

APPENDIX F RECREATION

INTRODUCTION

This section discusses recreation planning efforts, and describes conceptual plans for the recommended alternatives. Existing status of proposed park areas is described, as well as descriptions of planning regions and existing flood problem areas. Socio economic assessment of these alternatives is provided in the *Appendix A*. Following this introductory section is a description of the methodology used for recreation planning, identification of goals, objectives, problems, constraints and opportunities, along with desired recreation activities. Cost sharable and non-cost sharable features are identified in the summary section of this appendix.

EXISTING CONDITION AND FLOODING PROBLEMS

As reported in the Phase I documentation, four areas (**Figure Rec – 1 – all figures will be found at the end of this report**) were considered economically and socio-politically acceptable to pursue continued federal involvement. These areas included (1) Timber Creek (TC), (2) Onion Creek Forrest-Yarrabee Bend (OCFYB), (3) Williamson Creek (WC), which contains four isolated sub-areas), and the (4) Bear/Onion Confluence. As planning efforts continued, it was decided that recreation would only be initially planned for the TC area, OCFYB area and the WC areas. As Phase IIa underwent public review, the WC areas were eliminated for recreation because of lack of local support. *Conceptual designs for the Williamson Creek area are included in this appendix for communication and documentation purposes only.*

Because of increasing flood damages including loss of human life, the city of Austin has decided to install some “Smart Growth” measures to reduce flood plain encroachment and to reduce long term damages. Currently the city of Austin and Travis County restrict new development within the 25-year flood plain. Long range goals include the eventual acquisition of greenbelt lands within this zone and throughout the city and county, and both entities control building in these areas through review and permitting on a case-by-case basis. These restrictions apply to recreation facilities as well as other developments. The TC and OCFYB areas are currently under acquisition by Travis County and the Federal Emergency Management Agency (FEMA). FEMA restricts any new structures from being built on their properties, and some of their properties were included in the proposed park areas recommended proposals; however, the purchased properties have not been mapped in these plans and will need identification prior to further design efforts.

ONION CREEK’S WATERSHED AND PLANNING REGIONS

The city of Austin is the dominant municipality in Travis County, and is shown in **Figure Rec- 1** with its five mile extra-jurisdictional boundary. As delineated by the city of Austin, the planning area is divided into 27 Planning Regions and includes the entire Travis County and city of Sunset Valley boundaries. These planning regions are further divided into neighborhood districts for additional city planning efforts. Only the 27 Planning Regions and the extra-jurisdictional boundary are shown in **Figure Rec- 2**.

The Onion Creek Watershed and proposed project sites are located within or are adjacent to Planning Regions 13, 14, 15, 16, 24, 25 and 26. It is assumed that most visitations would occur within a five-mile radius of each proposed park. This distance was used to estimate populations for economic assessments. (However, regional parks, such as the Onion Creek Sport Complex adjacent to the proposed Onion Creek Forest-Yarrabee Bend Park area will draw

residents outside of the five mile radius and potentially from other counties.) Extreme sport centers, such as the skate-park and BMX course being planned by the City of Austin's PARD on adjacent lands, are also limited in supply and will attract users from a wider radius. It is assumed that some of these visitors will utilize the Onion Creek Forest-Yarrabee Bend Parks (OCFYB). Festival events as proposed to be held in the metro park may also draw visitors outside of this five-mile radius. Recently a new elementary school has been built to the west of the OCFYB metro park area. Benefits for recreation of all areas were determined using USACE economic analysis of the *Onion Creek Recreation Survey*, which was conducted during the summer of 2004 (See *Economics Appendix* for more information.)

TIMBER CREEK (TC)

Timber Creek is in the southern half of Travis County and currently has a low population density. However, the area is undergoing rapid development, particularly surrounding Bergstrom Airport. This development is predominantly single and multi-family housing. Some commercial and industrial areas are also being developed, or they are currently planned to be developed adjacent to the airport. This development includes hotels and other airport-related service industries and land uses. This development may affect one golf course in the vicinity, which is scheduled to become an industrial park. Only the "Non-Structural 25-year Flood Event" was considered for the Timber Creek area, which has already undergone several FEMA and Travis County buyouts of properties. A new state highway is planned to be constructed east of the Timber Creek area, and may improve access to the park area.

ONION CREEK FORREST-YARRABEE BEND (OCFYB)

Onion Creek Forrest - Yarrabee Bend is a fully developed neighborhood that is located in the city of Austin's planning region #13. This area has significant flooding and was considered under two scenarios – the "Non-Structural 25-Year Flooding Event" and the "Non-Structural 100-Year Flooding" Event". Structural alternatives were deemed uneconomical and were not supported locally because of the environmental degradation associated with these structures. Ecosystem restoration was planned for both non-structural alternatives; however, only the 25-year buyout option was economically feasible. (It is somewhat of a misnomer to describe these in flood plain context, since the areas considered for park development were only those flooded areas north of Pleasant Valley Street. Flood areas west of this street were not considered feasible to include in park development based upon economic considerations and connectivity. Also some houses with raised elevations were deemed "ineligible" for USACE buyout and are shown to remain in the 25-year flood plain. It is highly likely that these houses will be bought out by the City of Austin and lands associated will be added to those shown in the recommended plan.)

WILLIAMSON CREEK (WC)

Williamson Creek has a fully developed neighborhood throughout most of the area, except for the upland areas near Sunset Valley. The creek areas are on the west-central portion of Travis County. The city of Sunset Valley is surrounded by the city of Austin's extra-jurisdictional boundary. Williamson Creek contains recharge sites, perennial springs, ponds, limestone bluffs and creek beds.

Four sub-areas on Williamson Creek were identified as damage centers. The cities of Austin and Sunset Valley have been acquiring lands in this drainage and are working toward a greenbelt within the 25-year flood plain.

Encouragement of greenbelt development was considered desirable for ecosystem restoration and acceptable for flood damage reduction efforts. In many areas, lawns are mown and are adjacent to the edge of the creek bed. In other areas, ecosystem planners have identified exotic and invasive plant species and various aged forest plant communities. The city of Austin's property is often frequented and inhabited by homeless citizens, and there are some neighborhood concerns regarding illegal activity, safety and trespassing.

