

WESTSIDE CREEKS ECOSYSTEM RESTORATION

Appendix K: Other Social Effects

OTHER SOCIAL EFFECTS

EXECUTIVE SUMMARY

Social well-being factors are constituents of life that influence personal and group definitions of satisfaction, wellbeing, and happiness. The distribution of resources, the character and richness of personal and community associations, the social vulnerability and resilience of individuals, groups, and communities; and the ability to participate in systems of governance are all elements that help define well-being and influence to what degree water resources solutions will be judged as complete, effective, acceptable, and fair. In large measures these issues are the province of the Other Social Effects (OSE) account.

The OSE account has appeared, in various forms and nomenclatures, in federal guidance for many years. What has varied is the “status” of the account—whether required—and its importance—whether considered in formulation and plan selection. EC 1105-2-409, Planning in a Collaborative Environment (EC 409), greatly increases the emphasis and potential application of the OSE account by stating all four accounts (NED, EQ, RED and OSE) will be considered in project analysis and decision making. While OSE is not always accepted as a factor in the decision making and the overall success of a project, next to solid engineering, it may be the most important factor in the success of a project.

The Westside Creeks have attracted humans for over 10,000 years, from Native Americans, to Spaniards, to a variety of European settlers, to San Antonio's current residents. Once the impetus that made life possible for both wildlife and human communities, the creeks have been reduced in their community significance since they were channelized by the USACE in the 1960s and 70s to reduce flood risk. San Antonio River Authority (SARA), working to sustain and enrich life in the San Antonio River Watershed, began restoration work with the San Antonio River Improvements Project, a broader focus from the San Antonio Channel Improvement Project, and has continued this process into the Westside Creeks, leading this project and ensuring extensive community involvement. Through a lengthy public process, particular interest in providing increased opportunities for people to enjoy these urban creeks in a social, cultural, educational, recreational, and historical setting was expressed in such a way that would reunite the once connected community.

Initiated by SARA in 2008 with support from an interdisciplinary consultant team and the Westside Creeks Restoration Oversight Committee (WCROC) (a broad group of several committees such as neighborhood associations, an Audubon Society, historical, conservation, cultural society, school districts, community representatives, and stakeholders), public involvement activities involved the community that lives near the creeks and stakeholders to develop the Westside Creeks Restoration Conceptual Plan and ensure it reflects the local community ideas. The social condition of the Westside Creek communities would benefit from an ecosystem restoration and recreation project to restore its once vital and connected community.

Environmental justice principles demand that all residents need protection from disproportionately high and adverse human health and environmental effects of Federal agency programs and activities on minority populations and low-income populations. The study area is low-income, minority-dominant, and ultra urban with less access to recreation due in part to the channelization of the Westside Creeks compared to the city of San Antonio and nation. This lack of recreational activity opportunities negatively effects the fastest growing populations subject to health risks

such as obesity. These poor and minority groups, who have borne more than their share of the negative effects of development, were invited for public participation. Meaningful involvement of all people of the Westside Creeks community was used to develop the goals for the Westside Creek project.

The restored Westside Creeks is worth more to the nation as a vibrant, resilient regional economic hub than what its future would be without an ecosystem restoration and recreation project that affords the community an opportunity to reunite with nature and each other.

The OSE analyses for the Westside Creeks study area reflect a highly complex set of relationships and interactions between the social and cultural settings which are impacted by the study. This report is to account for the social effect outputs attributed to the Westside Creeks ecosystem and recreation plan effects.

INTRODUCTION

The Westside Creeks study area includes 14 miles of Alazán, Apache, Martínez, and San Pedro Creeks, primarily located in the city's urban core. The Westside Creeks, located due west of the vibrant, livable, and economically charged downtown area of San Antonio, are tributaries to the San Antonio River and were previously channelized as part of the San Antonio Channel Improvements federal flood control project in 1954. During public workshops spearheaded by SARA, the communities reflected on the unique and rich history of Westside Creeks prior to the channelization when the creeks were known for swimming, fishing, a source for community gathering, enjoyment, and relaxation. The current condition of the channelized creeks is causation for the community to be physically and psychologically disconnected from other communities and community amenities as well as from the creeks. The outcome of multiple impediments that prevent individuals or groups from participating fully in the social and environmental life of the society in which they live is key to the communities' perspective of their social exclusion. This concept characterizes a form of social disadvantage or obstruction from environmental resources.



Figure 1. 1Channelization of Alazán Creek in the early 20th century



Figure 2. Typical desired natural condition with development & trail amenities (Underlying aerial from the 1960s following Corps channelization of Alazán Creek)

As a result of these conditions, San Antonio River Authority in partnership with an interdisciplinary consultant team, embarked on multiple phases of community engagement to create the Westside Creeks Restoration Conceptual Plan, a plan for restoration of the Alazán, Apache, Martinez, and San Pedro Creeks, to ensure it reflects the local community ideas. This Conceptual Plan documents the communities' input as it relates to improving water quality, increasing biological diversity, providing increased opportunities for people to enjoy these urban creeks, and suggesting redevelopment potential along their margins. Phase 1 of this planning process collected inventory and analysis where Phase 2 identified the overall vision and neighborhood reinvestment priorities for the Westside Creeks through community workshops. The outcome of this two year public participation planning process (six phases), the SARA was able to reduce the amount of years from the typical timeline and cost for the Corps feasibility study. This process also helped to create a reinvestment plan for the entire degraded area. Each phase of the public planning process will be discussed in more detail later in this report. Through a lengthy public process, these goals in the conceptual plan were established for the Westside Creeks Restoration Project:

- Environmental enhancement
- Aquatic and riparian restoration
- Flood control enhancement
- Recreational uses for all ages

- Water quality enhancement
- Low maintenance and sustainable design
- Fluvial geomorphology concepts
- Continuous hike and bike trails
- Transportation connectivity
- Public gathering places
- Cultural/historical awareness
- Public art
- Economic development
- Neighborhood and business connections

Many of these factors will be discussed in more detail throughout this report and will work to highlight the social impacts that should be considered in the analysis of the tentatively selected plan for ecosystem restoration and recreation.

By further study, a future with the Westside Creeks Ecosystem Restoration and Recreation project could contribute to the mitigation of several socially negative circumstances currently exhibited in the study area including the following:

- a comparatively high rate of bicycle crashes,
- the highest rating in child obesity for the city,
- degraded social connectedness and identity, and
- safety.

SCOPE OF REPORT

The necessity of analyzing social effects in addition to the typical economic impacts in the context of water resource planning has become apparent since Ecosystem restoration projects' services have direct or indirect social values that can be described and in some cases quantified (Coles, Loomis and Feather). Although the significance of Other Social Effects (OSE) factors have often been undervalued in the past, the Corps highlights that "next to solid engineering, it [OSE] may be the most important factor in the success of a project" (Dunning and Durden, Handbook on Applying "Other Social Effects" Factors in Corps of Engineers Water Resources Planning.)

"Today, ecological and social considerations are often of great importance in project planning and should not necessarily be considered secondary to the maximization of economic benefits."

—National Research Council 1999, p. 4

This report will discuss the social effect that have occurred in the Westside Creeks area as a result of the degraded creeks, effects that may have otherwise been overlooked by other planning analysis, and show the following:

- The impairment that occurred as a result of the channelization in both a qualitative and quantitative manner.
- The intensive public input process that worked to create a preferred restoration strategy and reinvestment plan for the study area—a process that worked in coordination with the Army Corps of Engineers Feasibility Study.
- The detrimental effects to the future of the City if the ecosystem restoration strategy were not funded and implemented. These effects will be discussed based on the topics of environmental justice and social effects.

PURPOSE

The Westside Creeks study is not formulated for OSE, but procedures are carried out to evaluate OSE benefits from the Westside Creeks tentatively selected plan for ecosystem restoration and recreation. The OSE account provides information about key social concepts and their importance in the Westside Creeks water resources planning.

