

alta DRAFT DISCOVERY MEMO - Our Natural Environment, Montclair General Plan Update Prepared by Alta Planning + Design | April 8, 2019



TABLE OF CONTENTS

Introduction + Regional Context	03
Planning Context	04
Existing Parks + Open Space Network	05
Challenges + Opportunities	06
Public Parks and Gardens	07
Open Spaces	15
Trails	17
Streetscapes + Green Infrastructure	20

DOCUMENT PURPOSE

General Plans are intended to provide high-level vision and planning guidance. This scope of this discovery work is scaled proportionally, providing a high-level overview of Montclair's existing parks and open space network, and identifying preliminary opportunities to improve and expand that network that will be further explored during the charette and plan development phases of the General Plan update process.

INTRODUCTION + REGIONAL CONTEXT

Parks and open space networks enhance communities by providing a myriad physical and mental health benefits to residents and environmental services that contribute to a city's sustainability and resiliency. They provide opportunities for exercise and places for gathering and socialization, as well as habitat for beneficial urban wildlife. Green spaces and tree cover improve air and water quality and reduce surface temperatures.

Montclair is in a transitional zone between the coastal plains and mountains west and north of the city, and California's Inland Desert region to the east and south of the city. Montclair is located in the foothills of the San Gabriel Mountains of the Angeles National Forest. Average annual rainfall is generally 15 inches, though can fluctuate significantly from year to year and has, like many communities in Southern California, suffered from periodic drought. Daily temperatures are projected to increase by between 5-8 degrees by the end of this century. These conditions in turn increase vulnerability to extreme weather events such as droughts and wildfires¹. Montclair's primary drainage channel, the San Antonio Creek, originates in Mt. San Antonio (known locally as Mt.Baldy), and flows southwest via a concrete channel through San Antonio Heights and Upland before reaching Montclair, where it runs through the entire city parallel to its western boundary.

While Montclair is surrounded by natural features, the city itself is largely built-out with little undeveloped land. As such, we must creatively explore ways to enhance Montclair's parks and open space network and strengthen connections to regional assets to maximize benefits to the community.



Montclair is located between two ecoregions: Coastal Plains and Mountains of the LA region, and the Inland Desert

¹ California's Fourth Climate Change Assessment: Inland Deserts Region Report: http://www.climateassessment.ca.gov/regions/docs/20180827-InlandDeserts.pdf

PLANNING CONTEXT

The Montclair General Plan was last updated in 1999. It made limited recommendations for a trail system, active transportation network, and open space network. There are a number of planning efforts completed both for the City of Montclair and for San Bernardino County that will inform the Parks and Open Space Network recommendations of this Plan:

Holt Boulevard Specific Plan (1991): Streetscape Plan for Holt Boulevard with provisions for enhanced landscape elements to enhance the pedestrian experience.

North Montclair Specific Plan (1998): Made recommendations to improve pedestrian experience through enhanced streetscape design

North Montclair Downtown Specific Plan (2016, amended 2017): This proposed land use plan will create new opportunities for transit-oriented, mixed-use development with a downtown district atmosphere. It emphasizes the development of pedestrian oriented public open spaces including parks, plazas, squares, pathways, trails, and streetscapes. It further establishes recommended street tree spacing and selection guidelines.

San Bernardino County Non-Motorized Transportation Plan (Revised June 2018): This plan documents existing and proposed transportation routes for all the cities in San Bernardino County. The Plans for Montclair included proposed bike facilities along a limited number of major corridors. The proposed network is significantly limited, with no proposed north-south routes through the city's core, and only three proposed east-west routes. This plan is very limited. It does not include the potential for a trail along the San Antonio Creek, and does not propose any significant first/last mile improvements around the rail station. Many of Montclair's parks and schools are not incorporated into the larger active transportation network.

Montclair Active Transportation Plan (2019 - ongoing): The City is currently seeking a consultant team to develop an active transportation plan for the City. This planning effort should endeavor to work collaboratively with that team once selected by the City.

Montclair Safe Routes to School Plan (2019 - ongoing): The City recently selected a consultant team to develop a plan that will identify improvements to the transportation facilities around its schools. This planning effort should work collaboratively with that team to incorporate improvements relevant to the city-wide planning goals of this study.

San Bernardino County Safe Routes to School Plan Phase II (2017): This Plan includes several goals that can inform and support the Parks and Open Space element of Montclair's general plan: 1) Increase bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites; 2) make bicycling and walking an integral part of daily life in San Bernardino County, particularly (for bicycle) trips of less than five miles, by implementing and maintaining a bike network, providing end of trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycle safe and more convenient.