The upper reaches are recharge areas covered with cobble beds, which fade away to areas of limestone creek bed cover. Williamson Creek has very sensitive ecological features and supports some endangered animal species. (See *Environmental Appendix B*) The creek is predominantly dry in most of its reach; however, there are some small, isolated perennial ponds. Private property boundaries extend to the middle of the creek bed.

METHODOLOGY OVERVIEW

SURVEY JUSTIFICATION

As discussed in detail in *Onion Creek Phase I Study* documentation, Texas Parks and Wildlife Department (TPWD) no longer collects data or publishes the *Texas Outdoor Recreation Plan (TORP)*. The latest update of this plan was in 1995 and it deviated from other plans significantly in organization and applicability. Much of the data was based upon the *1990 TORP*. Both documents failed to capture the tremendous changes in growth and recreation that has occurred since their publication. TPWD now publishes the *Land and Water Resources, Conservation and Recreation Plan, 2002*, which focuses mostly on conservation and land management within State owned lands. Other efforts are recommended to be conducted at the local level in coordination with TPWD community and recreation planners.

The city of Austin and Travis County have park and recreation master plans. The city of Austin's Parks and Recreation Department is currently undergoing revision and updates to their master plan. Travis County has recently updated their 2002 plan, but did not have information regarding potential park development in Timber Creek at that time. The city of Sunset Valley currently does not have a recreation master plan.

Growth is occurring very rapidly and planning efforts are quickly made obsolete throughout the county. *Onion Creek Phase I Study* processes identified a need for new recreation and socio-demographic information for additional planning efforts. As a result, a survey was planned and conducted in the summer of 2004. Methodology and assessment for this survey are described in *Onion Creek Recreation Survey subsection*.

OVERVIEW OF RECREATION PLANNING EFFORTS

Recreation planning for the *Onion Creek Phase II Study* began in 2004. Planning activities included the formation of a Recreation Focus Team, identification of goals and objectives, identification of desirable recreation activities to include in the survey and on project lands, development and coordination with an outside contractor for the production of the *Onion Creek Recreation Survey*, mapping of proposed recreation zones, and economic assessment of recreation activities based upon survey results. This effort used a coordinated resource planning approach with the creation of a Recreation Focus Team (RFT), which consisted of representatives of various disciplines from the four project partners – USACE, Travis County, city of Austin and the city of Sunset Valley. A fifth partner, LCRA provided feedback toward the end of the Phase IIa, but did not participate in other planning activities.

USACE team members included representatives from Ecosystem Planning, Economics, and Recreation Planning with oversight provided by the Project Manager. Sponsor representatives were from the parks and recreation and/or planning departments. The RTF constructed guidelines and guided the telephone survey process, which was performed by Responsive Management, the out-of-state contractor. The Contractor and USACE (Fort Worth District and Southwest Division Offices) were responsible for obtaining Office of Management & Budget (OMB) approval for the questionnaire prior to conducting the survey (*OMB Control Number 0710-0001*).

The RTF also identified problems, constraints, and opportunities along with visions, goals, and conceptual designs which are described in more detail below. Texas Parks and Wildlife Department (TPWD) representatives were invited to participate and were briefed regarding the survey results. Involvement from this agency may be forthcoming as partnerships with the local

sponsors develop and for coordination with McKinney State Park and Onion Creek Corridor trail linkage. However, TPWD recreation planners did not choose to participate in the initial efforts, nor have they participated up to the time of writing this report.

Conceptual designs showing “recreation zones and pathways only” were developed in-house using ArcMap software and the various recreational activities per zone were identified by the RFT and evaluated by the USACE Economic Planner. Recreational amenities were estimated (quantity) using design guidelines and input (and support) from the sponsors’ planning representatives and according to needs for economic justification; these quantities were adjusted with sponsor oversight as initial economic assessment information revealed shortcomings. (Future processes, to be reported in the Design Document Report, will provide a layout of features, with possible regrouping to accommodate on-site conditions difficult to evaluate at this stage. The goal will be to provide a quality recreational experience, while maximizing opportunities defined by the RFT. Cost estimates for recreation planning were then estimated by the USACE Design Branch team members based upon quantities used for economic assessment and ArcMap mapping.

RECREATION FOCUS TEAM ROLES AND TASKS

Travis County was the lead sponsor agency for the TC site, city of Austin’s PARD led planning on the OCFYB site, and coordinated efforts with other PARD and Sunset Valley representatives for efforts on the Williamson Creek areas. USACE acted as lead and consultant regarding the federal interests that USACE may participate in from a funding aspect. The RFT was charged with the following tasks:

- Defining the “sphere-of-influence” to be studied;
- Identifying problems, constraints, opportunities and development of goals and objectives for the survey;
- Defining the recreation activities to be evaluated;
- Decision making on hiring a contractor, including scoping and pre-survey meetings;
- Reviewing and approval of pre-survey questionnaires developed by the private contractor;
- Reviewing of survey reports as developed by the Contractor;
- Communicating with various concerned entities within the local sponsor network;
- Developing goals, and objectives for Timber Creek, Onion Creek Forest – Yarrabee Bend Non-Structural Alternatives and all Onion Creek Project sites including recreation activities;
- Preliminary planning of recreation for Non-Structural Alternatives;
- Preliminary planning for recreation amenities of Structural Alternatives and;
- Review of all recreation survey reports and maps.

RFT GOALS AND OBJECTIVES

The Recreation Focus Team combined planning efforts to define goals, and objectives, which are listed below.

Goal 1

Compliment the local and regional recreation system.

- Do not compete with other existing or planned recreation.
- Do not duplicate recreation features that are in neighboring areas

Goal 2

Coordinate with sponsors on recreation activities.

- Be locally driven, but sensitive to project economic benefits/cost needs.

- Sponsors will identify desired recreational activities and number of amenities to consider where feasible, alterations may occur, but will be approved with the sponsors and based upon economic criteria during Phases IIa and IIb. Site evaluation factors may shift quantities and locations in the design phase.
- Consider maintenance and flood plain restrictions.
- Define zones of activity for each recreational opportunity.

Goal 3

Project for 50-year population benefits/demand – attempt to maximize benefits, but keep quality of experience high. (Economic analyses was based upon current year's, population in this report)

- Estimate future demand on a five mile radius basis.
- Include the "high demand" recreation activities in park areas where feasible.