ARMY CORPS OF ENGINEERS ALTERNATIVES

The Army Corps of Engineers has produced several alternatives for the future ecosystem restoration and recreation of the Westside Creeks. The impacts of the Army Corps of Engineers preferred alternative were examined from the viewpoint of social effects which will be discussed in this report.

COMMUNITY-BASED RESTORATION PLANNING

San Antonio River Authority's multiphase restoration planning efforts are significant to the study of social effects. SARA engaged its citizens on the type of restoration they wanted to improve their social conditions. The citizens desire to be connected to the creeks resulted in a combination of stream restoration approaches, economic development concepts, and recreation concepts. The Westside Creeks Restoration Conceptual Plan identified the public's vision for the Westside Creeks which is to restore ecological functions of the creeks while providing safety from floods, security from crime, connected communities, and celebration of unique identities. When realized, this would ultimately lead to restored and vibrant creek corridors. The Restoration Conceptual Plan also outlines a development of four frameworks of the vision to begin planning:

Water. A return to more natural conditions with a more natural low flow channel and enough flood capacity to maintain or improve the flood risk reduction benefits from the channelization. Opportunities for restoring or enhancing base flow should also be considered, primarily in San Pedro Creek. Additional land might be necessary to accommodate the wider channel and contain the floodplain.

Restoration. A treatment that restores natural processes through stable channel design incorporating meanders, wetlands, pools, riffles and drop structures. The restoration procedure would create channels that are in equilibrium with sediment transport. This restoration should also enhance the ecological functions of the stream with vegetation and wildlife habitat that resembles the pre-channelized state.

Connections. The creation of a continuous multi-use paved trail with neighborhood connections, creek crossings, and pedestrian bridges. Connections from the community into this trail system will range from simple gravel connectors up to trails of the same configuration and materials as the main trail. These connections should incorporate all of the transportation modes in use locally.

Security. Utilization of physical design, increased police patrols and increased public use of the creek corridor to improve creeks' safety. Specific locations will begin with simple features such as uniform lighting, signage, emergency call boxes, increased visibility and reduced understory growth. Basic design elements include clear lines of sight, uniform lighting using a white light source, clear delineation between public and private spaces, public "ownership", and access control.

With a strategy in place, SARA embarked on multiple phases of community engagement for planning future ecosystem and social recovery. The planning process was a partnership among over 50 public groups including neighborhood associations, residents, students, universities, school districts, churches, and many more to make up the Westside Creek Restoration Oversight Committee. SARA assembled a consultant team to work closely with SARA's Intergovernmental and Community Relations Department to execute a public involvement plan that consisted of information gathering through extensive community outreach. The outcome of the community involvement was the Westside Creeks Restoration Conceptual Plan.

The concept plan was developed over a two year period and included the following six phases:

Phase I, Inventory + Analysis

- Existing conditions and planning context were analyzed.
- Identified issues.
- Identified key analysis factors of creek conditions, adjacent land uses, redevelopment potential, restoration potential, flooding issues, connections, environmental hazards, cultural resources, wildlife habitat and public and private security.
- Classified opportunity areas for enhanced recreation and community re-development

Phase II, Vision

- Establish overall vision for the Westside Creeks
- Developed individual framework plans for each creek
- Refined the concepts to achieve a feasible plan

Phase III, Restoration Concepts

- Developed restoration concepts for each creek
- Coordination with other projects and teams (e.g. Watershed Master Plan, Linear Creek Greenways Program, etc.)

Phase IV, Catalyst Sites

- Identified and programmed catalyst sites by the community for further development are supported by opportunities for neighborhood redevelopment and recreation enhancements to revitalize the communities.
- Planned for key considerations including the enhancement and beautification of the creeks, trails, parks and open spaces; providing and supporting transportation connectivity, ADA compliance, and historical context; and adjacent land uses.

Phase V, Design Elements

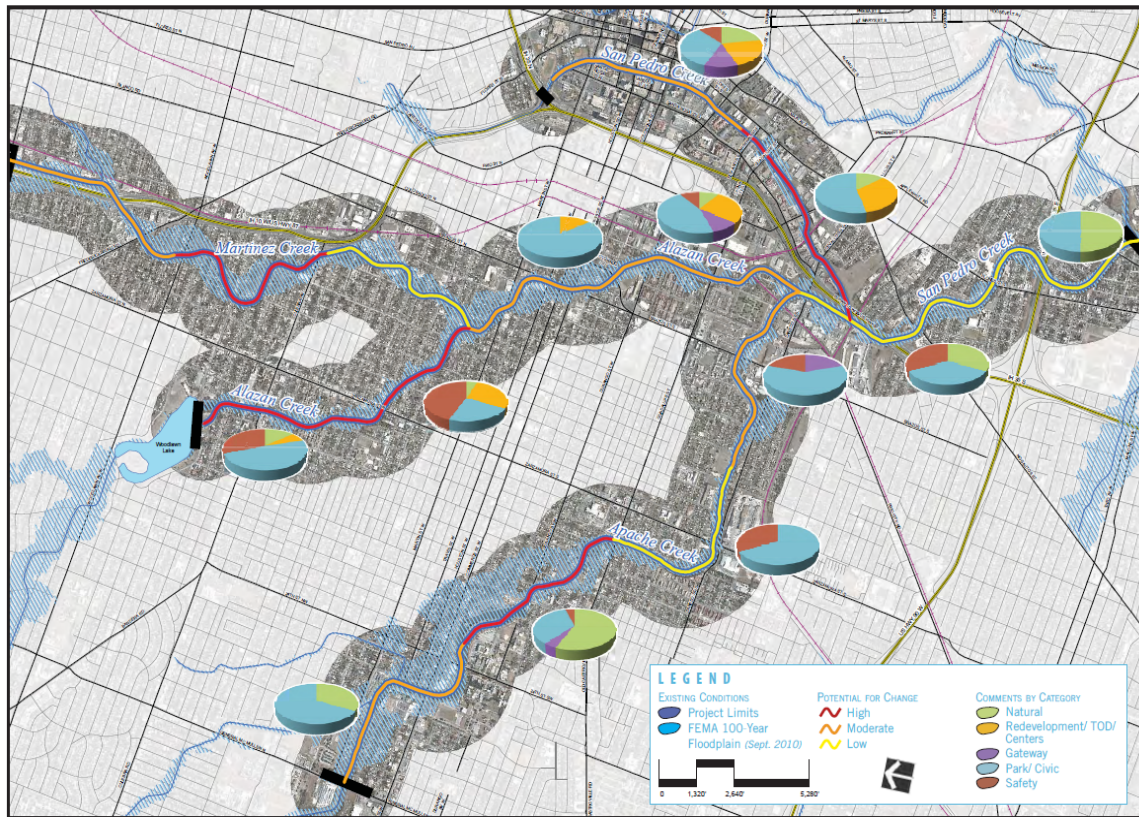
- Defined typical design elements
- Established best management practices

Phase VI, Implementation

- Developed an implementation plan identifies opportunities
- Addressed the multiple organizational partnerships and potential funding opportunities

From April 2009 through February 2010, SARA held a series of public and stakeholder workshops that engaged over 400 residents in setting the vision and establishing priorities for the

future of Alazán, Apache, Martinez, and San Pedro Creeks including community revitalization. The first public workshop, Public Workshop #1 – Prioritization, revealed neighborhood’s most challenging issues and promising opportunities. From these public comments, a pie chart explains breakdown of comments by percentage. Comments fell under five priority categories: Natural, Redevelopment/Transit Oriented Design (TOD)/Centers, Gateway, Park/Civic and Safety. The segment which received the largest percentage of comments fell into the “Park” category.



Public Workshop #1: Change Priority Analysis

Figure 3. Public Workshop Priority Analysis (from Westside Creeks Restoration Conceptual Plan)

Public Workshop# 2 – Catalyst Site Development was to educate the public regarding the vision development and to discuss concept alternatives. The third and final workshop for the Conceptual Design Phase, Public Workshop #3 – Plan Frameworks, and served to collect public feedback to make final refinements to the Draft Conceptual Design.