Omnitrans Strategic Plan (2017-2020): Identifies a Service and Operations Goal of Improving and expanding public transportation service to our customers and communities. To help achieve this goal, the Plan recommends "...policy and practices which support transit-oriented development in proximity to rail stations, bus corridors, or multi-modal transportation centers. Not only will this maximize the value of capital investments in transit, it will support the infrastructure, land availability, housing, services, and amenities needed to support viable mixed use, mixed income, pedestrian-friendly, and walkable communities."

San Bernardino County Department of Public Health Strategic Plan (2015-2020): The Plan's vision statement includes four guiding statements, one of which is "We Envision a sustainable system of high-quality education, community health, public safety, housing, retail, recreation, arts and culture, and infrastructure in which development complements our natural resources and environment." It also identifies a series of priority focus areas, of which

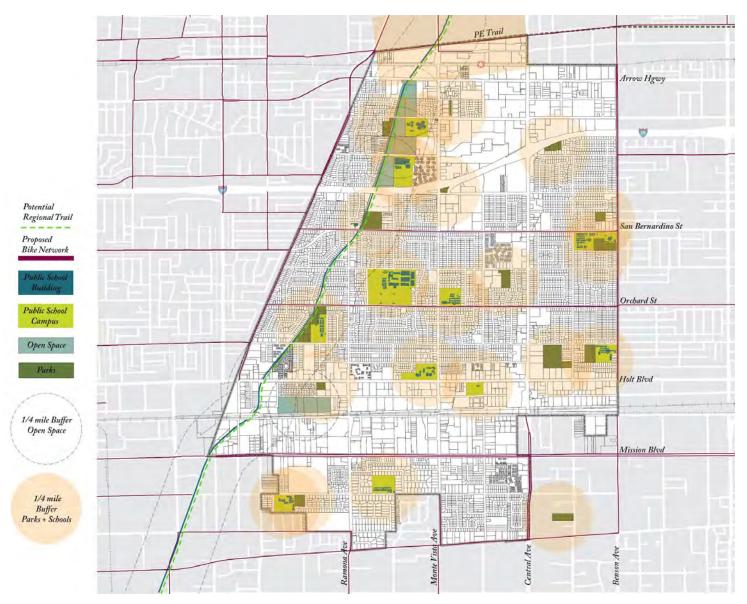
Community and Environment is ranked number one. Relevant goals of the Community and Environment Priority Area include Sub-goal 1.1: Support healthy communities through policy, systems, and environmental strategies; and Sub-goal 3.1: Improve access to open space, parks, trails and recreation.

San Bernardino Countywide Vision 4 Safety (Community Vital Signs): The Plan includes an Environment Element that states "We must protect and preserve the terrain and natural amenities with which we are blessed. We shall strive to intelligently manage our resources for habitat preservation, recreation opportunities, resource extraction, alternative energy, future growth, water quality, and air quality all within a regulatory framework that does not impede the creation of a sustainable economy."

EXISTING PARKS AND OPEN SPACE NETWORK

Montclair's parks and open space network are comprised of the following elements: 1) formally programmed public parks and gardens operated and maintained by the City of Montclair; 2) undeveloped open spaces; 3) semi-recreation areas, such as school yards and playgrounds; 4) trails and streetscapes.

The map below identifies each of these areas, and places a ¼-mile radius around each, representing a typical 10minute walk. This reveals large areas of Montclair that are located outside of easy travel distance from these parks and open spaces, underscoring the need to expand access via improvements to the City's active transportation network.

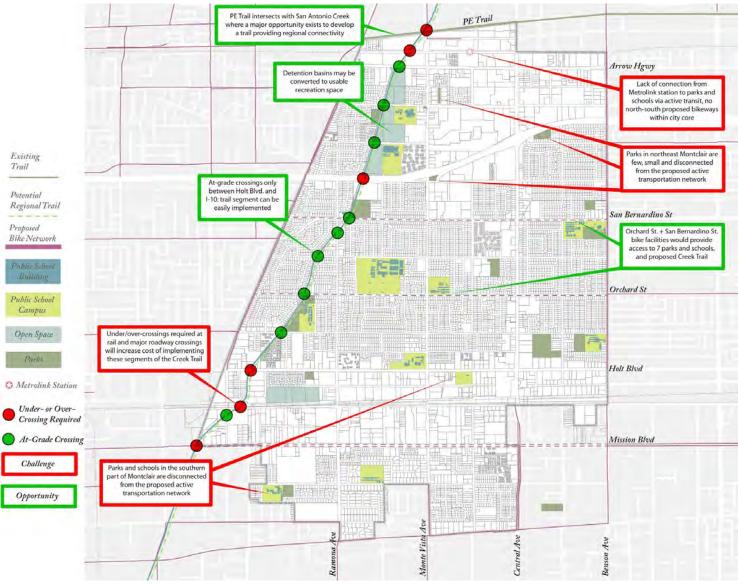


Parks and open spaces of Montclair, with quarter-mile buffers representing what is accessible within a 10-minute walk

