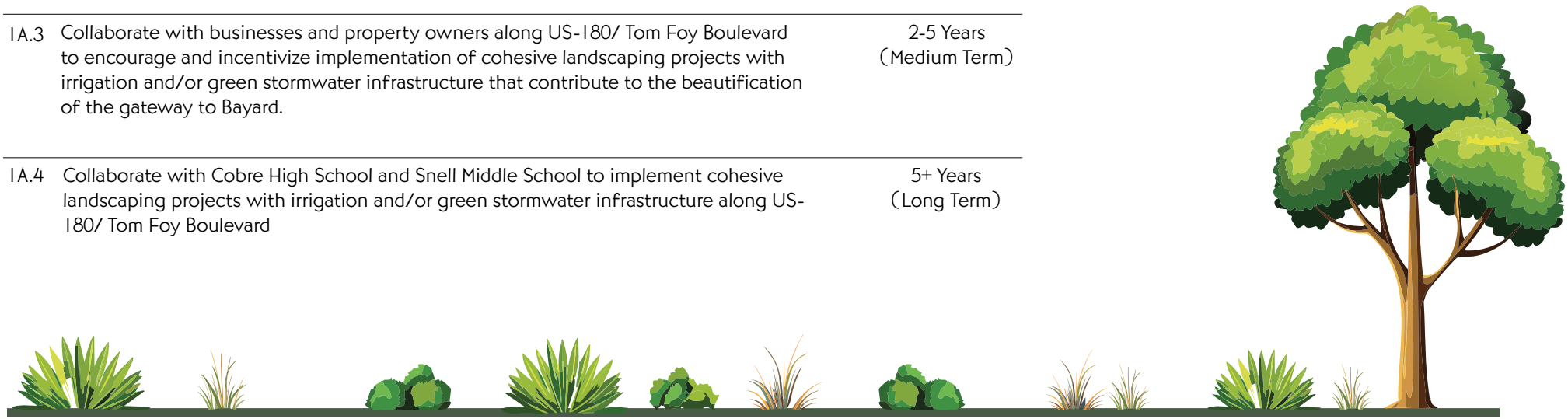
Actions		Timeline
1A.1	Collaborate with NM DOT to design, engineer, and install streetscaping with automatic irrigation along US-180/Tom Foy Boulevard within the City of Bayard for traffic calming, pedestrian and bicyclist safety, beautification, and economic development.	5+ Years (Long Term)
1A.2	Develop cohesive landscaping projects along US-180/ Tom Foy Boulevard to create an attractive business district and foster a distinctive sense of place: » Add landscaping to highlight the Welcome to Bayard sign (at Hurley Avenue) » Collaborate with Five Points Initiative on landscaping at Union Hall (at Steyskal Street) » Collaborate with NM DOT on landscaping projects along the entrance to the walking path from Bayard to Santa Clara (and a future path to Hurley, when implemented.) » Identify parcels along this corridor owned by the City of Bayard or in the right of way that could provide opportunities for complementary landscaping.	2-5 Years (Medium Term)
1A.3	Collaborate with businesses and property owners along US-180/ Tom Foy Boulevard to encourage and incentivize implementation of cohesive landscaping projects with irrigation and/or green stormwater infrastructure that contribute to the beautification of the gateway to Bayard.	2-5 Years (Medium Term)
1A.4	Collaborate with Cobre High School and Snell Middle School to implement cohesive landscaping projects with irrigation and/or green stormwater infrastructure along US-180/ Tom Foy Boulevard	5+ Years (Long Term)

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Department of Transportation (NM DOT)
- Cobre Consolidated School District
- NM Public Schools Facilities Authority
- US-180 Business Owners

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- NM DOT Design Manual



Action Plan

Goal 1

Bayard's community forest fosters economic development, community character, and environmental health.

Strategy 1B

Use streetscaping to formalize a "Main Street" along Central Avenue and Hurley Avenue, enhancing walkability and connectivity in Bayard.

Actions		Timeline
1B.1	Develop cohesive and complementary streetscaping projects with shade trees and irrigation infrastructure at government-owned locations along the Central Ave corridor to foster placemaking and walkability on "Main Street". » Priority locations: Bayard Public Library, Police Department, City Hall, Magistrate Courthouse, Cobre Consolidated School District Administration building	2-5 Years (Medium Term)
1B.2	Develop cohesive and complementary streetscaping projects in public spaces along Foy St, Park Street and Hurley Avenue to continue the Central Avenue walking corridor and connect community services in the heart of Bayard. » Landscape Elementary School drop off » Landscape edges of Bayard Community Park » Include street trees in future Hurley Avenue infrastructure improvements.	1-2 Years (Short Term) Ongoing
1B.3	Collaborate with small businesses and property owners along Hurley Avenue, Park Street, Foy Street and Central Avenue to encourage and incentivize implementation of cohesive landscaping projects with irrigation and/or green stormwater infrastructure that contribute to walkability in Bayard and development of the local business district.	2-5 Years (Medium Term)
1B.4	Integrate community forestry goals into future community revitalization projects along walking corridors in Bayard. » Train Depot/Mining Museum Revitalization Project » Bayard Community Garden/ Central Plaza Project » Bayard Union Hall	Ongoing
1B.5	Collaborate with NM DOT to design, engineer, and install streetscaping with automatic irrigation along NM-356/Central Avenue within the City of Bayard for traffic calming, pedestrian and bicyclist safety, beautification, and economic development.	5+ Years (Long Term)

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Department of Transportation (NM DOT)
- Cobre Consolidated School District
- NM Public Schools Facilities Authority
- Central Avenue area Business Owners
- Bayard Community Garden partner organizations
- Southwest NM Arts, Culture and Tourism.