This transparent public process resulted in a plan for the ecological restoration of the streams, mitigation of existing flood hazards, and access along and across the streams. Considerable effort was expended by community members in the long range planning of economic opportunities that was publically agreed should be available from this project. A number of long-term design elements based on land use were developed to address connectivity and security. These elements were designed to increase access and usage by the public while maintaining the flood hazard reduction and ecological functions of the restored creeks. As described below, the social restoration design included the development of catalyst sites based on public workshops and stakeholder input.



Figure 4 Economic development opportunities provided by community members' long-range planning efforts - sample

Through investment in planning, SARA lead the San Antonio community through the conceptual planning process and helped to establish implementation considerations to the restoration project. As part of the process, funding options were provided for the long-term implementation of the plan as well as identification of phasing and schedule.

It was important for the local community and stakeholders to determine the project’s core values which resonate as themes throughout key messages by the community. The following table represents the communities’ core values identified in the Westside Creeks Restoration Project Conceptual Plan consistent with the WSC Recreation study:

Westside Creeks Restoration Project Conceptual Plan 2011	
Historic Theme	
	Return the roots and the history of the creeks so future generations can make connections to their history.
Cradle to Grave Theme	
	This theme reflects the core value that the creeks should be accessible, safe, and usable for all members of society, regardless of age or other demographic factors.
Rebirth Theme	
	This theme was raised by several WCROC members. This process will essentially give new life to the creeks, effectively generating a new perception of the Westside Community. This project also presents an opportunity to reintroduce the Westside of San Antonio to the rest of the City as a place that is ecologically-sound, safe and inviting.
Bringing Nature Back Theme	
	This conceptualizes a return to the creek’s former natural beauty. It is focused on the importance of bringing plants and animals back to the creeks. It voices the need to create a biologically sound and environmentally sustainable vision.
Connections Theme	
	The theme here is the importance of the creeks as a way of connecting points of interests, transportation networks, and the Westside to the rest of San Antonio. The consensus was that even though the creeks are on the Westside, they will be used by people from all parts of the city and county.

Other programs and committees have applicable interests in recreation component to the WSC project. As part of the public involvement and site analysis process for the Westside Creeks Restoration Project Conceptual Plan, various key stakeholders were interviewed about opportunities and challenges for this project. The stakeholders selected were in addition to the various groups identified to participate on the WCROC and are identified here:

Westside Creeks Restoration Oversight Committee (WCROC)
Residents and Neighborhood Groups
Business Owners and Business Groups
Elected Officials
San Antonio
Bexar County
Technical Officials
Bexar County officials
City of San Antonio
San Antonio River Authority
Media
Westside Service Organizations
Schools and Universities
Our Lady of the Lake University
St. Mary's University
General Public

RELATIONSHIP TO OTHER FEDERAL AND LOCAL PLANNING

The WSC project is a multi-benefit project meeting not only the Corps' mission for ecosystem restoration and recreation but also other federal and state agencies' missions. The following national and regional agencies have missions specifying goals, objectives, strategies, and initiatives to encourage action for the benefit of the Nation's health, safety, and overall sense of wellbeing, all of which are outcomes of the WSC ecosystem restoration and recreation project.

EXECUTIVE ORDER 12898

This order which was issued by President Clinton on February 11, 1994, calls for federal agencies to develop strategies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. It provides procedures on federal actions to address Environmental Justice for such populations. Environmental Justice focuses on the fair distribution of environmental benefits and burdens.

UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT)

On April 22, 1994, the Federal Highway Administrator and National Highway Traffic Safety Administrator submitted the final report of the *National Bicycling and Walking Study (NBWS)* from the Department of Transportation to the U.S. Congress (Bicycle and Pedestrian Program). The study contained two overall goals:

USDOT NBWS Goals
Double the percentage of total trips made by bicycling and walking in the United States from 7.9 percent to 15.8 percent of all travel trips
Simultaneously reduce by 10 percent the number of bicyclists and pedestrians killed or injured in traffic crashes.

SAN ANTONIO MASTER PLAN 2011

The City of San Antonio has established several planning resources to further coordinate the city's efforts to plan and provide for future growth and development. The San Antonio Master Plan 2011 contains three major sections: The Vision, Goals and Objectives and Policies (San Antonio Comprehensive Master Plan Framework). The vision is the plan's central purpose and establishes a broad framework for the consistent application of the individual goals, objectives and policies. The goals and objectives assist in achieving its vision. They also provide general guidelines for developing specific policies.

The Vision Statement in the City of San Antonio's 1997 Master Plan outlines the following framework:

- Equal opportunity to all its citizens and equity in the distribution of benefits.
- Safe, dynamic and sustainable neighborhoods which offer employment opportunities, high quality education, adequate and affordable shelters, and health care and recreational amenities.
- A vibrant economic climate which will attract and support a wide diversity of business opportunities and community services within the metropolitan area.
- Balanced and responsible urban design, planning and development, and responsible protection of the city's historical, cultural, and natural resources.
- An open, accessible, responsive, and fiscally responsible government whose structure creates the functional framework to accomplish the vision.

The following table represents the City of San Antonio 2011 Master Plan's goals and objectives which the WSC Recreation project satisfies (all others are not applicable to the study framework):

City of San Antonio Master Plan 2011 Urban Design Goals and Objectives
Goal 1: Preserve and enhance the city's urban design.
Objective C
Encourage patterns of urban development that provide a full range of housing choices and promote a sense of community, urban vitality and the efficient provision of infrastructure.
Objective D
Develop criteria and procedures for infill development, or significant new construction in an established area, which will enhance the character of neighborhoods.
Objective E
Apply strategies which will result in all existing and new streetscapes being accessible, safe, and stimulating.
Goal 3: Develop and maintain a diversified and balanced city-wide system of parks and open space.
Objective A
Utilize a planning process which encourages civic participation in the creation of a City park, recreation and open space plan which will: <ul style="list-style-type: none"> a) Coordinate the acquisition and development of public and private parks and open spaces; b) Develop master plans for existing City parks; c) Complete the development and revitalization of existing parks; d) Ensure that parks are fully accessible to all citizens.
Objective B
Plan and develop a citywide system of linear parks and hike and bike trails which incorporate drainage ways and open spaces to link parks, schools, institutions, and neighborhoods.
Objective E
Involve citizens in the design, development, and maintenance of parks and open spaces.
Goal 4: Plan, locate and maintain infrastructure and utilities to facilitate and maintain safe, healthy and sustainable environments for human activity.
Objective C
Create streetscapes which emphasize both pedestrians and vehicles.
Goal 5: Develop policies for various transportation modes that will increase access to employment centers, community services, culture, recreation, education and commerce; meet the needs of all San Antonians; decrease the reliance on single occupancy vehicles; and promote

transportation safety and efficiency.
Objective A
Develop a transportation plan that promotes safety and links neighborhood destinations throughout the City and allows residents access to regional destinations.
Objective B
Develop a system of complementary transportation modes which supports safe and efficient movement of people and goods, which results in an efficient pattern of urban development, including active and vital neighborhoods.
Objective C
Develop a transportation plan that promotes safety and links neighborhood destinations throughout the city and allows residents access to regional destinations.
Objective D
Expand the overall capacity for the movement of people by including alternative transportation modes in the design of the City's infrastructure and utility systems.
Objective H
Promote the safe use of bicycles as an efficient and environmentally sound means of recreation and transportation by encouraging a citywide network of lanes, trails, and storage facilities.
Objective I
Develop a safe and convenient pedestrian travel network with sidewalks, walkways and trails integrated into the transportation system and neighborhood centers.
Objective K
Accommodate the specific needs of disabled individuals in all transportation modes.