Parks + Open Space Network - Challenges + Opportunities Summary

There are a number of challenges to expanding the city's stock of parks and open space. Montclair is largely built-out with few vacant parcels available to develop into future parkland, and among the city's current stock of parks, all are small neighborhood parks as opposed to larger, regional parks capable of serving a larger population. The PE Trail at the northern end of the City is a fantastic regional trail, but there are no planned or existing bike routes that connect it to the city's other recreational resources. Montclair does not have existing city-wide plans that require street trees, which has resulted in many city streets that have few or no street trees. Without the shade provided by canopy trees, it can feel hot and uncomfortable to walk and bike and discourages using active modes to access open space.

There are some key opportunities to enhance and expand the city's network of park and open space. Along the existing San Antonio Creek Channel there is an opportunity to develop a regional bike and pedestrian trail with connections to the existing Pacific Electric Bike Trail and the nearby parks, schools, and proposed bikeways. Existing stormwater detention basins within the city have potential be designed to incorporate recreational uses and increase the city's existing stock of parkland. Establishing bike and pedestrian-oriented design recommendations and standards for the public right-of-way, such as planting shade street trees, green infrastructure, pocket parks, and other pedestrian oriented amenities will help the city's streets to function as extensions of the open space network.



Opportunities + Constraints overview map **Public Parks + Gardens**

Summary of Parks Opportunities and Constraints

Montclair has a very limited number of parks and gardens. There are 13 parks in Montclair that occupy 46.27 acres,providing 1.18 acres of park land per 1,000 residents. This is eight and a half times below the national average of10.1acresofparkparklandper1,000residents².

The community survey and feedback from community focus group meetings found that residents 65% or respondents are satisfied with the quality of the City's parks. Community members feel there's room for improvement to parks in terms of perceived safety at parks, park maintenance, adding amenities, and increasing the number of parks. This tells us that Montclair's parks are well loved, with some room for improvement. For example, many of Montclair's parks are separated from the surrounding neighborhoods walls and have limited ingress/egress points. This condition can create a sense of isolation and a lack of perceived safety for park users. Developing welcoming entry points and limiting the use of walls can improve that sense of safety. Tree cover in Montclair's parks vary, some have ample mature tree canopies that provide shade and others have more limited tree canopy coverage. Program amenities at parks include ball fields, basketball courts, a skate park, and playgrounds. Several of the city's parks have no hard programming and simply provide open green space.

There is an opportunity to improve connectivity to parks through the development of a local bike network to connect these recreational destinations to other activity nodes in Montclair, such as schools, employment hubs, retail areas, transit stops, and neighborhood centers, as well as to the proposed regional bike and pedestrian trail along the San Antonio Creek Channel. Exploring opportunities to acquire land, such as the recently acquired Reeder Ranch property, and re-design the city's detention basins represent major opportunities to expand the city's parks and open space network.

² 2018 National Recreation and Park Association (NRPA) Agency Performance Review: Park and Recreation Agency Performance Benchmarks: https://www.nrpa.org/siteassets/nrpa-agency-performance-review.pdf

Parks Existing Conditions

<u>Alma Hoffman Park</u> (5201 Benito Street - 4.95 acres) This park contains a playground, installed more than a decade ago. Other park amenities include a zero-depth water feature Splash Pad that is open during the summer, two lighted tennis courts, a lighted skate park, a lighted basketball court, and restrooms. Parking is available via a surface lot adjacent to Benito Street. The park is accessed via the surface lot, or via a pedestrian linkage with City Hall. The park is located 1.5 blocks from Central Avenue and is immediately adjacent to Montclair City Hall, Public Library, recreation center, and other city offices. It is less than ¹/₄ mile from the future proposed bike network on Orchard Street.

The park amenities are in fair condition, and the splash pad and playground are well used, especially during the Summer months. The remaining open space of the park is sparsely planted with trees and has limited shade. A gazebo provides limited seating and a shade structure. The cinder block walls separating the park from the adjacent residential neighborhoods create a feeling of isolation, preventing neighbors from practicing natural surveillance of their neighborhood park. Picnic benches are currently located towards the back of the park, distant from the parking lot and playground areas, and are not convenient to other amenities. There are no trees in the parking lot, here there is an opportunity to add planting at the park entrance to create a welcoming feel, while being mindful of keeping sight lines open. Additional tree plantings may be considered within appropriate distance from the playground and splash pad



Left - Alma Hoffman Park Playground, Right - Alma Hoffman Park Skate Park

Essex Park (4295 Howard Street - 4.4 acres) This park contains a single, un-lighted baseball field and snack bar facility. Parking is available via a surface parking lot with entrance on Essex Street. The park is located immediately adjacent to Ramona Elementary School, connected to the park via a playground, and less than one mile from the San Antonio Creek Channel, a proposed regional trail.