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- NM DOT Design Manual

Action Plan

Goal 1

Bayard's community forest fosters economic development, community character, and environmental health.

Strategy 1C

Manage a healthy community forest to conserve water resources, mitigate risk, and enhance environmental health.

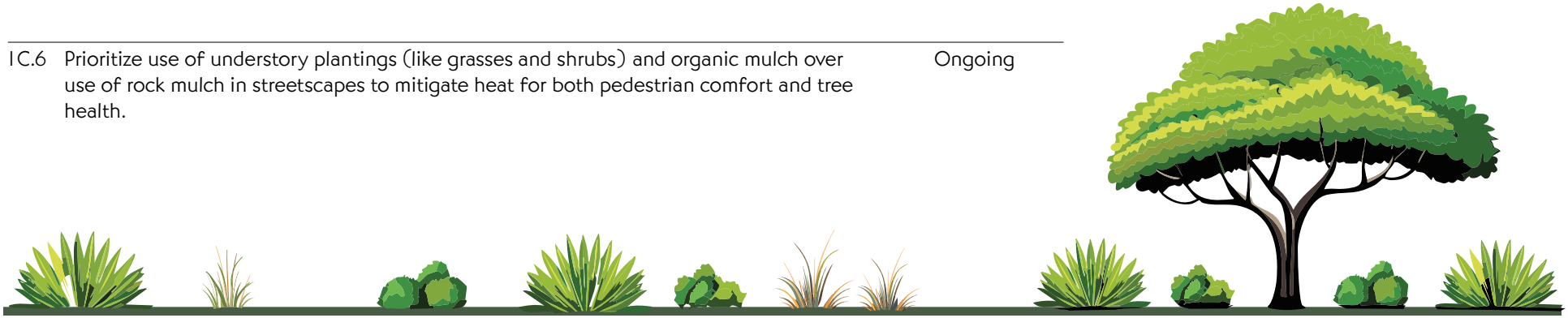
Actions		Timeline
1C.1	Practice succession planting by phasing new trees and plants into landscapes over time to avoid having a single generation community forest.	Ongoing
1C.2	Publish a tree list and plant palette appropriate for Bayard's climate and geography, focused on drought-tolerant plants native to the southwest U.S./northern Mexico.	1-2 Years (Short Term)
1C.3	Proactively identify opportunities to co-locate GSI and tree plantings to supplement irrigation with stormwater, mitigate ponding, and support watershed health.	Ongoing
1C.4	Coordinate with NM EMNRD/State Forestry, NRCS and water agencies to develop a program to proactively manage riparian areas and prioritize work to minimize fire danger, flood risk, and invasive species migration. Perform maintenance to mitigate risk of falling limbs on footpaths.	2-5 Years (Medium Term)
1C.5	Collaborate with NM DOT to plant windbreaks and/or living ground cover along highway corridors to improve air quality by mitigating airborne dust.	2-5 Years (Medium Term)
1C.6	Prioritize use of understory plantings (like grasses and shrubs) and organic mulch over use of rock mulch in streetscapes to mitigate heat for both pedestrian comfort and tree health.	Ongoing

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Department of Energy, Minerals, and Natural Resources - Forestry Division (EMNRD)
- NM Department of Transportation (NM DOT)
- Natural Resources Conservation Service (NRCS)
- Water agencies

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- Green Stormwater Infrastructure Implementation Guide



Action Plan

Goal 2

Bayard's community forest enhances public health, recreation opportunities, and quality of life for residents.

Strategy 2A

Focus resources on improving and expanding the urban forest in community parks, gathering spaces and recreation areas.