PROBLEMS, CONSTRAINTS, AND OPPORTUNITIES

Constraints and opportunities for future recreation development on the proposed project sites are described below:

- Neighborhood planning focus
- Need for low maintenance facilities by both county and city
- Reduction of flood damages to city and county maintained facilities
- COA's 25-year flood plain building restrictions and other smart growth initiatives
- Acceptance and willingness of residents to support park development
- Funding limitations and partnership roles
- Support from broader COA taxpayers
- Access issues
- Need for compatibility with metro park plans already being developed and linkage where possible
- Increasing urbanization near Timber Creek
- Conflicting user groups, mountain bikers vs equestrian trail users – need for separate trail systems
- Water quality, waste and erosion issues related to equestrian and other trail use.
- No competition with recently established community center in neighboring areas
- Airport 5-mile buffer and wildlife restriction area – no wetlands or open water that would attract flocks of birds – airport fences off boundary and no trail access through this area is possible.
- Linkage to state park is not doable for equestrian access
- Restrictions associated with ecosystem restoration program
- Hydrologic and endangered species concerns – Williamson Creek
- Safety to trail and park users
- Privacy for neighboring residents

DESIRED RECREATION ACTIVITIES

Desired recreation activities as identified by the various sponsors to consider in the associated park areas are listed below:

TIMBER CREEK

- Picnicking and large group shelters
- Playgrounds

- Multi-use and open play areas without fences
- Canoe launching (not suitable at this location)
- Long distance trails – multi-use, equestrian use
- Trailhead parking
- Spray park (later deemed undesirable for this location)
- No structural sport fields
- Covered basketball and multi-use courts
- Early warning system in parking areas
- Gated access
- Nature observation points, trails and education signage
- Drinking fountains and restrooms
- Fishing access (not planned at this location)
- Wildlife habitat enhancements
- Community gardens and orchards (later deemed undesirable)
- Landscaping for wildflowers and wildlife
- Natural surfaced trails
- Permeable trails and parking lots

YARRABEE BEND

- Long distance trails – natural surface- equestrian trails
- Possible equestrian facilities (currently not included in park plan)
- Playscape
- Picnic and group shelters
- Open, multi-use areas for non-league play and practice, festivals, etc, no fences
- Sport courts – tennis, basketball, volleyball with picnic areas
- Botanic garden/community garden potential (not planned at present)
- Nature center
- Disc (Frisbee) Golf
- BMX in pit area (not in buyout area or Corps cost share)
- Amphitheater/parking shared with botanical/community garden (no gardens planned, portable amphitheatres desirable to PARD)
- Ecosystem restoration

WILLIAMSON CREEK

- Trails – natural surface
- Trailhead parks with playscapes

**Note: Recreation for Williamson Creek was ruled out by sponsor in Phase IIa in response to lack of community support.*

PLAN FORMULATION

Formulation of plans included mapping of “recreation zones” and listing activities per zone. These zones were later refined as economic assessments revealed needs for capturing more benefits. Much discussion occurred regarding potential in-door recreation facilities in the OCFYB area; however, COA PARD was strongly opposed to such development and strongly in support of equestrian recreation opportunities, except indoor facilities. Neighborhood planning desires, maintenance requirements, flood damage and compliance with the city’s 25-year flood plain building restrictions were the main factors affecting the concerns expressed by the COA park planners. Public support for the projects was also of high concern, and was particularly questionable for the Williamson Creek trail system.

ONION CREEK SURVEY SUMMARY

As discussed above, funding for a Recreation Survey was incorporated within the *Phase IIa Study* and was cost-shared equally between USACE and the local sponsors. Sponsors for the *Phase IIa Study* included the Lower Colorado River Authority (LCRA), Travis County, city of Austin (COA) and the city of Sunset Valley. Improved coordination and encouragement of partnership development was a goal for all entities.

Based upon survey literature and contractor recommendations, the Recreation Focus Team (RFT) opted to pursue a telephone survey to achieve the most unbiased feedback from local residents. The contractor was charged with development of questions based upon a list of recreational needs generated by the team. The survey's question format was required to conform to the USACE-OMB guidance and requirements. OMB approval was required prior to application of the survey. Because of the growing Hispanic population in the region, the team required the survey to be conducted in English and Spanish versions as needed by respondents.

The survey was conducted during the Aug-Oct (2004) timeframe. Three volumes of information resulted from this survey work – *A Recreation Study for the City of Austin and Travis County, Texas (Vol 1)*; *A Recreation Study for the City of Austin and Travis County, Texas - Supplemental Demographic Analyses (Vol 2)*; and *A Recreation Study for the City of Austin and Travis County, Texas – Supplemental Nonparametric Analysis (Vol 3)*.

SPHERE OF INFLUENCE IDENTIFIED

The RFT defined the Sphere-of-Influence (survey study area) to be the extra-jurisdictional area of Austin along with all of Travis County and city of Sunset Valley. Some of Hays and Williamson counties were included in the extra-jurisdictional boundary. This boundary is expected to be the area used by most residents. It does not account for any tourism to the area, which will only be described using the TPWD's 2002 report, in which the Texas Parks and Wildlife Department defined a 100-mile distance (1.5 hour drive) as the distance Texas residents are willing to travel for weekend recreation (**Figure Rec – 3**).

The Austin area is in the Hill Country of Texas and can be considered the "recreation Mecca of Texas", because of its close proximity to major regional attractions, diverse terrain, geological and other unique natural areas, lakes, Colorado River corridor, State Parks and the University of Texas. Austin is also the location of the state's Capital, and has a modern, high-tech, youthful population base. It is not known for being a "retirement area", because of its increasing high costs of living, and rapid growth rate. Recreation occurs year-round because of the mild climate of the region.

SAMPLE TYPE AND SIZE USED

As recommended by the Contractor, the sample type was defined at the household level, not the individual level. A total of 1200 samples were specified as necessary to keep sampling errors at less than five percent. This definition was modified slightly in order to keep the survey instrument manageable and to ensure greater participation. As a result of this redefinition, the sampling error was estimated at eight percent for the entire area and varied up to 10% when considering smaller, individual planning regions. The survey sample was based on U.S. Census Tracts and later organized by COA's 27 Planning Regions, which encompassed Travis County and Sunset Valley.