SAN ANTONIO PARKS AND RECREATION SYSTEM STRATEGIC PLAN 2006-2016

As with any function of local government, the ability to plan for the short and long term is critical to meeting community needs. The Parks and Recreation System Strategic Plan 2006-2016 will continue to fully support the goals and objectives stated in the City of San Antonio's Master Plan Policies adopted in 1997, especially related to Neighborhoods and Urban Design sections (San Antonio Parks and Recreation Department). The purpose of the San Antonio Parks and Recreation System Strategic Plan is to:

1. Update the 1999 Parks and Recreation System Plan by evaluating the Goals and Objectives, Recommendations, and Accomplishments.
2. Continue to develop a coordinated, achievable plan to guide decisions impacting San Antonio's Parks and Recreation System
3. Integrate pertinent City Master Plan policies and adopted ordinances into ongoing parks and recreation system planning (i.e. Neighborhood Planning Process, Drainage

Regulations Ordinance, Tree Preservation Ordinance, Open Space Plan; and the Unified Development Code)

4. Integrate information and recommendations from other Departmental studies and reports including the Park Police Performance Review, the National Golf Foundation Report, and the After School and Summer Program Monitoring Standards.
5. Ensure adoption of the San Antonio Parks and Recreation System Strategic Plan by the Texas Parks & Wildlife Department to support statewide efforts to improve Texas' parks.
6. Integrate the three volumes of the Parks and Recreation System Plan which include this updated Parks and Recreation System Plan (2005), the Planning and Design Guidelines for Creek Based Greenway Parks (2001), and the Land Use Management Planning Guidelines for Natural Areas (2003).

Strategic Initiatives outline actions and goals to meet San Antonio's needs for facilities and programs in order to create a great Parks and Recreation System. The following table is a synopsis of the City of San Antonio 2005 System Strategic Plan's strategic initiative's consistent with the WSC Recreation study (all others are not applicable to the study framework):

City of San Antonio System Strategic Plan 2006-2016
STRATEGIC INITIATIVE 1: Plan, develop and sustain a diversified, balanced, and well-conditioned citywide system of public parks and recreation facilities.
1. Continue implementation of the Parks and Recreation Strategic System Plan through the public input process.
3. Coordinate with other public and private entities in the acquisition, development and shared use of existing and/or new park and recreation facilities when in the public's best interest.
6. Develop urban, neighborhood, and cultural parks adjacent to and connecting with the San Antonio River Improvement Project and developed Creekways, as a means for citizens to easily access the San Antonio River, Creekways, and individual neighborhood centers.
11. Improve the appearance of urban areas with the increased usage of public art, reforestation, and enhanced landscape planting and maintenance.
STRATEGIC INITIATIVE 2: Ensure equitable access and maximize usage of parks and recreation facilities
1. Assure a city-wide park system that is accessible to everyone regardless of location, physical ability, or income level, specifically addressing underserved areas.
STRATEGIC INITIATIVE 3: Provide quality recreation and cultural program opportunities for all users
2. Provide increased opportunities for youth and adults to participate in our athletic, aquatic, golf cultural and other recreational programs, especially in regards to improving youth physical fitness.
STRATEGIC INITIATIVE 4: Ensure that municipal parks and recreation facilities are safe for all users.
6. Determine deterrent strategies such as lighting, signage, landscaping, design, etc. at facilities in order to reduce graffiti and vandalism.

BICYCLE MOBILITY ADVISORY COMMITTEE (BMAC)

The City of San Antonio’s mission statement regarding bicycles in the City is a key component of BMAC’s San Antonio Bike Plan 2011 plan, and in summary states a significant goal of increasing bike ridership for daily travel and improving cycling safety by making the bike network accessible, direct, and continuous (Bicycle Mobility Advisory Committee). The following four elements collectively support and work toward achieving the City of San Antonio Master Plan’s overarching goals, which the WSC project would help satisfy:

- Bicycle Facilities Network;
- Network Support Facilities;
- Program Recommendations; and
- Implementation.

SA 2020

Initiated by the Mayor’s office in 2010, San Antonio (SA) 2020 creates a vision of what the citizens of San Antonio want to achieve by 2020 (SA2020). SA 2020 includes recommendations for many areas, including arts and culture, downtown development, economic competitiveness, education, family well-being, health and fitness, environmental sustainability, neighborhoods and growth management and transportation. The vision includes more walkable neighborhoods, a significant reduction in youth and adult obesity, and environmental friendly transportation.

HEALTHY KIDS HEALTHY COMMUNITIES

The Healthy Kids Healthy Communities initiative is a national program of the Robert Wood Johnson Foundation (RWJF) whose primary goal is to implement healthy eating and active living initiatives that support healthier communities for children and families across the U.S. The program places special emphasis on reaching children who are at highest risk of obesity on the basis of income, race/ethnicity or geographic location. Healthy Kids, Healthy Communities supports a comprehensive, community-based approach that focuses on strategies—especially policy and environmental changes—to advance active living and healthy eating among children and their families. The program includes addressing the obesity problems on the Westside of San Antonio

MISSION VERDE SUSTAINABILITY PLAN

The Mission Verde Sustainability Plan (MVSP) was adopted in 2009 by the City of San Antonio to address the challenge of meeting the city’s needs today without compromising those of future generations of San Antonio (Mission Verde Sustainability Plan). The plan focuses on economic sustainability; its intent is to “invest in energy saving initiatives that would save the consumer and the community money, and serve as a catalyst for job creation and innovation.” Among the initiatives of the Mission Verde plan is to create an integrated and efficient multi-modal transportation system.

DEFINING THE PROBLEM AND PROJECT OPPORTUNITIES

STUDY AREA

The study area comprises approximately 12 square miles along San Pedro, Apache, Alazán, and Martínez Creeks in San Antonio, Bexar County, Texas. The four creeks, known locally and collectively as the Westside Creeks, are tributaries of the San Antonio River located to the west of the downtown area of San Antonio. The study area is primarily urban residential with business districts and some manufacturing facilities as well. The area is serviced by IH-10, IH-35, and US Highway 90. Figure 5 shows the study area delineation.

The community affected by the degraded Westside Creeks is considered those populations within a ten minute walk, or half a mile distance from the creeks.