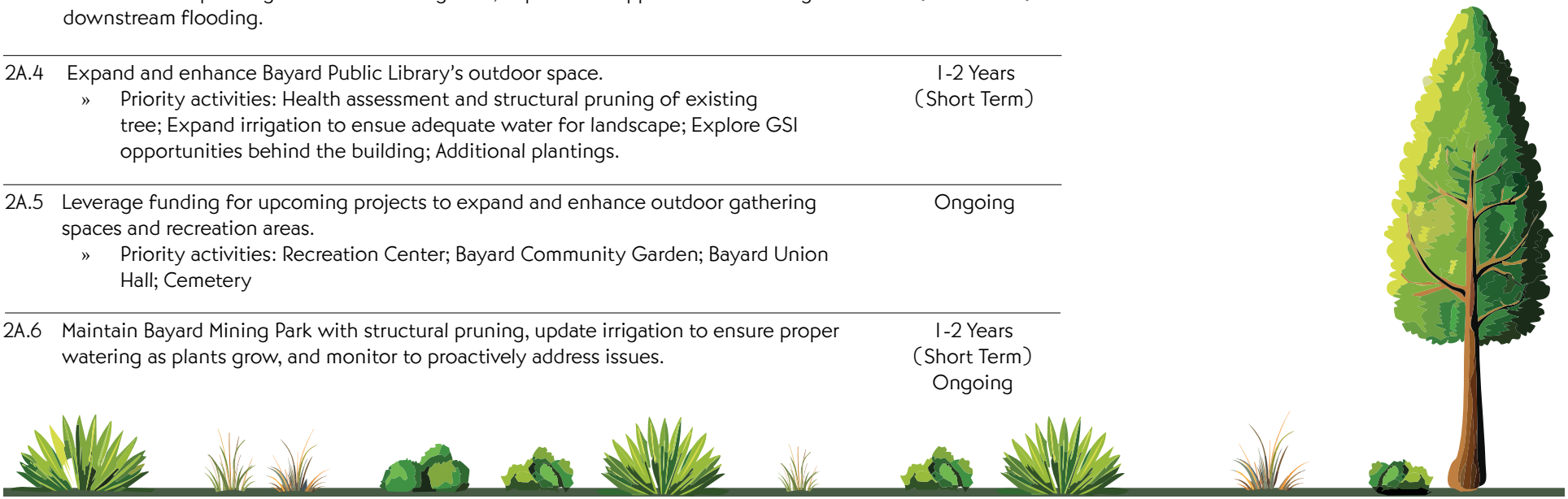
Actions		Timeline
2A.1	Revitalize the Bayard Community Park and Community Center Complex and ball fields » Priority activities: Remove and replace dead/dying trees; Structural pruning and maintenance for existing trees; Install an efficient irrigation system in Bayard Community Park; Add shade trees near ball fields for spectators; install sufficient irrigation for mature trees; Connect to Elementary and Middle School landscaping.	1-2 Years (Short Term)
2A.2	Revitalize Old Fire Station Park. » Priority activities: Remove and replace dead and dying trees; Structural pruning and maintenance for existing trees; Extend an efficient irrigation system; Additional plantings in park.	1-2 Years (Short Term)
2A.3	Further develop Bayard Housing Authority Park into a vibrant community amenity with additional tree plantings and efficient irrigation; explore GSI opportunities to mitigate downstream flooding.	1-2 Years (Short Term)
2A.4	Expand and enhance Bayard Public Library's outdoor space. » Priority activities: Health assessment and structural pruning of existing tree; Expand irrigation to ensue adequate water for landscape; Explore GSI opportunities behind the building; Additional plantings.	1-2 Years (Short Term)
2A.5	Leverage funding for upcoming projects to expand and enhance outdoor gathering spaces and recreation areas. » Priority activities: Recreation Center; Bayard Community Garden; Bayard Union Hall; Cemetery	Ongoing
2A.6	Maintain Bayard Mining Park with structural pruning, update irrigation to ensure proper watering as plants grow, and monitor to proactively address issues.	1-2 Years (Short Term) Ongoing

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- Green Stormwater Infrastructure Implementation Guide



Action Plan

Goal 2

Bayard's community forest enhances public health, recreation opportunities, and quality of life for residents.

Strategy 2B

Enhance landscaping at Bayard's school campuses and facilities to contribute to a vibrant community forest.

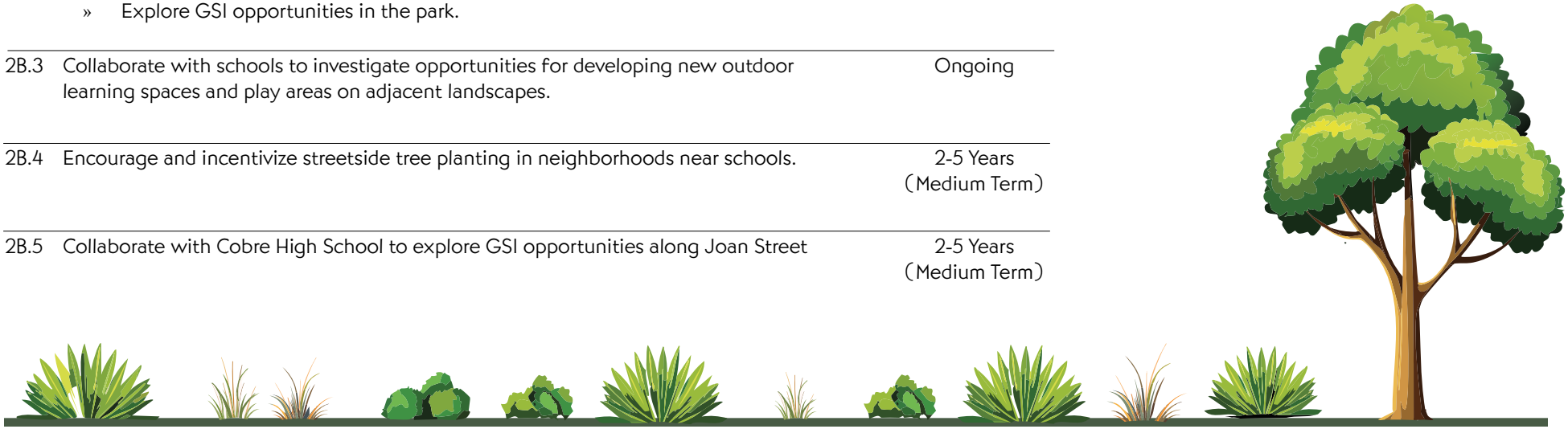
Actions		Timeline
2B.1	Collaborate with the schools to develop landscaping with shade trees and living ground cover at high use areas of Elementary, Middle and High School campuses. Priority activities: » School entrances/ drop offs. » Near sporting fields and play areas. » In seating and picnic areas. » Along walking paths between facilities at Cobre High School. » Along walking paths that connect Snell Middle School, the Community Center and Park and Bayard Elementary School.	2-5 Years (Medium Term)
2B.2	Revitalize Cobre Golf Park. Priority activities: » Tree removal and replacement. » Structural pruning and maintenance for existing trees. » Improve irrigation efficiency. » Additional plantings to create distinct areas. » Explore GSI opportunities in the park.	1-2 Years (Short Term)
2B.3	Collaborate with schools to investigate opportunities for developing new outdoor learning spaces and play areas on adjacent landscapes.	Ongoing
2B.4	Encourage and incentivize streetside tree planting in neighborhoods near schools.	2-5 Years (Medium Term)
2B.5	Collaborate with Cobre High School to explore GSI opportunities along Joan Street	2-5 Years (Medium Term)