There is an opportunity to improve the park's appeal with the addition of amenities to the perimeter green space. These amenities could include a perimeter walking path with fitness equipment, childrens play area, and picnic areas for example. Amenity options should be limited to maintain water drainage function of the park. The addition of night lighting would encourage evening hour usage of the park. Unlike some other parks in the city, Essex park is not walled off from the surrounding residential area, permitting good visibility and connection to the surrounding residential area. This concept known as 'eyes on the street' or 'natural surveillance' is an important element of deterring crime in public spaces, and should be incorporated into future park and open space development in Montclair. There is a community desire to upgrade the snack bar so that it can serve hot food during events and league games.



Mature trees shade Essex Park

<u>Golden Girls Park (formerly Vernon Park)</u> (9762 Benson Avenue, OMSD property - 1.87 acres) This park contains a single softball field and amenities, a snack bar facility, and restroom. It is used during weekdays by the adjacent Buena Vista Arts Magnet School, and there is a joint use agreement with the city for league Softball Games. There is a community desire to upgrade the snack bar so that it can serve hot food during events and league games. The snack bar is owned by the school district.



Left - Diamond sports at Golden Girls Park, Right - Snack facility at Golden Girls Park

<u>Kingsley Park</u> (5575 Kingsley Street - 3.0 acres) This park contains a single baseball field, and snack bar facility. There is a turf grass area with shade trees and a surface parking lot located along Kingsley Street. The park is located immediately adjacent to Kingsley Elementary School and less than ¹/₄ mile from Holt Boulevard and Benson Avenue, a future proposed bikeway. This park is leased to the city under a joint use agreement.

There is an opportunity to improve the park's appeal with improvements to the existing diamond sports facility, as well as adding amenities to the open turf area adjacent to the parking lot. These amenities could include a children's play area, picnic areas, and shade trees. There is a community desire to upgrade the snack bar so that it can serve hot food during events and games.



Left - Turf at Kingsley Park, Right - Backstop at Kingsley Park

MacArthur Park (5450 Deodar Street - 2.64 acres) This park contains a batting cage, playground with engineered wood fiber that was installed more than a decade ago and is in fair condition. There are picnic tables and parking is available in a surface lot accessed via Deodar St. Access is only via the Deodar Street entrance. The park is located in a residential neighborhood immediately adjacent to the 10 Freeway which borders the park to the north.

MacArthur park is walled on three sides which creates a feeling of disconnect from the surrounding neighborhood and prohibits any meaningful level of natural surveillance, or "eyes on the street" from occurring. There is an opportunity to increase the park's appeal by adding amenities such as a perimeter walking trail with fitness stations, and shade trees or canopies adjacent to the playground and picnic table for shade. Additional ways of connecting the park to the local neighborhood should be explored.



Left - Playground at MacArthur Park, Right - picnic bench and play area

<u>Mini Park #1</u> (9120 Monte Vista Avenue - 0.28 acres) This park contains two picnic tables and two large shade trees. There is no dedicated parking or restroom. A bus stop shelter is located adjacent to the park on Monte Vista Avenue. As this park is located directly on Monte Vista Avenue and is not walled off from the surrounding residential neighborhood, there is an existing element of natural surveillance.

There is an opportunity to increase the appeal of this park by adding amenities such as a small fitness station loop and additional picnic areas with shade trees. The park is located within a ¼ mile of Moreno Elementary School and the San Antonio Creek Channel, a proposed future regional trail. It is also co-located with a bus stop.



Left - Bus stop adjacent to Mini Park #1, Right - View to Monte Vista Avenue

<u>Mini Park #2</u> (4682 Highland St. - 0.07 acres) This is Montclair's smallest park, and has no amenities aside from landscape. There is no dedicated parking or restroom, and it is surrounded by fencing from the adjacent private property.

The appeal of this small neighborhood park could be enhanced by adding a picnic area, and could be considered as a potential community garden space.



Mature tree at Mini Park #2

Moreno Vista Park (4675 Moreno Street - 3.4 acres) This park contains no amenities aside from landscaping. There are existing tennis courts in poor condition that are permanently closed. Parking is located in a small surface lot accessed via Moreno Street, and the park is located immediately adjacent to the San Antonio Creek Channel, a proposed regional trail. The park is separated from the surrounding residential area on three sides by cinder block walls.