Graphs were later simplified and combined by the USACE Recreation Planner for use in this report and by other partners as needed and desired based upon data for the top 20 recreation items per planning region provided in the reports. Only those areas within the Onion Creek Watershed are shown in this report, since most users were *assumed* to be originating from this area.

RECREATION ACTIVITIES CONSIDERED FOR SURVEY

The team opted to look at both outdoor and indoor recreation, since buyout areas can be developed into more active parks. Linkage to neighborhood amenities, such as schools, libraries, and cultural areas was considered an important aspect in the development of the survey and planning of recreation. Designing the survey for multiple uses ensured a better return on the investment and provided USACE and local sponsors with important information for several planning projects in the Austin area. This approach also provided data for prospective partnership building and private industry development to meet the recreation needs of the area. Approximately 90 recreation activities were explored in the survey.

As expected, there is a great diversity of recreation activities in demand in the Austin area, and there is wide variance between planning regions. This variance is produced in part by built-up land restrictions and rapid expansion into the outer areas of the city. Younger, first home buying families are rapidly moving into the extremities, and these areas are expected to mirror planning areas that currently have a high percentage of children and teenagers within the next 5-20 years. As expected this household group accounted for the highest and most diverse recreation demand.

College age adults were also high users of various recreation activities, and typically located close to the University of Texas. Older groups were constrained mostly by time constraints from work and most likely children’s activities. The senior citizen group was markedly absent from most areas as expected because of the rapid growth and high costs of living pushing them to other regions in Texas.

EXISTING RECREATION AND LATENT DEMAND

Areas with greenbelts, stream corridors and lakes showed high interest in recreation participation and demand. **Figure Rec – 4** lists the top recreation activities on a “city-wide” scale, showing latent and existing demand; of the top 20 items, seven activities are trail-related and include walking, walking on roads and/or sidewalks, walking on paved trails, walking on unpaved trails, running and jogging, running, jogging on roads or sidewalks, residential wildlife viewing and wildlife viewing within 1-mile distance of residence. As illustrated, trails and linear outdoor recreation is in wide demand throughout the city. Walking was listed as the #1 recreation activity. Demand was also high for trails for biking within the area. Indoor activities making the top activities list included indoor cultural activities, exercise equipment use, swimming indoors, general fitness and weight training.

ECONOMIC WILLINGNESS TO PAY

Recreation demand does not equate to “willingness to pay” and recreation demand differed in respects to the “willingness to pay” criteria used by Corps economists. The top willingness-to-pay activities are listed below in **Table Rec – 1**. Recreation needs and willingness to pay were identified in the survey and used as a basis for proposing additional recreation development on all recreation plans. Results from this assessment of the survey results were used to estimate benefit-cost analysis as discussed in the *Economic Chapter* of this report.

Table Rec - 1

Recreation Activities Ranking by Willingness to Pay and Percent Expected Participation

Recreation Activity	Ave \$ per person per Day	Ave # of Expected Participants (% pop)	Total Anticipated (Ave \$ x % pop)
Water Parks	\$8.81	2.06	\$18.15
Cultural Activities or Arts-Indoors	\$8.29	1.76	\$14.59
Cultural Activities or Arts-Outdoors	\$9.40	1.42	\$13.35
Nature or Outdoor Ed. Centers	\$4.24	1.82	\$7.72
Camping in a Tent	\$4.72	1.46	\$6.89
Picnicking	\$2.20	2.21	\$4.86
Outdoor Swimming Pools	\$2.52	1.87	\$4.71
General Fitness	\$4.00	1.11	\$4.44
Bowling Alleys	\$3.80	1.16	\$4.41
Golf	\$9.07	0.46	\$4.17
Horseback Riding at Equestrian Centers	\$5.33	0.76	\$4.05
Swimming in natural waters	\$2.39	1.69	\$4.04
Miniature Golf Courses	\$3.11	1.27	\$3.95

Motor boating	\$3.82	1.01	\$3.86
SCUBA diving/Snorkeling	\$6.38	0.57	\$3.64
Trails for Horseback Riding	\$4.67	0.77	\$3.60
Fishing	\$3.01	1.08	\$3.25
Camping in an RV or Campground	\$3.84	0.77	\$2.96
Indoor Swimming Pools	\$2.12	1.34	\$2.84
Rodeo	\$4.51	0.61	\$2.75
Canoeing or Kayaking	\$2.77	0.99	\$2.74
Biking on Roads	\$2.87	0.9	\$2.58
Indoor Rock Climbing	\$3.34	0.65	\$2.17
A trail System	\$1.59	1.34	\$2.13
Wildlife Viewing trips at least 1 mile from home	\$2.16	0.97	\$2.10
Community Gardens	\$1.95	1.04	\$2.03
Dance	\$3.37	0.59	\$1.99
Arts & Crafts	\$2.51	0.78	\$1.96
Playgrounds	\$1.28	1.39	\$1.78
Painting/Drawing	\$2.96	0.57	\$1.69
Tennis Courts	\$2.18	0.75	\$1.64
Sailing	\$2.95	0.54	\$1.59
Spray Parks	\$2.03	0.77	\$1.56
Riding a Personal Watercraft	\$2.66	0.56	\$1.49
Roller Skating Rinks	\$1.86	0.65	\$1.21
Ice Skating rinks	\$2.00	0.6	\$1.20
Martial Arts	\$2.55	0.45	\$1.15
Paved Running, Jogging or Walking Trails	\$0.81	1.26	\$1.02
Unpaved Running, Jogging or Walking Trails	\$0.85	1.15	\$0.98
	Ave \$	Ave # of	Total
	per	Expected	Anticipated
	person	Participants	(Ave \$ x %
Recreation Activity	per Day	(% pop)	pop)
Birding	\$1.46	0.62	\$0.91
Indoor Paintball	\$2.04	0.44	\$0.90
Rock Climbing Outdoors	\$1.72	0.5	\$0.86
Outdoor Ranges for Shooting Sports/Archery	\$2.40	0.35	\$0.84
Running, Jogging or Walking on Roads or Sidewalks	\$0.58	1.39	\$0.81
Soccer	\$1.48	0.54	\$0.80
Paved Trails for Biking	\$0.89	0.88	\$0.78
Outdoor Basketball Courts	\$1.01	0.67	\$0.68
Football	\$1.12	0.54	\$0.60
Indoor Shooting Sports/Archery Ranges	\$1.67	0.35	\$0.58
Mountain Biking	\$0.96	0.53	\$0.51
Water Trails	\$1.12	0.45	\$0.50
Gymnastics/Tumbling	\$1.63	0.29	\$0.47
Indoor Volleyball Courts	\$0.54	0.85	\$0.46
ATVs or Motocross	\$1.57	0.29	\$0.46
Residential Wildlife Viewing	\$0.68	0.65	\$0.44
Outdoor Volleyball Courts	\$0.69	0.56	\$0.39
Indoor Basketball Courts	\$0.71	0.47	\$0.33