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- Cobre Consolidated School District
- NM Public Schools Facilities Authority

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- Green Stormwater Infrastructure Implementation Guide



Action Plan

Goal 2

Bayard's community forest enhances public health, recreation opportunities, and quality of life for residents.

Strategy 2C

Engage residents in the care and development of Bayard's community forest.

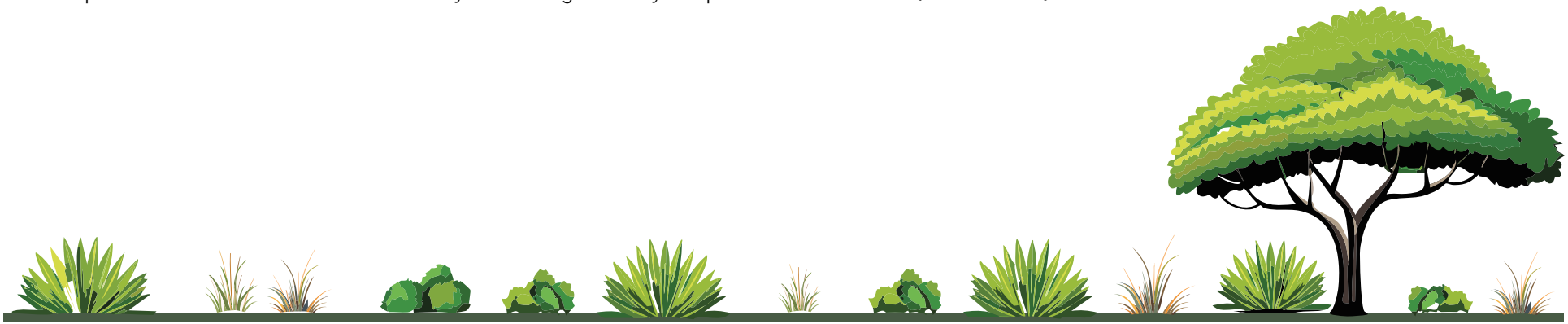
Actions		Timeline
2C.1	Support residents to connect to existing educational resources, partner organizations and events on tree planting, care, and maintenance and resources for implementing residential scale rainwater harvesting, and to empower community members to action. Priority activities: » Engage community volunteers to assist with tree planting and care. » Establish a Tree Board to advise and support urban forest management. » Educate residents on their tree and landscaping responsibilities near ROWs.	1-2 Years (Short Term) Ongoing
2C.2	Educate and encourage residents to select plants for their property that are regionally appropriate, drought-tolerant, and support pollinator and native wildlife habitat. Start phasing out aging Siberian elms (Ulmus pumila) to decrease weedy trees throughout town.	1-2 Years (Short Term)
2C.3	Increase tree canopy by promoting tree planting and landscaping in residential areas. » Partner with organizations that support residential tree planting programs.	2-5 Years (Medium Term)
2C.4	Support and encourage tree planting and residential rainwater harvesting implementation at residences within the Bayard Housing Authority complex.	2-5 Years (Medium Term)

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- Tree New Mexico Neighborwoods Program
- NM Tree Alliance
- NMSU Cooperative Extension
- Bayard Housing Authority

Resources include:

- Recommended Tree and Plant List for Bayard
- Guide to Planning and Implementing Community Forestry Projects
- Bernalillo County Passive Rainwater Harvesting Guide
- CFN Website and Printed Materials



Action Plan

Goal 3

Bayard cultivates a well-managed community forest through staff support, collaboration, and comprehensive planning.

Strategy 3A

Invest in building staff expertise to further strengthen Bayard's community forest management.