The appeal of this park could be enhanced by adding amenities such as a perimeter walking trail, a children's playground, and picnic areas. The existing tennis courts can be repaired and re-opened to the public or removed and replaced with other amenities that may prove more popular. The tennis courts are sited on top of a reservoir owned by MVWD, which would require coordination and approval of any improvements. There is an opportunity for this park to become a destination with the future development of the San Antonio Creek Channel trail. The park could also be enhanced by the inclusion of the detention basin directly across the San Antonio Creek Channel which could provide additional opportunities for active and passive recreation.



Left - View from parking lot at Moreno Vista Park, Right - Tennis courts closed to public use due to poor condition at Moreno Vista Park



San Antonio Creek Channel adjacent to Moreno Vista Park

Saratoga Park (5397 Kingsley Street - 11.7 acres) The largest park in Montclair, amenities include a playground, four baseball fields, a snack bar, basketball court, picnic areas, and two surface parking lots located on Kingsley Street and Vernon Avenue respectively. The park is located within a ¹/₄ mile of Kingsley Park, Kingsley Elementary School, and Central Avenue. This park has the potential to incorporate a sports field, as it has a large grassy area.

There are nice clusters of mature shade trees, and more should be added to the northern half of the park where a large expanse of open turf exists. A wrought iron and cinder block fence currently separates the park from the adjacent apartment complex on the east side. As this fence is frequently cut to gain access, a more permanent gateway or set of gateways leading from the complex to the park should be explored. There is a community desire to upgrade the snack bar so that hot foods can be served during games. There is an opportunity to increase this park's appeal with the addition of a walking path and more shaded seating opportunities.



Left - Playground shaded by mature trees at Saratoga Park, Right - Path and lighting between diamond sports fields at Saratoga Park



Benches line the path around sports fields and open lawn at Saratoga Park

Sunrise Park (5616 Princeton Street - 2.34 acres) A small neighborhood park with a playground and picnic table area, parking is available in a surface parking lot accessed via Princeton Street. This is the park's only entrance. The park is located with easy access to Benson Avenue and San Bernardino Street, both proposed bikeways.

The park suffers from visibility and access issues. It is separated on 3 sides from the surrounding residential area by cinder block walls, and the access point via an alley at the northeast corner has been closed. This has created a feeling of isolation and a lack of perceived safety in the park. An adjacent city owned parcel exists to the south. There is an opportunity to increase the park's connectivity by incorporating the city owned parcel into the park and creating an additional neighborhood entrance here. The park's appeal could be improved with the addition of amenities such as a perimeter walking path with fitness stations, more shade trees, and additional seating areas.



Left - Picnic tables shaded by mature trees at Sunrise Park, Right - Playground at Sunrise Park

Sunset Park (4351 Orchard Street - 7.3 acres) This park's amenities include a playground, pickle ball court, and one surface parking lot accessed via Orchard Street, which has a fruit park and newly added benches. The existing restroom building is to be removed. The park is located immediately adjacent to the San Antonio Creek Channel, a proposed regional trail, and to Lehigh Elementary School. Orchard Street to the north is a proposed bikeway.

Access to this park via walking and biking can be vastly improved by implementing the proposed Orchard Street bike facility and the San Antonio Creek Channel. An opportunity exists to enhance the appeal of this park with the addition of amenities such as a perimeter walking trail with fitness stations, picnic areas, and sports courts. The school district leases approximately 20,000sf of this space from the city.



Left - Mature trees at restroom to be removed at Sunset Park, Right - Path at the perimeter of Sunset Park adjacent to the San Antonio Creek <u>Wilderness Basin Park</u> (4594 San Bernardino Street - 4.32 acres) This park is operated by Chino Basin Water Conservation District and is one of Montclair's newer parks. Park amenities includes special installations such as a

demonstration garden and planting areas, a walking path, fitness equipment, picnic area, restrooms, and a surface parking lot accessed via San Bernardino Street. The parking lot includes permeable paving. The park is located immediately adjacent to the San Antonio Creek Channel, a proposed regional trail, and San Bernardino Street, a proposed bikeway. This location makes the park a potential future destination or stopping point on the regional bike network. The City leases approximately 3.3 acres of the park from the CBWCD.



Left - Fitness equipment adjacent to a natural surface trail in Wilderness Basin Park, Right -Picnic tables and diverse mature trees at Wilderness Basin Park



Native planting area at Wilderness Basin Park

Paseos Park (4914 Olive St, Montclair, CA 9176) is a linear park space with a terraced landscape and seating areas, pedestrian-scale lighting, and educational signage. It doubles as a stormwater capture feature of the residential development. This is Montclair's newest park and its high-design aesthetic make it a community favorite.