Baseball	\$0.87	0.37	\$0.32
Inline Skating	\$0.94	0.34	\$0.32
Sail boarding or Windsurfing	\$1.13	0.28	\$0.32
Disc Golf/Frisbee Golf	\$0.66	0.46	\$0.30
Indoor Soccer	\$0.96	0.31	\$0.30
Skateboarding - indoors	\$0.90	0.27	\$0.24
Off-Leash Dog Areas	\$0.45	0.49	\$0.22
Skate boarding-outdoors	\$0.78	0.24	\$0.19
BMX Biking	\$0.86	0.17	\$0.15
Softball	\$0.55	0.25	\$0.14
Commuting by Bike to Work or School	\$0.46	0.27	\$0.12
Women's Slow-Pitch Softball	\$0.63	0.18	\$0.11
Fencing	\$0.87	0.13	\$0.11
Rugby	\$0.78	0.14	\$0.11
Ice Hockey	\$0.61	0.16	\$0.10
Floor Hockey	\$0.47	0.17	\$0.08
Indoor Handball Courts	\$0.40	0.17	\$0.07
Cricket	\$0.62	0.08	\$0.05
Lacrosse	\$0.62	0.08	\$0.05
Field Hockey	\$0.37	0.11	\$0.04

Information extracted from *Onion Creek Recreation Survey* conducted by Responsive Management, fall 2004.

RECREATION AREAS: AMENITIES-RECOMMENDED PLAN

TIMBER CREEK

The Timber Creek (TC) area is located in Planning Region 24, and is predominantly rural. Residents from Region 25 are likely visitors to the area. The TC area is outside of Austin's existing boundary, but within its extra-jurisdictional boundary, and it is expanding rapidly as a single-family residential area. Park lands within the area are managed by Travis County. **Figure Rec – 5** illustrates existing parks and important sites within a five-mile radius of the Timber Creek project area. As shown there are several regional park amenities within the Timber Creek five-mile radius including McKinney Falls State Park, Austin's Soccer Complex Metro Park and the proposed Onion Creek Forest-Yarrabee Bend park. As defined by the Travis County representatives, the Timber Creek area will be planned as a Neighborhood Park with ecosystem restoration components.

Timber Creek Park Vision

Timber Creek will be a separate, isolated neighborhood park to serve rapidly developing areas to the east and southeast. Preserve existing mature, (desirable) trees. No linkage to the larger trail system is planned.

Figure Rec – 6 illustrates existing and latent demand for Planning Regions 24 and 25, which are the most likely affected areas. This is the recommended 25-YR Buyout plan, and was

developed for the Timber Creek area as illustrated in **Figure Rec – 7**. **Table Rec – 2** lists Timber Creek Park’s proposed recreation activities per zone under this scenario.

In the economic assessment, a five-mile radius was used to determine the population of the most likely participating population. Factors that could affect use of the area include regional tourism with tourists attracted to McKinney State Falls, regional trail users, and regional sport complex users. The Bergstrom Airport will affect development of the area and hinders some recreation and ecosystem restoration potentials – such as ponds and wetlands.

Table Rec - 2 Timber Creek Park - Proposed Recreation per Zone

Zones of Activity	Activity	Recreation Amenities	Quantity
E/H	Picnic Areas includes associated parking areas	Picnic Sites	20
E/H		Picnic Site (small group)	8 (36 people)
E/H		Large group shelter	1 (>36 people)
	Restrooms		1
E/H		Playground	2
C/H	Sport Courts	Basketball	2
D	Multi-use Fields	All suitable activities	10 AC
Trails	Trails	Unpaved	5305 LFT
		Paved	1241 LFT
N	Vegetative Buffer		~ 8 AC
Ecosystem Restoration Area	Ecosystem Restoration Area		16.9 AC

Onion Creek Forest - Yarrabee Bend (OCFYB)

The Onion Creek Forest is located within a five-mile radius of the Timber Creek project area and within the restricted buffer zone of Bergstrom Airport. With development of this area into a recreational – ecosystem restoration area, metro parks could be linked and a potential corridor linking to these parks and McKinney Falls State Park could be facilitated. **Figure Rec–8** illustrates existing and latent demand for Planning Region 13. Two areas are planned and are separated by Onion Creek and steep banks.

Onion Creek Forest – Yarrabee Bend (OCFYB) Park Vision

Onion Creek Forest – Yarrabee Bend Park (OCFYB) will be separate park nodes (a metro and one neighborhood park) on the Onion Creek Greenway, to serve rapidly developing areas to the north, east and south with complimenting greenway park system linkage. Existing desirable trees will be preserved and incorporated into the design wherever feasible.

As defined by the COA PARD representatives, the larger OCFYB area will be planned as a Metro Park with ecosystem restoration components, equestrian and multi-use trails, picnic areas, sport courts, self-guided nature trail, and multi-use fields to include activities such as festivals and farmers markets. The recommended plan includes a disc golf course area of four sub-areas, with two deferred while two are active. An extreme sport complex area (skate park, BMX course) is planned adjacent to, but outside of the proposed park area, and will be funded entirely by COA PARD.

The smaller neighborhood park east of Onion Creek will contain traditional amenities including ecosystem restoration which will occur on outer areas along the creek's steep banks.

Figure Rec – 9 illustrates the proposed recreation areas considered for the Recommended Plan, and **Table Rec-3** lists recreation features per zone.