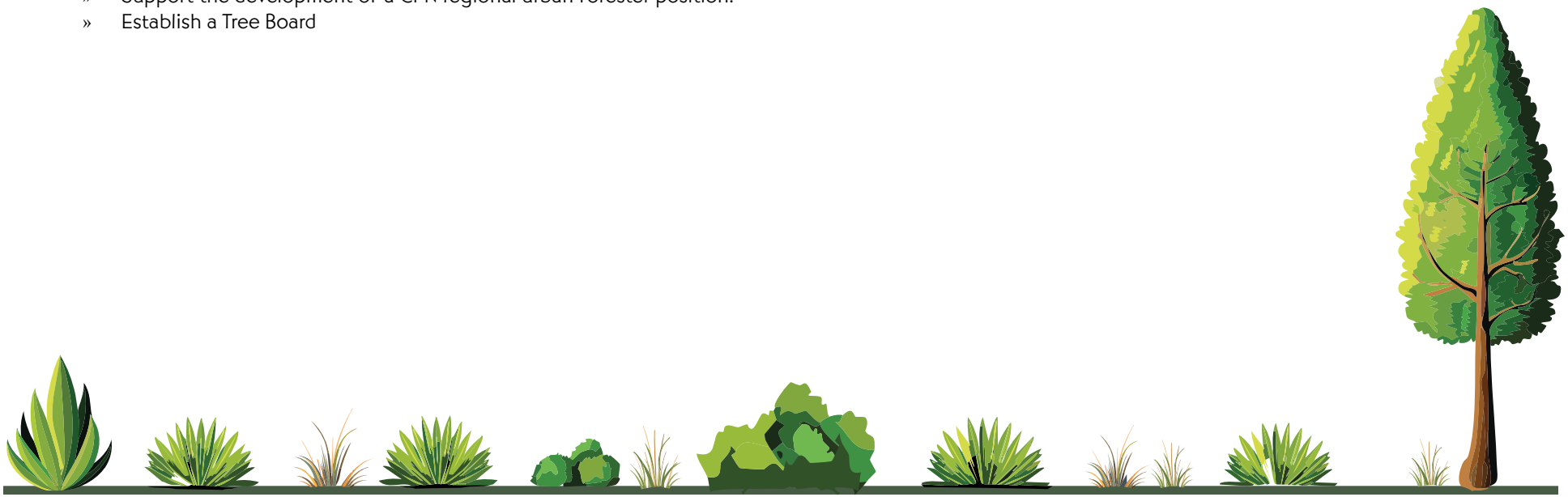
Actions		Timeline
3A.1	Support Bayard staff to actively participate in the SWNM Community Forestry Network (CFN), where they can connect to educational resources and events to further their skills in urban forestry and GSI implementation and maintenance.	Immediate and Ongoing
3A.2	Invest in staff training for tree care, tree risk assessment, irrigation standard installation guidelines and maintenance, integrated pest management, and GSI maintenance. » Include Bayard school maintenance staff in CFN tree care training events.	1-2 Years (Short Term) Ongoing
3A.3	Create a mechanism for Bayard staff and leadership to access tree expertise: » Establish contracts with certified arborists. » Support the development of a CFN regional urban forester position. » Establish a Tree Board	1-2 Years (Short Term)

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Tree Alliance
- New Mexico Urban & Community Forestry Program

Resources include:

- CFN Website and Printed Materials
- Arborist Contract Template



Action Plan

Goal 3

Bayard cultivates a well-managed community forest through staff support, collaboration, and comprehensive planning.

Strategy 3B

Develop and streamline a strategic landscape maintenance program.