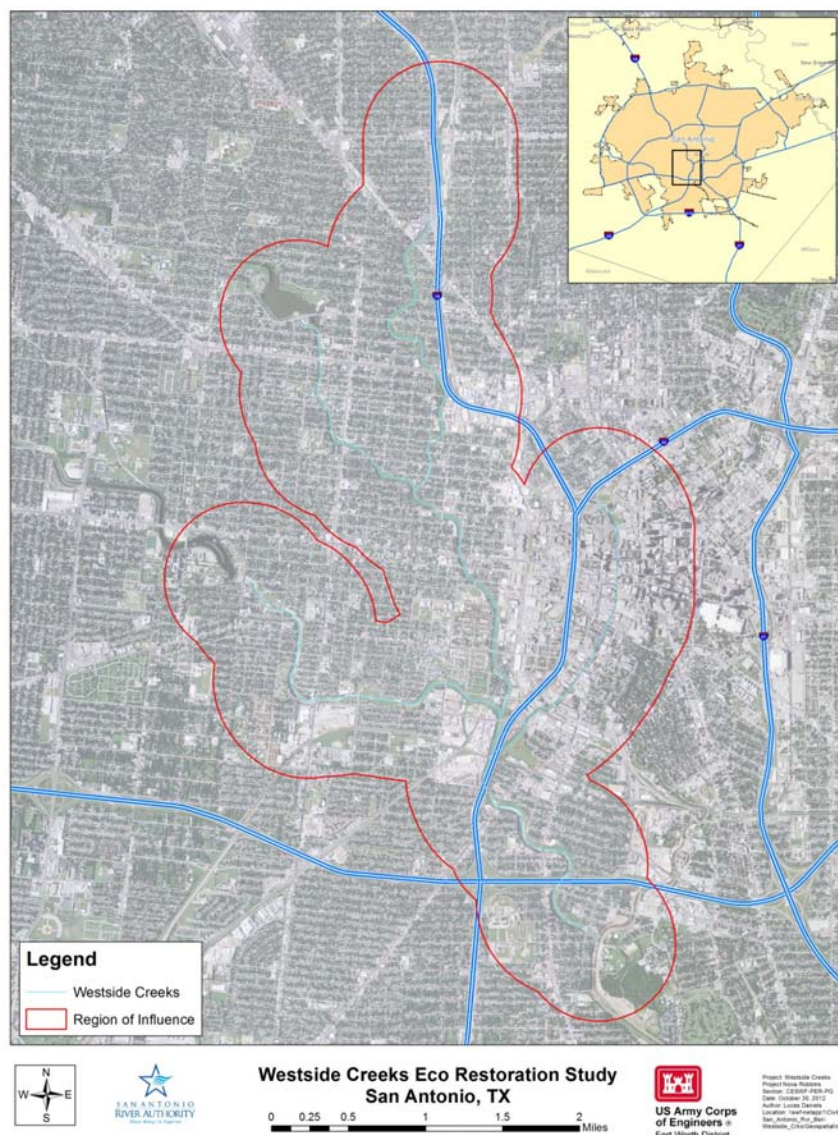


Figure 5. Westside Creeks Study Area

POPULATION

TOTAL POPULATION AND GROWTH

A socio-economic analysis of the study area, city, county, and state are fully expressed in the Socio-Economic Appendix; however, here the socio-economic statistics are analyzed as it relates to current land issues. In summary, those living in the affected 12 square mile study area are predominantly of Hispanic Origin (89%), are largely of the Baby Boom Generation or Millennials, creating a median age of 32.3 years. The study area population equates to approximately 78,000 persons of which are predominantly of Hispanic Origin (89%), more than the city and state. This community is also family-oriented who, more likely than their counterparts elsewhere, often have parents and perhaps even grandparents and great-grandparents living under the same roof.

Table 1. Population and Projections

Geographical Area	2010	2016	2040
Texas	25,145,561	27,505,386	44,872,038
Bexar County	1,714,773	1,900,877	2,253,060
San Antonio city	1,327,407	1,452,140	1,872,964
Westside Creeks Study Area	77,782	8,115	

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing (2010 and 2016 figures); Texas State Data Center (2040 projections for Texas and Bexar County); Texas Water Development Board (2040 projection for San Antonio)

Table 2. 2010 Population by Race

Geographical Area	White	Black	American Indian	Asian	Pacific Islander	Some Other Race	Multiple Races
Texas	17,701,552	2,979,598	170,972	964,596	21,656	2,628,186	679,001
Bexar County	1,250,252	128,892	14,475	41,739	2,350	217,389	59,676
San Antonio city	963,413	91,280	11,800	32,254	1,504	181,625	45,531
Westside Creeks Study Area	55,972	2,616	1,058	267	40	15,597	2,233

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing

Table 3. 2010 Hispanic Origin Population

Geographical Area	Hispanic Origin
Texas	9,460,921
Bexar County	1,006,958
San Antonio city	838,952
Westside Creeks Study Area	69,538

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing

Table 4. 2010 Population by Age Group

Geographical Area	0-9	10-19	20-34	35-44	45-64	65+
Texas	3,856,707	3,765,007	5,430,552	3,458,382	6,033,027	2,601,886
Bexar County	260,394	260,777	386,722	230,754	400,243	175,883
San Antonio city	199,799	199,907	304,784	175,669	308,644	138,604
Westside Creeks Study Area	12,444	11,500	17,735	9,681	17,719	8,703

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing

The study area population shows to have attained less education when compared to San Antonio, Bexar County, and Texas. Almost 50% of those 25 years of age and older have less than a high school education, 29% have only a high school diploma, 9% possess an Associate's degree or higher.

Table 5. Percent of Population 25 Years and Older by Highest Level of Education

Geographical Area	Less than High School Diploma	High School Diploma	Associate Degree	Bachelor's Degree	Master's, Professional or Doctorate Degree
Texas	20.3%	26.6%	6.6%	17.1%	8.4%
Bexar County	18.6%	27.3%	7.1%	15.8%	8.7%
San Antonio city	20.8%	27.4%	6.7%	15.0%	8.1%
Westside Creeks Study Area	49.6%	29.2%	3.0%	3.8%	2.1%

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing

Similarly, the study area shows to be poorer than the city, county and state. With a median household income of \$23,000, the income shows to be about half of what is experienced in the other geographical areas. Per capita income (\$12,813) is also about half of per capita incomes in the other geographical areas.

Table 6. 2010 Median Household and Per Capita Incomes

Geographical Area	Median Household Income	Per Capita Income
Texas	\$47,753	\$24,332
Bexar County	45,689	23,545
San Antonio city	42,612	22,457
Westside Creeks Study Area	22,739	12,813

Source: ESRI Community Analyst citing U.S Bureau of the Census, 2010 Census of Population and Housing

HEALTH

The prevalence of obesity in the United States increased during the last decades of the 20th century (Flegal, Carroll and Ogden, Prevalence and trends in obesity among US adults, 1999-2000; Ogden, Flegal and Carroll). More recently there appears to have been a slowing of the rate

of increase or even a leveling off (Flegal, Carroll and Ogden; Ogden, Carroll and Curtin). However, San Antonio and especially the Westside community is experience quite the opposite. The City of San Antonio is tackling obesity, a health condition that is prevalent throughout the city of 1,327,407 residents. According to statistics from the U.S. Center for Disease Control, 31% of San Antonio’s residents are obese and 65% are overweight: the worst record in the nation. In Bexar County, 65.7% of adults are overweight or obese. In Texas, 32.4% of children aged 10-17 are overweight or obese. San Antonio Metropolitan Health District (Metro Health) states that schools within the study area have a 37-67 percent obesity rate among children.

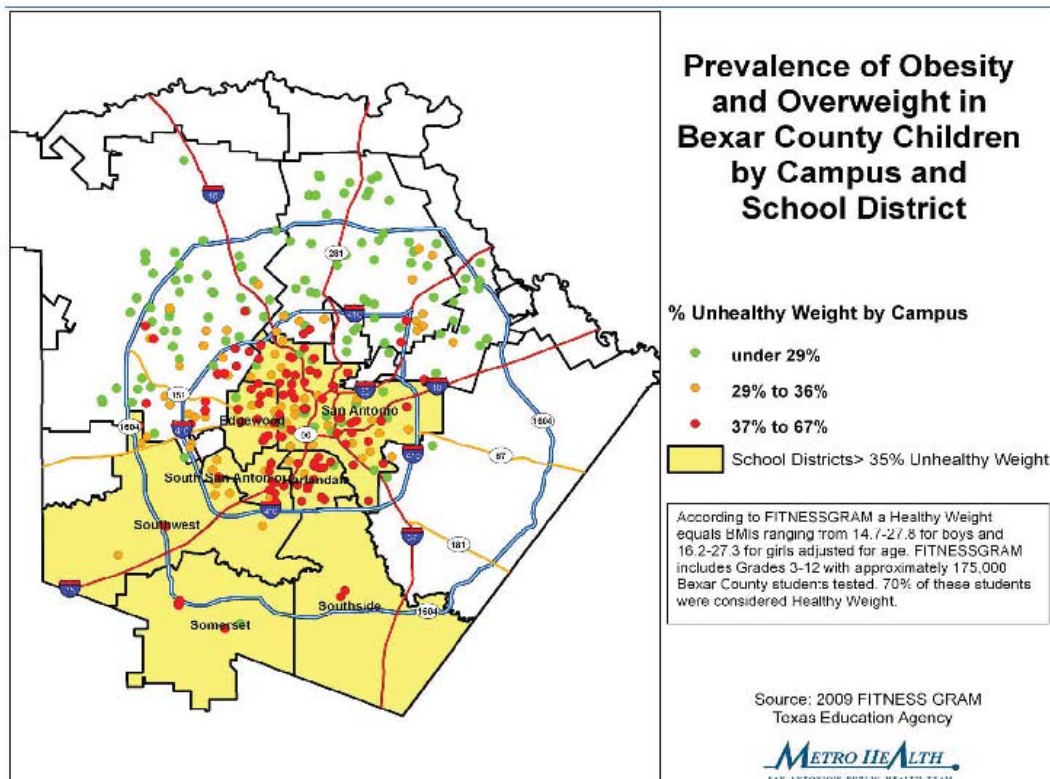


Figure 6. Prevalence of Obesity and Overweight in Bexar County Children by Campus and School District