Movable seating in the park space at the Paseos

Reeder Ranch (4405 Holt Blvd, Montclair, CA 91763) is a historic orchard and home site that the city recently acquired. It is located adjacent to a City parcel of 1.57 acres and is planned to be developed in the future as an interpretive center for Reeder Ranch and Park. The proposed project will construct a historical and cultural center park site on land owned by the former City of Montclair Redevelopment Agency. Development of the park site will include construction of a building that would act as a historical and cultural center regarding the City's citrus- related past to be owned and operated by the City. The facility will house artifacts related to the City's citrus heritage and development. The City will partner with the Ontario- Montclair School District on development of programs to instruct school children about the City's past, suburban and urban development, and environmental issues. The facility will include an outdoor amphitheatre for City/ School District- sponsored community events. This amphitheatre will be used for environmental and healthy- eating programs associated with the community orchard (fruit park) and a community garden, to be developed onsite, where fresh fruits and produce would be furnished to children and the community at large. A parking lot would be constructed to serve the cultural center and the community activities associated with the city programs.



Open Spaces

Undeveloped open spaces in the city are limited, consisting primarily of the series of detention basins that flank the San Antonio Creek and occupy approximately 57.6 acres of land. These detention basins are currently fenced off and inaccessible to the public. The City and the Chino Basin Water Improvement District have indicated a willingness to open this land up for use as public open space, much as it did with the Wilderness Basin Park, described above.

The primary function of these detention basins is stormwater management. Developing these spaces into usable recreation space will require coordination with the Chino Basin Water District, which controls these lands, and designs must not degrade the storage capacity of the spaces.

Additionally, there is a city owned vacant lot that is currently located in unincorporated San Bernardino County. It is fenced off and unavailable for public use. This lot could be developed as additional parkland if the area is incorporated into the city.



Left - One of the detention basins that flank the San Antonio Creek, Right - Cleared vacant lot in unincorporated San Bernardino County

Semi-Public Recreation Areas

The City is currently developing a Safe Routes to Schools Plan. The General Plan should consider recommendations made in that plan within the context of our study.

There are several public schools located within the City of Montclair that have school yards and playgrounds. While they are not open to the public, they are accessible by students. These include:

- <u>Moreno Elementary School</u> contains two playgrounds, basketball courts, and blacktop courts, as well as open lawn.
- Serrano Middle School contains soccer fields, basketball courts, tennis courts
- <u>Montclair High School</u> contains two baseball diamonds, softball diamond, football field, basketball courts, soccer field, and tennis courts
- Monte Vista Elementary School contains 4 playgrounds, open lawn, basketball, and blacktop sports
- <u>Lehigh Elementary School</u> contains a playground, basketball courts, blacktop courts, and is adjacent to Sunset Park
- <u>Ramona Elementary School</u> adjacent to Essex Park, contains two playgrounds, basketball, and sport courts, as well as open lawn
- Howard Elementary School contains open lawn, diamond sports, blacktop sports, and soccer
- <u>Kingsley Elementary School</u> adjacent to Kingsley Park and contains basketball and blacktop sports, and a playground, as well as open lawn space

<u>The Waterwise Community Center</u> (4594 San Bernardino St, Montclair, CA 91763), situated immediately adjacent to the Wilderness Basin Park, is free and open to the public during the center's business hours (Monday - Saturday, 8am-5pm) and contains a demonstration garden planted with native and drought-tolerant species.



Left - Demonstration garden at the Waterwise Community Center adjacent to Wilderness Basin Park, Right - "dry creek"

Trails

This Plan will consider ways in which its trails and streetscape network, examined through the circulation element, can support and enhance the parks and open space element both through greening and by improving connectivity between parks and major destinations throughout the City and the region.

Montclair has a limited trails network. The built network consists solely of a small segment of the P.E. Right of Way Trail in the northernmost tip of the city. This is a regional trail that extends west into Claremont, and east to Upland and provides access to Claremont Colleges and Upland Memorial Park respectively, as well as access extending into Rialto and beyond.

There is potential to expand the City's trail network to include a mixed-use trail along the San Antonio Creek Channel, which would also provide an opportunity for limited urban greening.

San Antonio Creek

One of the major opportunities to expand open space in Montclair is by developing a shared-use trail along the maintenance path adjacent to the San Antonio Creek Channel. This creek runs the entire north-south length of Montclair's western boundary for just over 3 miles, and extends into the communities north and south of the city. It intersects the regional PE Trail, connecting east and west into Claremont and Upland.

San Antonio Creek History + Origins

San Antonio Creek originates in the San Gabriel Mountains north of Montclair in the "Baldy Bowl" of Mt. San Antonio (aka Mt. Baldy), the highest peak of the San Gabriels. It winds its way south through the Angeles National Forest before reaching the communities of San Bernardino County that now lie at the foothills of the mountains. In 1938, Southern California experienced some of the worst flooding in its recorded history. Two converging storm systems brought significant snowfall to the San Gabriel mountains that was melted nearly immediately by a second warmer storm system. The resulting flood impacted multiple creek and river systems throughout Southern California, including the San Antonio Creek, causing extreme destruction in its wake.