Table Rec - 3 OCFYB Recreation Features per Zone

Zones of Activity	Description	Recreation Amenities	Quantity
E/T	Covered Picnic Areas and associated parking	Individual Picnic Sites	32
E		Small Group Sites	32
E		Group Site	1
	Restrooms		2
U		Playscapes	4
C	Sport Courts and associated parking	Basketball	4
E		Volleyball (assoc with picnic tables)	19
C		Tennis	2
D	Multi-use Fields and associated parking	Unreserved areas – all suitable activities	11.5 AC
D		Reserved areas – all suitable activities	3 AC
D	Disc Golf (MU Field parking areas)	4 rotated areas	25.2 AC
	Nature Area –trail	Self-guided nature education	5273.3LFT
	Unpaved Trails	walking - biking	7856.7 LFT
E, C, N, D, G	Paved Trails		9680.2 LFT
	Equestrian Trail		7400 LFT
	New Paved 2-Way Road (24" wide)		867.55 LFT
N	Vegetative Buffers		27.2 AC
	Ecosystem Restoration Area		
V	*Skate Park		1
G	*BMX Course		1

* Items planned by COA PARD are 100% their responsibility. Benefits not calculated in economic assessment for linkage to these features.

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Williamson Creek Greenbelt

The previously proposed Williamson Creek Greenbelt was approximately 5.4 miles long and consisted of proposed flood reduction and ecosystem buy-out lands along with city of Austin property. The federal plans developed included the Nonstructural 25-Year Combined Plan (**Figure Rec – 10**), and the Structural 25-Year Combined Plan (**Figure Rec – 11**). **Table Rec - 4** shows recreation amenities originally planned for the Williamson Creek plans, and consisted of only nature trails and small trailhead parks. Trail activity was proposed to be 3-foot wide nature trails. There was potential for trail linkage with the western greenbelt area already owned by the city of Austin, and this would have required cooperation with the city of Sunset Valley. To illustrate the complete greenway potential provided with these plans and the existing western greenbelt, **Figure Rec - 12** was provided.

In response to the growing neighborhood opposition geared toward the inclusion of trails in the Williamson Creek Floodway, with or without ecosystem restoration activities, the sponsors decided to eliminate all recreation from the plan following the conclusion of Phase IIa.

Table Rec - 4 Recreation Amenities for Williamson Creek

Description	Recreation Amenities	Quantity
Nature Trails	3 ft wide, natural surface	4.1 mi
Trailhead Park	Picnic Tables	10

SUMMARY

In summary, three parks will be developed by USACE and local sponsors in the proposed buyout areas. Two of these will be designed as neighborhood parks and include the Timber Creek site and the Onion Creek Forest -Yarrabee Bend area on the east bank of Onion Creek. The larger buyout area in the Yarrabee Bend-Onion Creek Forest area will be developed into a Metro Park. The area illustrated in the OCFYB buyout, will most likely be increased to include houses closest to the greenbelt, which did not qualify for the USACE buyout because of raised foundation elevations. These areas will most likely be bought out by the city of Austin and incorporated into the park in the near future. No recreation is planned for Williamson Creek areas, but initial planning activities have been documented in case future opportunities present themselves, and the cities of Austin and Sunset Valley choose to pursue a trail system on their own.

Most of the recreation features included in the park plans are cost-sharable with USACE; however, some are not and will be the sole responsibility of the sponsors. **Table Rec - 5** lists features cost-sharable and non-cost sharable. Future efforts upon approval of this plan include the development of a Design Document Report, which will illustrate features in the park. This process may or may not include design charrettes at the local level in coordination with the various sponsors. Amenities identified for economic evaluation will be used; however, as design advances and access to property is permitted, some adjustments may be needed to design a “quality recreation experience”. This may include, but is not limited to consolidation of picnic sites into larger group shelters, more or less parking areas, etc. Design efforts should entail utilizing some of the existing pavement areas for roads, parking, trails etc. Some grading is expected to be needed once buildings, undesirable pavement and septic systems are removed. During grading activities (cost-sharable), USACE will assist with grading of sport court areas. Additional construction activities of this type of recreation feature are not covered under USACE cost-share guidelines, as indicated in **Table Rec - 5**.

Table Rec – 5
Check List of New Facilities Which May be Provided in Recreation
Developments at Corps Water Resource Projects (1)

Activity/Facility	Joint Cost Share (2)	COE Cost Shared (3)	100% Other (4)
<u>Access and Circulation</u>			
Roads (5)		X	X
Turnarounds	X	X	X
Trails			X
Hiking/Multi-use		X	X
Bicycle/Jogging		as multi-use trail	X
Equestrian/without jumps		X	X
Parking (5)		X	X
Bridges and Culverts		X	X
Walks		X	X
Steps (Outdoor)		X	X
Footbridges (9)		X	X
<u>Structures</u>			
Sanitation			
Vault Toilets (6)		X	X
Comfort Station (6)		X	X
Shelters			
Picnic		X	X
Overlook		X	X
Trail		X	X
<u>Utilities</u>			
Water Supply			
Municipal System		X	X
Wells		X	X
Storage		X	X
Fountain and Outlets		X	X
Irrigation System (manual)		X	X
Sewage and Waste Water Disposal			
Municipal System		X	X
Septic Tanks and Tile Fields		X	X
Storm Drainage		X	X
Public Telephone (2)		X	X
Electrical			
Lighting		X	X
Lift Pumps		X	X
Gas, Natural/Propane		X	X

Activity/Facility	Joint Cost Share (2)	COE Cost Shared (3)	100% Other (4)
<u>Site Preparation and Restoration</u>			
Clearing and Grubbing (includes Vista clearing)		X	X
Grading and Land Form		X	X
Tree Planting		X	X
Shrub Planting		X	X
Turf Establishment		X	X
Reforestation		X	X
<u>Park Furniture</u>			
Grills and Fireplaces		X	X
Trash Receptacles/holders		X	X
Benches		X	X
<u>Play Facilities</u>			
Multiple use courts (7)		X	X
Ball diamond with backstop		X	X
Playfield Area (open space)		X	X
Play equipment standard		X	X
<u>Signs</u>			
Entrance-Directional-Marker		X	X
Traffic Control (Vehicular and Pedestrian)		X	
Instruction (includes fire danger notices)		X	X
<u>Interpretive Guidance and Media</u>			
Display Boards		X	X
Interpretative Markers (natural, Historical, archeological, etc.)		X	X
Bulletin Boards		X	X
<u>Protection, Control, Health & Safety</u>			
Protection and Control			
Gates and Barricades	X	X	X

All items above are applicable to various parks discussed within this plan.