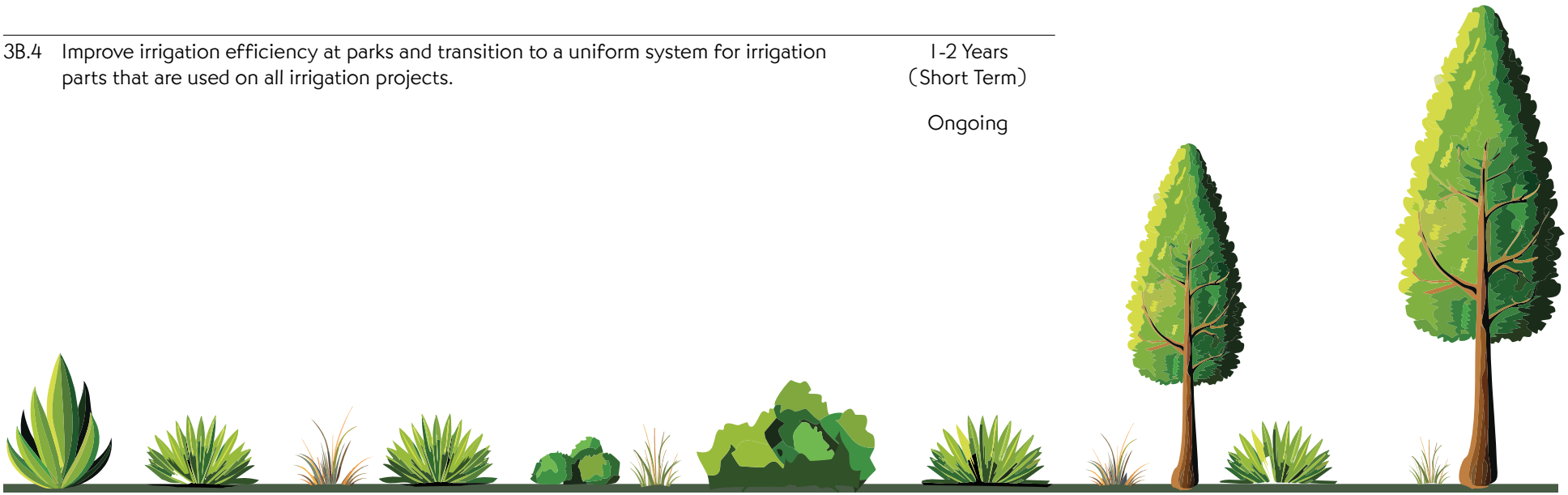
Actions		Timeline
3B.1	Complete the existing Bayard tree inventory in Tree Plotter and periodically update the data set to inform priorities for maintenance and high risk trees.	1-2 Years (Short Term)
3B.2	Establish and adhere to a tree maintenance schedule, to include: » Tree pruning/removal. » Irrigation checks. » Mulch and understory planting maintenance. » Insect and disease checks.	1-2 Years (Short Term)
3B.3	Identify opportunities to integrate GSI practices into landscaping projects to re-purpose stormwater to irrigate plants, curb flooding, and provide multiple community benefits.	Ongoing
3B.4	Improve irrigation efficiency at parks and transition to a uniform system for irrigation parts that are used on all irrigation projects.	1-2 Years (Short Term) Ongoing

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Tree Alliance
- New Mexico Urban & Community Forestry Program

Resources include:

- SWNM Community Forestry Network Website and Printed Materials
- Example Maintenance Schedule
- Green Stormwater Infrastructure Implementation Guide
- Irrigation Resource



Action Plan

Goal 3

Bayard cultivates a well-managed community forest through staff support, collaboration, and comprehensive planning.

Strategy 3C

Establish municipal policies that support Bayard's community forest goals.

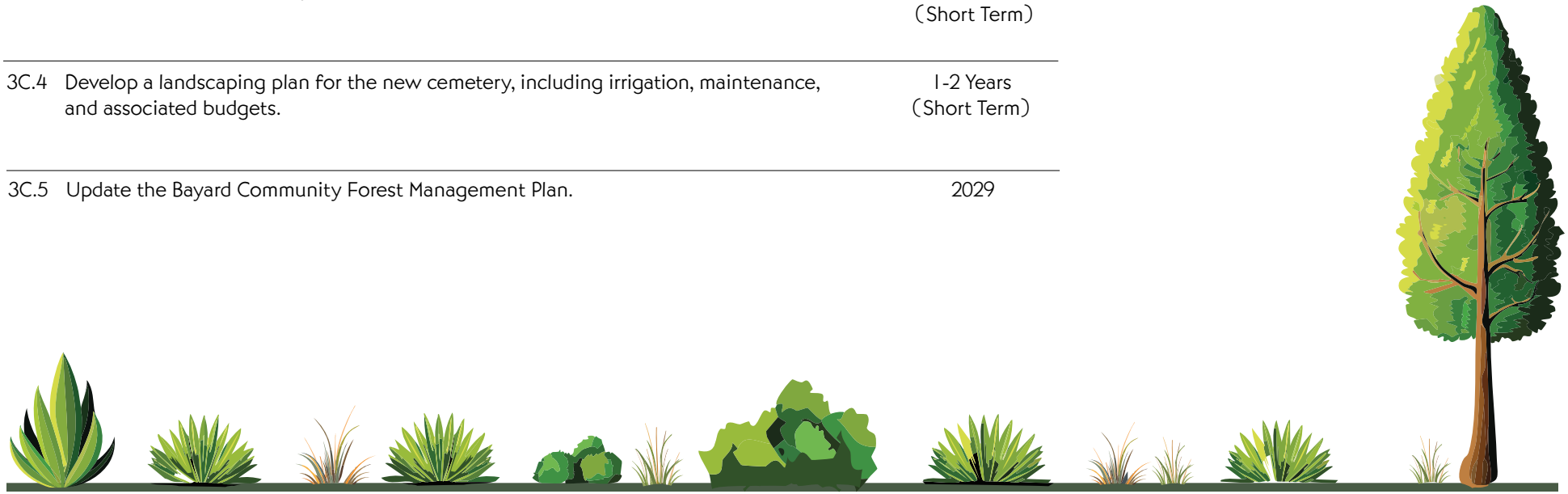
Actions		Timeline
3C.1	Establish a vegetation ordinance that formalizes the authority of city staff and includes: » Protection and preservation of healthy mature trees. » Irrigation and water conservation policy. » Designated responsibilities in ROWs and buffer strips - municipal, private, and public. » New development landscaping requirements.	2-5 Years (Medium Term)
3C.2	Establish and update an annual budget for landscaping projects, including irrigation and maintenance.	1-2 Years (Short Term)
3C.3	Establish a cemetery tree policy.	1-2 Years (Short Term)
3C.4	Develop a landscaping plan for the new cemetery, including irrigation, maintenance, and associated budgets.	1-2 Years (Short Term)
3C.5	Update the Bayard Community Forest Management Plan.	2029