A home in the Inland Empire destroyed by the 1938 flood (image source: dailybulletin.com)

A road between Claremont and Upland submerged in raging floodwaters in 1938 (image source: dailybulletin.com)

In response to this catastrophe, communities throughout the region invested heavily in massive infrastructure projects to prevent future flooding through the Flood Control Act of 1938. In 1955 the Army Corps of Engineers completed construction of the San Antonio Dam, which is nearly three-quarters of a mile long and controls runoff from a 27-square mile catchment. As an additional flood protection measure, the San Antonio Creek was lined with concrete between 1956 and 1960 to help rapidly divert stormwater in the event of another extreme flooding event.



(Left) San Antonio Dam and filling basin, (Right) San Antonio Creek emerges from Dam (image source: Spencer Croce)

The segment of the San Antonio Creek that runs through Montclair is flanked on either bank by a buffer zone of approximately 15-20' that is gated off and used for channel maintenance. Many communities throughout the region have used similar spaces to develop bike and pedestrian trails, such as the LA River Trail, the Rio Hondo Trail, and the San Gabriel River Trail--and the potential exists to do the same in Montclair. The Creek spans just over 3 miles, and presents a tremendous opportunity for the community to expand its active transportation network and access to parks, schools, and other key destinations throughout the city.



(Left) San Antonio Creek adjacent to Sunset Park, (Right) San Antonio Creek at Moreno Street across from Moreno Park

There are a number of different high-level design considerations for such a project:

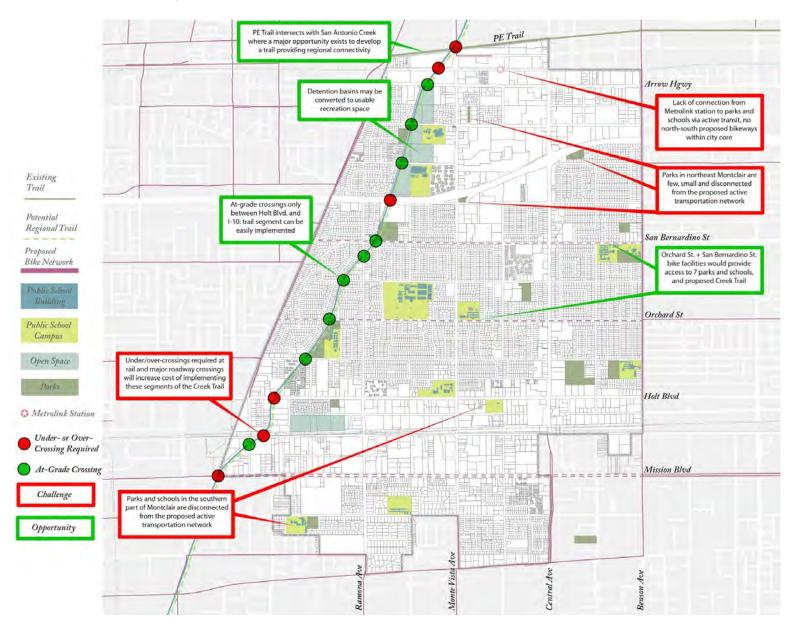
- Alignment: A maintenance area exists on both the east and west bank of the creek for the majority of its length, should the trail run along the east bank, west bank, or a combination?
- Crossings: Where can the trail cross the road at-grade and where are under/overcrossings needed?
- **Destinations/Access:** Where are there opportunities to create trailhead access points to the channel? Where does it intersect with planned bike facilities? Are there nearby destinations?

Alignment: The majority of Montclair lies to the east of the creek, meaning that an alignment on the east bank of the creek will make the trail most accessible to the greatest number of people. This is also the side of the creek that the detention basins are on, one of the largest public open space development opportunities. The amount of space available adjacent to the creek along the maintenance path is approximately equal throughout the corridor, so determining which side of the channel to align the trail should be driven by community and stakeholder input. Connection to the trail from both the east and west bank should be considered, regardless of which side or sides of the channel the alignment ultimately lies. The community design charette will provide an opportunity for community members and members of the consultant team to collaborate and test different alignment alternatives.