* See applicable notes below:

- 1) Includes new and completed lakes, local protection projects, navigation projects, etc. Facilities not listed must be justified and approved prior to commitments made to cost sharing partners. This check list will be modified as appropriate.
- 2) The facilities to be provided are to be limited to those required for minimum health and safety; beyond these the Corps will also provide type "C" visitor center and operational boat ramps. Handicapped access will be a consideration.
- 3) Facilities to be cost shared are limited to standard designs that do not include embellishments such a decorative stone work, planters, elaborate designs or pretentious space.
- 4) Includes facilities which may not be resource oriented, are revenue producing or are over and above that which would normally be provided at a water resource project.
- 5) When roads and/or parking are to be used and/or designed for use under more than one financing category, cost will be allocated on the basis of estimated use by function. The discretion of the D. E. is to be applied
- 6) Minimum sanitary facilities are limited to those that meet minimum Federal and local health requirements.
- 7) Grading and paving, to the extent they represent least cost alternatives to stabilizing floodways, may be used by local interests for recreational activities or facility developments not eligible for cost sharing. Such grading and paving may be done by the Corps to specifications more costly than necessary for floodway stabilization provided the additional cost is met by a non-Federal sponsor.
- 8) Includes extensive specialized play equipment over and above basic climbing, swinging and sliding apparatus.
- 9) Footbridges are to be austere and used only when other crossing methods are impractical. Footbridges which are the center of a recreation experience are to be at local costs.

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Figure Rec - 1 Onion Creek Phase II Proposed Study Areas

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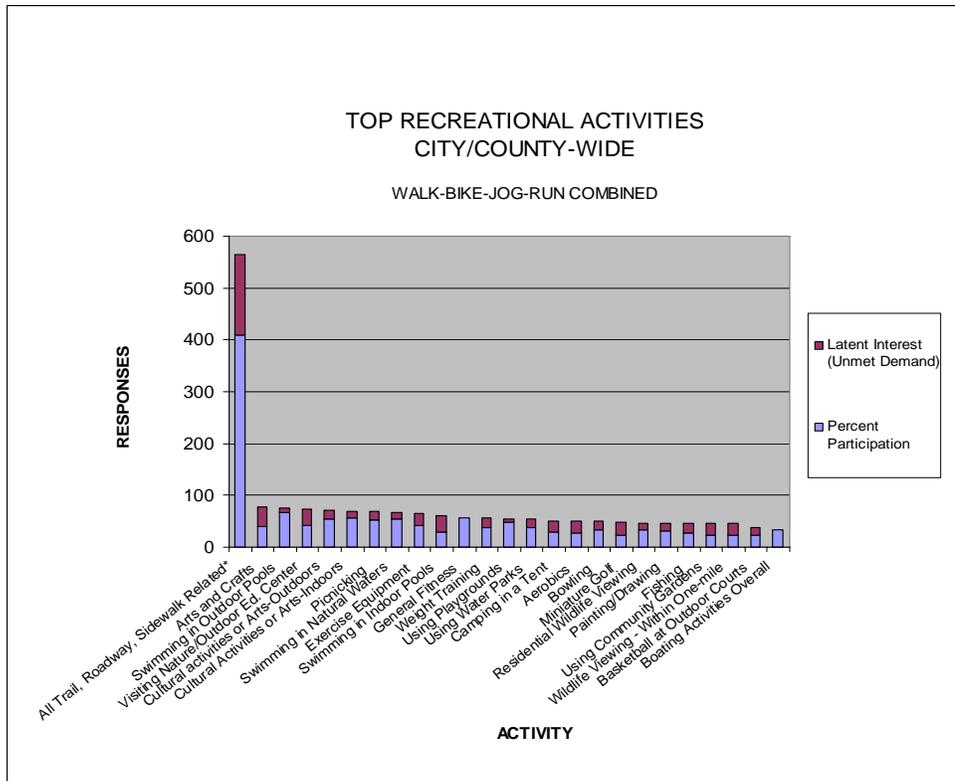
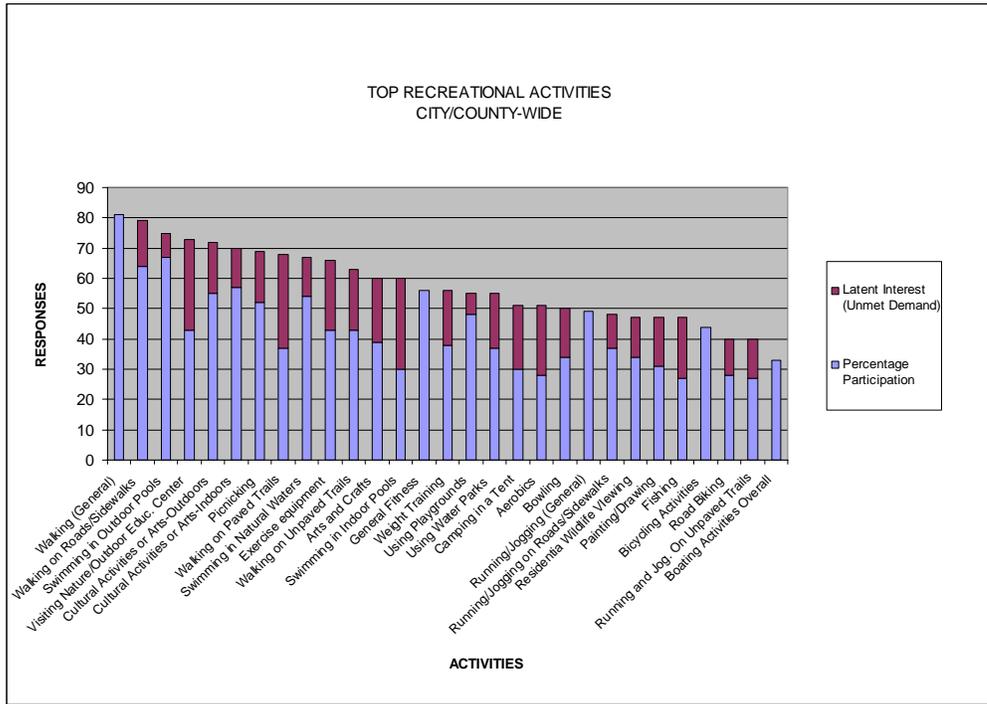
Figure Rec - 2 City of Austin's Planning Regions