According to Metro Health’s 2007 *Health Profiles*, of 47,844 clients enrolled in the Women, Infants and Children (WIC) program, 11.3% of children were at risk for being overweight and 11.3% were overweight. As part of a Metro Health program, the body mass index (BMI) of SAISD students was collected in 2007. Of the 19,045 students measured, 29% had a BMI greater than the 95th-percentile. The Youth Risk Behavior Surveillance System (YRBSS) survey administered at 8 local high schools in 2007 indicated that of 1,317 students, 19.1% were overweight and 20.2% were obese.

Metro Health serves as the sole public health agency charged with the responsibility of providing public health leadership and programs in San Antonio and the unincorporated areas of Bexar County, Texas with target audiences of children and families. Healthy Kids, Healthy Communities is a national program of the Robert Wood Johnson Foundation (RWJF) whose

primary goal is to implement healthy eating and active living initiatives that support healthier communities for children and families across the U.S. The program places special emphasis on reaching children who are at highest risk of obesity on the basis of income, race/ethnicity or geographic location. Healthy Kids, Healthy Communities supports a comprehensive, community-based approach that focuses on strategies—especially policy and environmental changes—to advance active living and healthy eating among children and their families.

In 2009, the Metro Health was selected to receive the Healthy Kids Healthy Communities grant. Metro Health convened a diverse network of partners, called the Healthy Kids Healthy Communities Partnership to plan and implement strategies to increase opportunities for physical activity and access to healthy foods for children and families. The HKHC Partnership will primarily focus their work within the boundaries of the Westside area where the obesity rate continues to increase. Within the study area, almost 30 percent of students in one school district were obese. In addition, a federal health survey of more than 1,300 students at eight local high schools in 2007 found that nearly two out of every five were overweight or obese.

The HKHC Partnership includes the City of San Antonio’s Planning & Development Services and Parks & Recreation Departments, the Metropolitan Planning Organization, the University of Texas School of Public Health, VIA Metropolitan Transit, the University of Texas Health Science Center at San Antonio – School of Nursing, the San Antonio Restaurant Association, the Health Collaborative, Texas Public Radio, and several community based organizations located within the target area. Working together, this partnership will focus their efforts on the following goals and tactics:

Goal 1: Develop Partnerships, Build Capacity, and Communicate with Local Stakeholders to Establish Support.

Goal 2: Expand shared use of schools and other public facilities in the target area for after-hours use for physical activity.

Goal 3: Implement the Complete Streets concept in the target area for new development and redevelopment projects.

Goal 4: Promote the voluntary adoption and implementation of a healthy menu Initiative by restaurants in the target area through incentives and technical support.

Goal 5: Promote the voluntary adoption and implementation of a healthy selections initiative by corner stores in the target area through incentives and technical support.

SAFETY

Safety is an important social concern with the Westside Creeks communities as expressed in public workshops provided by SARA. Many points were made to illustrate the importance of improving creeks’ safety. A built environment in which the residents of the community can easily access the creek-side trails will mean more “eyes on the street”, a concept referred to as natural surveillance. Walkability promotes a stronger sense of community, more social interaction and thereby lower levels of crime than is currently experienced (Cozens).

Crime safety is not the only safety concerning the Westside community. The Westside Creeks study area is within an area of San Antonio that suffers the greatest number of bicycle-related crashes in the city. The city averages 148 crashes with injuries per year over the past 3 years and

has averaged 2.3 fatalities from bicycle crashes per year over the last 6 years (San Antonio Bike Plan 2011) (see Figure 7).

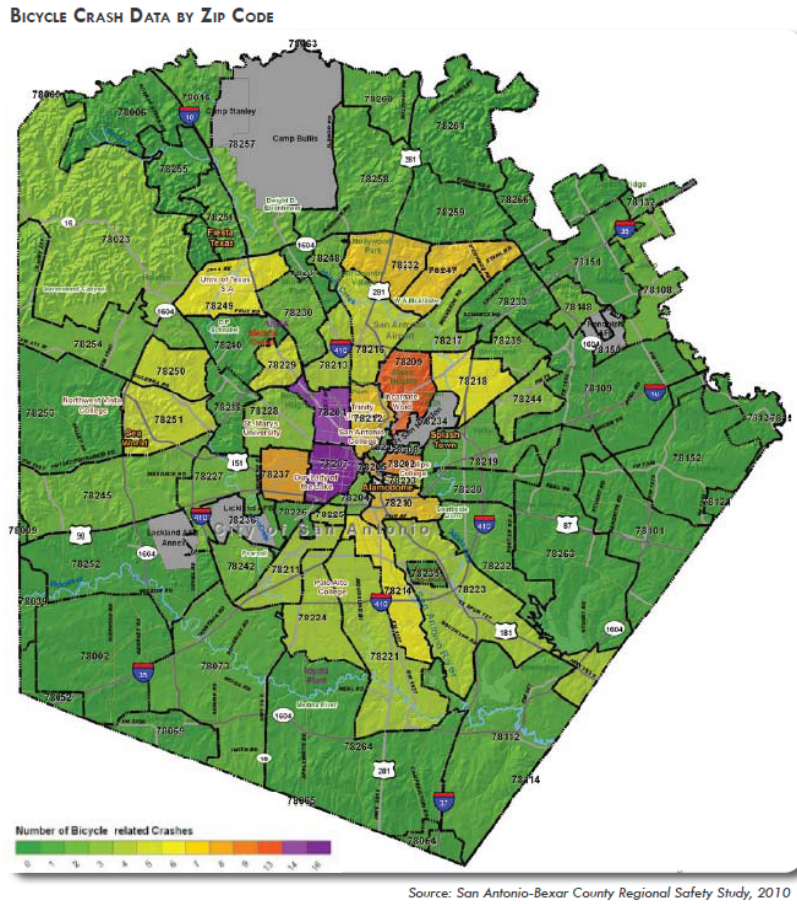


Figure 7. Bicycle Crash Data by Zip Code

Local and federal agencies have taken steps to try making the city safer for bicyclists using the following criteria; although, Westside is still experiencing the greatest number of bicycle-related crashes.

THE WHITE HOUSE

- **Benchmarks of Success:** Increase by 50% by 2015 the percentage of children ages 5-18 taking safe walking and biking trips to and from school. An increase of 50% would mean that 19.5% of school trips would be by biking or walking.

CITY OF SAN ANTONIO

- San Antonio Bicycle Plan 2011 helps to supports the city’s biking infrastructure with several recommendations.
- San Antonio Mayor Julian Castro’s SA 2020 encourages multimodal transportation system linking it to neighborhoods across the city.

- The goal of San Antonio Bikes is to increase bike ridership for daily travel and improve cycling safety by making San Antonio's bike network.
- San Antonio Police Department Bike Rodeo Program reaches out for student participation to improve bicycle safety and skills.
- City of San Antonio launched “Get Cyched” in 2010, a bilingual safety and awareness campaign for bicyclist and motorists.
- Neighborhood Adventures in Bicycle Safety TV was broadcast emphasizing bicycle safety.
- In 2010 the City passed two ordinances that directly affect bicyclists: the Safe passing Ordinance and the BikeLights @ Night Ordinance.
- Mayors Fitness Council has helped spearhead efforts that increase bicycling and walking as part of its mission to improve the health and fitness of San Antonians.
- Metro Health Department has been the source of funding or materials for education and promotion of bicycling and other active living lifestyles in San Antonio.
- The web portal www.sabalance.org was created to learn about access to physical activity opportunities in Sans Antonio.
- In 2010, the Metro Health Department was awarded a Communities Putting Prevention to Work grant to develop Safe Routes to School (SRTS) plans for seven schools in the City of San Antonio. As a part of this process they will be identifying infrastructure improvements needs, opportunities for education, encouragement and information programs.