Partners include:

- Southwest New Mexico Community Forestry Network (CFN)
- NM Tree Alliance
- New Mexico Urban & Community Forestry Program

Resources include:

- Southwest New Mexico Community Forestry Network (CFN) Website and Printed Materials
- Example Maintenance Schedule
- Green Stormwater Infrastructure Implementation Guide
- Irrigation Resource



Additional Resources

Supporting Documents

The Southwest Community Forestry Network (CFN) website, swnmforestry.org, was designed to help coordinate efforts and share information between communities and project partners, including links to additional resources that are referenced in this management plan. The network and the project team will continue producing and curating tools as needed to help the towns put their plans into action, such as:

- Examples of seasonal maintenance schedules and checklists.
- Guides to planning and implementing community forest projects.
- Guides to planning and implementing green stormwater infrastructure projects.
- Templates for recommended policies, such as a Vegetation Ordinance, a Complete Streets Ordinance and/or a Cemetery Tree Policy.
- Templates for contracts to enlist the support and specialized skills of a Certified Arborist, and a list of recommended questions to ask when selecting a practitioner to hire.
- Example landscape maintenance and irrigation budgets.
- Landscape irrigation guides and other resources.
- Guide to connecting with regional resources and groups, such as the NM Tree Alliance and the SW Directory of Tree Care Practitioners.
- Resources for soil testing and promoting soil health.
- Resources for engaging residents and exploring neighborhood tree planting programs.

Supporting Networks & Organizations

Gila Resources Information Project (GRIP)

Integrated Biological Solutions (IBIS)

Western New Mexico University (WNMU)

Grant County Cooperative Extension

New Mexico Tree Alliance

New Mexico Urban Forest Council

New Mexico Forestry Division

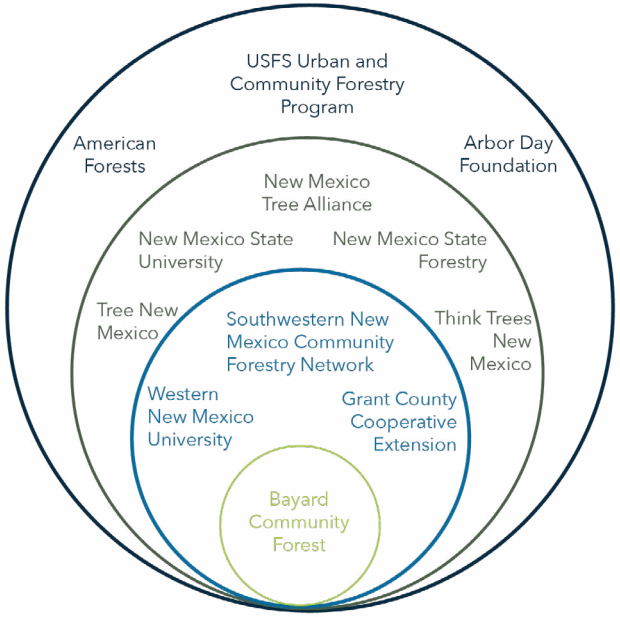
Arid LID (Low Impact Development) Coalition

Tree New Mexico

Arbor Day Foundation (Partners in Community Forestry, Trees are Good, TreeCity USA)

American Forests

US Forest Service, Urban and Community Forestry Program



The CFN Community Engagement Roadmap

Public input and local knowledge are critical components to any community planning effort. In September 2024 the project team produced the Community Engagement Roadmap, which can be found on the CFN project website. This document outlined the project's approach to engaging various audiences in the development of the Community Forestry Management Plans. The project team employed a unique set of strategies tailored specifically to each of the six community's needs and public practices.

The Roadmap includes actionable engagement strategies that can be adapted and applied to a variety of future projects in Bayard that have a public outreach component, such as:

- Using different approaches to reach a variety of community audiences in a way that best suits their needs and interests.
- Informing, consulting, involving, collaborating with, or empowering the engagement audiences at strategic points in the project (Source: Spectrum for Public Participation, International Association for Public Participation).
- Establishing clear objectives for community engagement.
- Employing a variety of engagement techniques to "meet people where they are," such as: community surveys, outreach booths at well-attended events, presentations, informational handouts, consultations with community groups and municipal leaders, use of social media and traditional media, fliers and door hangers, providing access to translation services, mailings, and creation of "Info Hubs" and a project website.

As Bayard works to champion projects featured in this plan, the Comprehensive Plan, the Infrastructure Capital Improvement Plan (ICIP) or other plans, **this Community Engagement Roadmap can serve as a useful resource to help project planners conduct meaningful community engagement**.

Local residents completing a survey at the Salsa Showdown to provide input for the development of the Community Forest Management Plans.