Crossings: There are fifteen points at which the channel must cross a rail line or road. Nine of these may be crossed at-grade, six will require over or underpasses. Between Mission Boulevard and Holt Boulevard crossing opportunities are few. Rail and road grade conditions do not permit at-grade crossings, which makes a trail along this segment very costly. A more viable alternative in this segment may be to explore on-street bike connections that connect users to the trail beginning at Holt Boulevard. The 1.4-mile stretch of the creek between Holt Boulevard and the I-10 could be implemented with relative ease as Phase One of the project, as all crossings through this segment can be completed at-grade without constructing over/undercrossings. An on-street connection to cross I-10 is recommended, where the trail can resume adjacent to the detention basins north to Arrow Highway, and an on-street connection or new overcrossings can connect users to the PE Trail.

Note: Where the creek crosses Caltrans-controlled rights-of-way or rail lines, additional coordination will be required with those entities.

Destinations/Access: The creek intersects with three proposed East-West bikeways, on Mission Boulevard, Orchard Street, and San Bernardino Street. It also intersects the existing PE Trail segment through Montclair. There are several parks, schools, and open spaces within a mile of the creek trail. The City's current Safe Routes to School and Active Transportation Plans provide another avenue to explore this proposed trail and connections to a larger network. Some limited opportunities exist to develop linear park spaces or trailhead access parklets along the creek. Those are identified in the map on the below.



Red circles indicate crossing points that will require under or over-crossings to implement the San Antonio Creek Trail, green circles represent intersections where the trail can cross at-grade.

Streetscapes + Green Infrastructure

The street network of Montclair occupies a large percentage of the city's land use. The public right-of-way is an extension of Montclair's open space network. No data is currently available to quantify the amount of tree canopy that exists within the City's right-of-way. However by examining aerial photos of Montclair it is evident that many of the City's streets lack trees and greenery, exposing those walking and biking to sun and heat and serving as a deterrent to walking and biking.

A brief sampling of evidence resulting from numerous studies over the past 40 years made available through the document 'Green Cities: Good Health' (published by the University of Washington and the U.S. Forest Service), indicates the importance and potential benefits of investing in the 'greening' of Montclair's public right-of-way.

- Among minor crimes, there is less graffiti, vandalism, and littering in outdoor spaces with natural landscapes than in comparable plant-less spaces.
- Studies of residential neighborhoods found that property crimes were less frequent when there were trees in the right-of-way, and more abundant vegetation around a house.
- The character of a neighborhood has a significant effect on residents physical activity. People in communities with abundant green space generally enjoy better health.
- Urban heat island effect occurs in built up areas. Parks can be up to 2°F cooler than the surrounding urban area in the day. Large numbers of trees and expansive green spaces across a city can reduce local air temperatures by up to 9°F.
- Urban trees perform a range of environmental services that make cities healthier places, including improved air and water quality, energy savings, noise abatement, and improved soils. In total these services may provide billions of dollars of value each year.
- Exercising in a green environment appears to enhance the restorative effects of urban greenery, and more restorative outdoor settings may boost exercise frequency.



Orchard Street at Fremont Avenue - the only trees along the majority of this block are located on private property

Street trees are one component of urban green infrastructure - landscape that provides ecological services to a community. Street trees provide a variety of benefits, from creating shade that lowers temperatures and make walking

more attractive, to helping regulate of indoor temperatures and lessening reliance on heating/cooling systems, to traffic calming, to providing habitat for beneficial urban wildlife. Many communities in the region have plans and policies in place that guide the selection of tree species, recommend tree spacing, and require street tree planting as part of new development. For example, the City of Claremont has a Tree Policies and Guidelines Manual that establishes approved street tree types, tree preservation guidelines, and recommendations regarding maintenance, watering, pruning, and pest management. Some cities have more extensive guiding documents with greater detail, such as Culver City's Urban Forest Master Plan. Montclair does not have any of these plans or policies in place, and as part of this General Plan effort there is a tremendous opportunity to recommend baseline standards for street tree planting.

Language from the North Montclair Downtown Specific Plan incorporates sidewalk and street tree standards for proposed development which states street tree spacing shall be between 25 feet and 45 feet on center with adjustments in spacing pursuant to public works standards. Street trees on a given block shall be of the same species and shall be selected per the primary solar orientation of the street as follows: Streets oriented primarily in a north-south direction: Deciduous or Evergreen trees. Streets oriented primarily in an east-west direction: Deciduous trees. Where appropriate, native California tree species shall be used in combination with other drought tolerant species.



There is an opportunity with this Plan update to expand the role of green infrastructure to include rain gardens and bioswales to help manage and treat runoff while beautifying the streetscape. These features can be incorporated into the parkway adjacent to the sidewalk, and can also be integrated into buffers installed adjacent to protected bikeways. Montclair does not currently have any of these features. Some photos of regional precedents are shown below.



Left - Protected bikeway with integrated bioswale, Temple City, CA, Right - Bioswales adjacent to parking lot in San Diego, CA