SAN ANTONIO-BEXAR COUNTY MPO

- San Antonio-Bexar County Metropolitan Planning Organization’s (MPO) Transportation Policy Board adopted the San Antonio Bike Plan 2011 + Implementation Strategy on March, 5, 2012 to provide safer transportation facilities for bicyclists and to ensure all transportation options are available as well as to improve air quality, the quality of life, and health of residents in San Antonian communities.
- Bexar County uses the Walkable Community Program as a forum of education and promotion. The Walkable Community Program has three components: Walkable Community Workshops, Safety Classes, and Bicycle Rodeos. The program is available to neighborhoods, schools, and community groups to evaluate their community, identify infrastructure improvement to increase bicycling and walking, and to provide education about the benefits of walking and bicycling.
- Walkable community workshops, Safety Classes, bicycle rodeo, MPO Kids in 2010 to outreach to younger bicycle populations, TXDOT, private bicycle advocacy, and others

TENTATIVELY SELECTED PLAN

The Westside Creeks tentatively selected plan is the proposed way forward on developing the future ecosystem restoration and recreation for the study area. This section generalizes this plan for ecosystem restoration and recreation opportunities for which social effects have been identified.

ECOSYSTEM RESTORATION

The ecosystem restoration study defines a plan that restores to the extent practicable, a sustainable, dynamic, riverine ecosystem providing habitat for aquatic and riparian dependent migratory and native resident bird species in the Westside Creeks study area. Recreation is to be

maximized to the extent practicable along the creeks as long as the recreation features do not diminish the project's ecosystem restoration objectives. See the Environmental Resources appendix for more information on the ecosystem restoration plan. Social effects are evaluated for all planned project conditions.

MULTI-USE TRAILS

The main recreation component proposed for the Westside Creeks Ecosystem Restoration and Recreation project is 10-foot multi-use trails incorporated into the current and planned City of San Antonio Mission Trail System, as well as, future planned trails by the National Park Service. From an environmental perspective, recreation features are located to avoid adverse impacts to riparian vegetation. The trails would enhance the visitation experience by providing access to the project ecosystem restoration features and it would encourage social, cultural, scientific, and educational encouragement due to the ecosystem restoration project.

TRAILHEAD ENTRANCES

Trailhead entrances are a significant component proposed for the Westside Creeks project and will be adapted to promote a strong physical connection from the local communities as well as for visitors.

These trailheads would allow for safe access for the communities within a half a mile of the Westside Creeks the following public amenities: on-road bike facilities (roads with designated bike lanes), designated tour trails, several cultural sites, a historic park, parks with a variety of facilities such as fitness equipment, historic cemeteries, San Antonio Natatorium, a library, schools, designated Downtown Runs and Bike Rides self-guided tours, the Riverwalk and associated tourist attractions.

EVALUATE PROJECT CONDITIONS AND EFFECTS

Social effects, in a general sense, refers to how the constituents of life that influence personal and group definitions of satisfaction, well-being, and happiness are affected by some condition or proposed intervention. The anticipated social effects from the proposed ecosystem restoration and recreation plan are viewed as three categories: health effects, alternative transportation and safety effects, and the economics of sustainable landscapes. The latter category is further defined by four subcategories: water treatment savings, atmospheric carbon dioxide reduction, air quality improvement, and aesthetic and property value benefits.

HEALTH

A series of research studies from a White House Task Force on Childhood Obesity Report suggests that attributes of our current built environment have had a negative impact on health outcomes, contributing to obesity and related health problems. The existence of safe, convenient, and accessible facilities for walking and biking are likely to increase physical activity and make parents feel more secure about their children's safety. However, they do not by themselves ensure more active lifestyles for residents of such communities. "Social environments" also play a role, including how community members feel about their neighborhood, how secure they feel, and how interested they are in participating in community-based physical activity. Evidence

suggests that the combined effect of the built and social environment has an impact on rates of childhood obesity and overweight (Solving the Problem of Childhood Obesity within a Generation).

Providing access to a linear trail system will have the greatest affect on the population within half a mile of the trails. The specific characteristics that seem most relevant to obesity-related health disparities in the United States are proximities/access to supermarkets, exercise facilities, safety. Each of these has been reported to be correlated with body mass index or related behaviors within low-income, minority target groups. A study in Lincoln, Nebraska has identified a cost-benefit ratio of 2.94, which means every \$1 investment in trails for physical activity led to \$2.94 in direct medical benefit (Wang, Macera and Scudder-Soucie). Since obesity in San Antonio is the highest in the nation, it can be assumed that this cost relationship would be greater in the study area than Nebraska. Since the Westside Creeks recreation project estimates \$3,900,000 in trail investment, then (3,900,000 Westside Creeks trail investment times \$2.94 in direct medical benefit) an estimated minimum \$11,466,000 in direct medical benefit should be observed from construction of the Westside Creeks project.

This figure for direct medical benefit does not include cost savings from bicycle-related crash prevention. See Alternative Transportation and Safety section below on preventable bicycle-related cost with the Westside Creeks project.

ALTERNATIVE TRANSPORTATION AND SAFETY

Trail networks provide alternative transportation links that are currently unavailable. WSC trails would connect to the San Antonio's Central City Trails, several miles of existing and planning trails located within Central and Downtown San Antonio, to provide the residents who live on the west side of downtown alternative transportation links that are currently unavailable. Residents who live in the west side community outside of downtown San Antonio would be able to walk or bike downtown for work or simply for recreation. These trails would allow residents to circulate through urban areas in a safe, efficient, healthy, and fun way: walking or biking. Residents would be able to move freely along trail corridors without paying increasingly high gas prices and sitting in ever-growing automobile traffic. Regional connectivity through transportation can be improved with the WSC project.



Figure 8. San Antonio Greenway System

Improving access to regional resources is proved to increase the number of trips made by foot or bicycle. The City of San Antonio and other local agencies share the same goals as the White House when it comes to bicycling: to double the percentage of trips made by bicycle by 2015. Meeting this goal is important particularly for the Westside Creeks’ community. The Westside Creeks area is within the area for the greatest number of bicycle crashes. The West Side area currently averages 148 bicycle-related crashes per year for the past three years (San Antonio Bike Plan 2011). This is reasoned to be related to the amount of residents in the area relying on bicycle to commute for work. A future with creek-side trails is expected to see an increase in trips made by foot and bicycle for a safer route opportunity and commuters and recreationists alike. By assuming the Westside Creeks project aids in meeting the City’s and Whitehouse goals by doubling the about of trips made by bike in the area, it can be estimated that the benefits of this safer alternative transportation route opportunity would reduce the number of bicycle-related crashes and deaths by half. The National Safety Council makes estimates of the average costs of bicycle-related injuries to illustrate their impact on the nation's economy. The average economic cost for nonincapacitating bicycle-related injury is \$22,300 (Estimating the Costs of Unintentional Injuries). The costs are a measure of the dollars spent and income not received due to accidents, injuries, and fatalities. Therefore if the 148 bicycle-related crashes are reduced by half, then (148 bicycle-related crashes per year divided by 2) times \$22,300 per nonincapacitating bicycle-related crash injury equals \$1,650,200 per year estimated cost savings for the community.