Recommended Tree List for Bayard

LARGE SHADE TREES

Common Name	Latin Name	Water Needs	Local Expert Notes
Persian Silk Tree/ Mimosa	*Albizia julibrissin*	Medium	Susceptible to freeze damage when young.
Common Hackberry	*Celtis occidentalis*	Medium	Prairie Sentinel(R) is a good cultivar for a more columnar look.
Netleaf Hackberry	*Celtis reticulata*	Low	Great native tree, not a good street tree.
Kentucky Coffee Tree	*Gymnocladus dioicus*	Medium	May experiment with this species, mixed results in other areas of NM.
Osage Orange	*Maclura pomifera*	Medium	Great tree, seedless and thornless varieties available.
White Mulberry	*Morus alba*	Medium	Very tolerant tree for urban conditions. High invasive potential.
Chinese Pistache	*Pistacia chinensis*	Medium	Performing very well. Very popular; beware of overplanting.
Mexican Sycamore	*Platanus mexicana*	High	Requires careful site selection, may be sensitive to drought conditions.
Honey Mesquite	*Prosopis glandulosa*	Low	Look for Texas variety that are thornless and more tree like in form.
Bur Oak	*Quercus macrocarpa*	Medium	Not widely available yet, but a great native tree.
Chinqapin Oak	*Quercus muehlenbergii*	Medium	Invasiveness is a characteristic of reproduction for oaks, so care should be taken in choosing planting location.
Shumard Oak	*Quercus shumardii*	Medium	
Southern Live Oak	*Quercus virginiana*	Medium	Doing well in many locations.
Western Soapberry	*Sapindus saponaria var. drummondii*	Low	Can form thickets, and have toxic properties.
American Elm	*Ulmus americana*	Medium	Gorgeous old specimens in area. Mostly sold as hybrid cultivars.
Cedar Elm	*Ulmus crassifolia*	Medium	
Lacebark/Chinese Elm	*Ulmus parvifolia*	Medium	Prolific seeds in fall - concern about invasiveness. Different tree than Siberian Elm.

Recommended TreeList for Bayard

EVERGREEN TREES

Common Name	Latin Name	Water Needs	Local Expert Notes
Deodar Cedar	*Cedrus deodar*	Medium	Performing well locally, but beginning to struggle in other parts of NM.
Arizona Cypress	*Cupressus arizonica*	Medium	Great tree with good hybrids available.
Yaupon Holly	*Ilex vomitoria*	Medium	Not a lot of familiarity locally, but doing well in other areas of NM.
Alligator Juniper	*Juniperus deppeana*	Low	Exhibiting some dieback locally. Does need supplemental irrigation.
Rocky Mountain Juniper	*Juniperus scopulorum*	Low	
Eastern Red Cedar	*Juniperus virginiana*	Low	
Aleppo Pine	*Pinus halepensis*	Low	Few examples locally, but seem to be doing well.
Single leaf pinyon pine	*Pinus monophylla*	Low	Small, but grows well locally.
Italian Stone Pine	*Pinus pinea*	Medium	Few examples locally, but seem to be doing well.
Arizona White Oak	*Quercus arizonica*	Low	Evergreen oaks generally do well locally.
Emory Oak	*Quercus emoryi*	Medium	
Escarpment Live Oak	*Quercus fusiformis*	Medium	
Mexican Elder	*Sambucus mexicana*	Medium	High performer in urban environments. Fast growing, but needs pruning to maintain its tree form.
Texas Mountain Laurel	*Sophora secundiflora (*SEE *Dermatophyllum secundiflorum)*	Low	Struggling with cold hardiness.

Recommended Tree List for Bayard

SMALL/MEDIUM TREES

Common Name	Latin Name	Water Needs	Local Expert Notes
Mexican Redbud	*Cercis mexicana*	Medium	Redbuds are doing well locally. Texas and Mexican species are doing particularly well. Eastern redbud (*Cercis canadensis*) is not generally recommended due to its intolerance to wind, but 'Forest pansy' varietal has grown well. Redbuds greatly benefit from good pruning.
Western Redbud	*Cercis occidentalis*	Medium	
Oklahoma Redbud	*Cercis reniformis*	Medium	
Texas Redbud	*Cercis texicana*	Medium	
Desert Willow	*Chilopsis linearis*	Low	Highly recommended.
Texas Persimmon	*Diospyros texana*	Low	Not much local experience with this species.
New Mexico Olive	*Forestiera neomexicana*	Medium	Highly recommended.
Golden-ball Leadtree	*Leucaena retusa*	Low	Good tree, but currently difficult to find.
Southern Wax Myrtle	*Morella cerifera*	High	No local experience with this species.
Texas/Little Leaf Mulberry	*Morus microphylla*	Low	Highly recommended.
Hoptree (Wafer Ash)	*Ptelia trifolata*	Low	Recommended by local experts. Drought tolerant.
Screwbean Mesquite	*Prosopis pubescens*	Low	Thorny, and concerns regarding their ability to handle local soil conditions.
Texas Red Oak	*Quercus buckleyi*	Low	Highly recommended.
Chaste Tree	*Vitex agnus-castus*	Low	Performing well locally, and can achieve small tree size in right conditions.


Thank you Bayard, for planting the next generation of trees!