THE ECONOMICS OF SUSTAINABLE LANDSCAPES

Sustainability can be defined as the ability to “meet the needs of the present without comprising the ability of future generations to meet their own needs.” This definition embraces the definition of sustainable development first put forward by the United Nations World Commission on Environment and Development at the United Nations General Assembly in 1987. Adopting planning and development sustainable practices not only helps the environment but also enhances human health and well-being and can be economically cost-effective. Ecosystem services provide benefits to humankind and other organisms but are not generally reflected in our current economic accounting. In this section on The Economics of Sustainable Landscapes, recognition is given to providing a value of Westside Creeks ecosystem services that supports human health and well-being.

“The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.”

- *President Theodore Roosevelt*

The communities of Westside Creeks have expressed their desire to approach ecosystem restoration in a sustainable manner in such a way “to make sure that the creeks themselves are biologically sound and that we make it environmentally sustainable.” One of the concepts identified by the public during the Branding and Key Messaging Workshop for SARA’s Westside Creeks Restoration Project was that of “Bringing Nature Back”. This theme means a return to the natural beauty that once was, focused on the importance of creating a biologically sound and environmentally sustainable vision. This 2-year planning process also included a phase aimed at achieving long-term sustainable conditions called Phase II Restoration Concepts.

The remainder of this chapter discusses the additional social benefits of ecosystem restoration. Benefits will result from air cleaning and water treatment savings. Increased recreational opportunities and enjoyment benefits expected from the WSC ecosystem restoration project are expanded on in the Recreation Appendix.

WATER TREATMENT SAVINGS

Urban trees intercept millions of gallons of rainwater each year, preventing runoff from entering storm sewers and saving the city in stormwater management costs. The social benefits that result from reducing peak runoff for the WSC project results in improved water quality. This can translate into improved aquatic habitats, less human disease and illness due to contact with contaminated water, and reduces stormwater treatment costs. Treatment of runoff is one way of calculating the implied value of each tree intercepting stormwater. The average tree intercepts 1432 gallons of stormwater each year, valued at \$61 per tree (Peper, McPherson and Simpson).

The riparian woodland measure that supports the Westside Creeks ecosystem restoration objective addresses an average of 50 stems of riparian woody vegetation per acre. Not all woody stems are trees but it can be approximated that on a 50 woody stem per acre basis, 45 are trees. Therefore based on a planting regime of 45 trees per acre, the improved water quality value is approximately \$2,745 per acre annually. Since the WSC project proposes 14.3 acres of riparian woody vegetation for the preferred Alternative 6, the improved water quality is approximately valued to \$40,000 annually.

ATMOSPHERIC CARBON DIOXIDE REDUCTION

Urban forests in open spaces (versus those near buildings) can reduce atmospheric carbon dioxide (CO₂) by directly sequestering CO₂ as woody and foliar biomass as they grow. The benefit of reducing atmospheric CO₂ is valued at approximately \$1.29 per tree (Peper, McPherson and Simpson). Based on a planting regime of 45 stems of riparian woody vegetation per acre (see Water Treatment Savings section above for methodology), the improved water quality value is approximately \$58 per acre annually. Since the WSC project proposes 14.3 acres of riparian woody vegetation for the preferred Alternative 6, the CO₂ sequestering benefit is valued at approximately \$830 annually.

AIR QUALITY IMPROVEMENT

Urban trees in open spaces improve air quality in four main ways:

- Absorbing gaseous pollutants (ozone, nitrogen dioxide) through leaf surfaces
- Intercepting particulate matter (e.g., dust, ash, dirt, pollen, smoke)
- Releasing oxygen through photosynthesis
- Transpiring water and shading surfaces, resulting in lower local air temperatures, thereby reducing ozone levels

The net air pollutants removed, released, and avoided are valued at approximately \$9.02 per tree. Although trees vary dramatically in their ability to produce net air-quality benefits, this is a conservative approach to the typical, medium-canopied tree mass. Based on a planting regime of 45 stems of riparian woody vegetation per acre (see Water Treatment Savings section above for methodology), the improved water quality value is approximately \$406 per acre annually. Since the WSC project proposes 14.3 acres of riparian woody vegetation for the preferred Alternative 6, the net air-quality benefit is approximately \$5,800 annually.

AESTHETIC AND PROPERTY VALUE BENEFITS

Many benefits attributed to urban trees are difficult to translate into economic terms. Beautification, improved human health, shade that increases human comfort, sense of place, and well-being are difficult to price. However, a study by the Center for Urban Forest Research USDA Forest Service considered the value of some of these benefits by capturing property values of the land on which trees stand or to which they are adjacent. Residential properties will realize a greater gain in value the closer they are located to trails and greenspace. This approach has the virtue of capturing what buyers perceive as both the benefits and costs of trees in the sales price. The estimated total annual benefit associated with property value increases and other less tangible benefits is \$90 per tree on average (Peper, McPherson and Simpson). Based on a planting regime of 45 stems of riparian woody vegetation per acre (see Water Treatment Savings section above for methodology), the improved water quality value is approximately \$4,050 per acre annually. Since the WSC project proposes 14.3 acres of riparian woody vegetation for the preferred Alternative 6, the estimated total annual benefit associated with aesthetics and other perceived human health improvements is approximately \$58,000 annually.

FORECASTING FUTURE WITHOUT-PROJECT CONDITIONS

This section presents future conditions concerning the Westside Creeks affected population and related resources as they are projected to exist without Federal action to solve the current problems. This condition is important to the evaluation and comparison of benefits and to identify impacts attributable to proposed federal actions. The without plan condition is the same as the “No Action” alternative that is required to be considered by the federal regulations implementing the National Environmental Policy Act (NEPA).

The environmental setting trends in the future without project conditions are tied to the increase in obesity, high bicycle-related crashes, a lack in regional connectivity for alternative transportation routes, and degraded natural creeks bound by a low income, minority-dominant community. The Westside Creeks would remain channelized providing no access to the trail network for exercise, recreation, and alternate routes to schools, works churches, and locations of cultural significance.

CONCLUSION

The City and SARA will continue to work towards achieving the community’s preferred plan for reinvestment and restoration. However, the WSC project is an essential element in achieving the community’s vision for the future of Westside Creeks.

	Effects With the WSC Project	Effects Without the WSC Project
Execute Order 12989	Supported	Not supported
USDOT NBWS	Supported	Not supported
SA System Strategic Plan 2005	Supported	Not supported
SA Master Plan 1997	Supported	Not supported
Bicycle Mobility Advisory Committee (BMAC)	Supported	Not supported
SA 2020	Supported	Not supported
Healthy Kids Healthy Communities	Supported	Not supported
Mission Verde Sustainability Plan	Supported	Not supported
Obesity reduction (savings per year)	\$11,466,000	\$0
Alternative Transportation Route (savings per year)	\$1,650,200	\$0
Water treatment savings (savings per year)	\$40,000	\$0
Atmospheric carbon dioxide reduction (savings per year)	\$830	\$0
Air quality improvement (savings per year)	\$5,800	\$0
Aesthetics (savings per year)	\$58,000	\$0
Total Savings per Year	\$13,220,830	\$0

Comprehensive Approach - SARA has aggressively taken steps of its own to improve the community’s circumstances by providing access to a healthy environment along with Westside. The City has brought together all community partners, neighboring communities, the public, and state and federal agencies, forging a partnership to reduce the negative effects to the community of the current conditions of the creeks.

Environmental Justice - Most of the residents in the zone of influence are neighborhoods with a high percentage of the poor, obese, and minority households. A commitment to environmental

justice underlies the SARA's approach -- all residents need protection regardless of socioeconomic status and the cost of their home, or its location.

Importance to the Nation – Finally, Westside Creeks is part of a vast public effort to restore the creek's ecosystem as it meanders through some of San Antonio's oldest and proudest neighborhoods containing their own unique, rich history. Investing in the Westside Creeks project will improve access to the creeks, and as a result, improve the outlook of the communities' health, safety, and overall well-being. A healthy, safe Westside Creeks is not just a good investment for Texas or the region; it is a good investment for the nation.

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