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Figure Rec - 3 100 Mile Radius – Anticipated Austin Tourism Population

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Figure Rec - 4

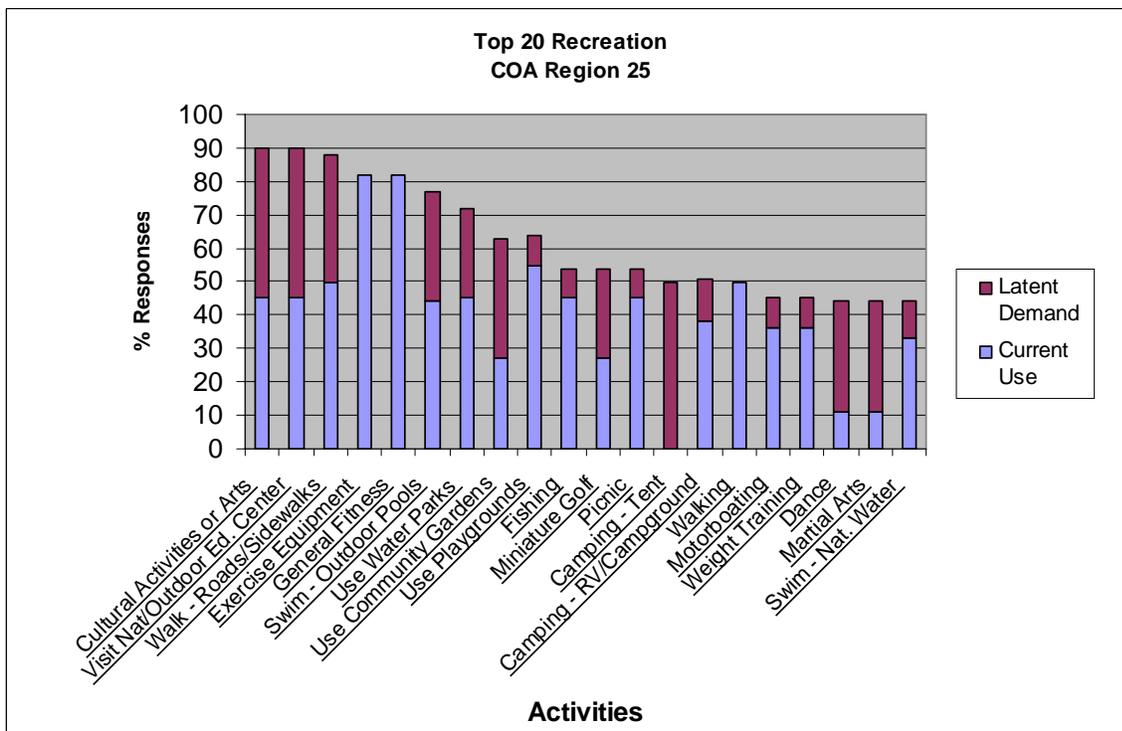
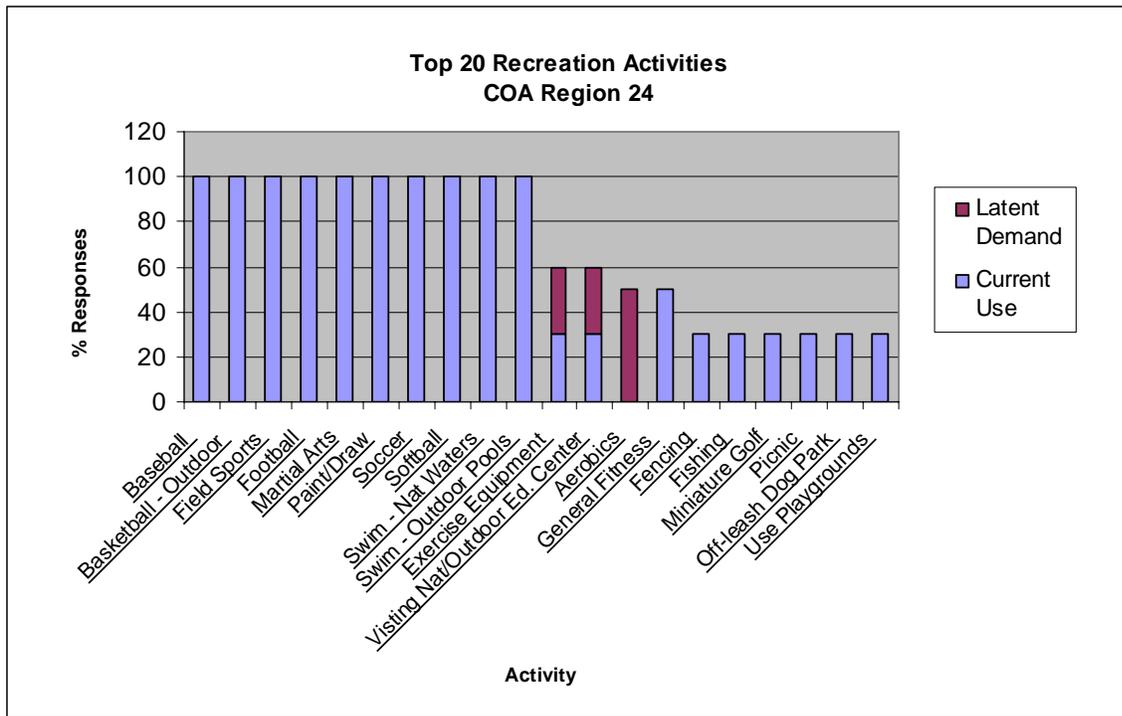


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Figure Rec - 5 Parks – Five mile Radius of Timber Creek

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Figure Rec - 6 Existing and Latent Recreation Demand – COA Regions 24 and 25

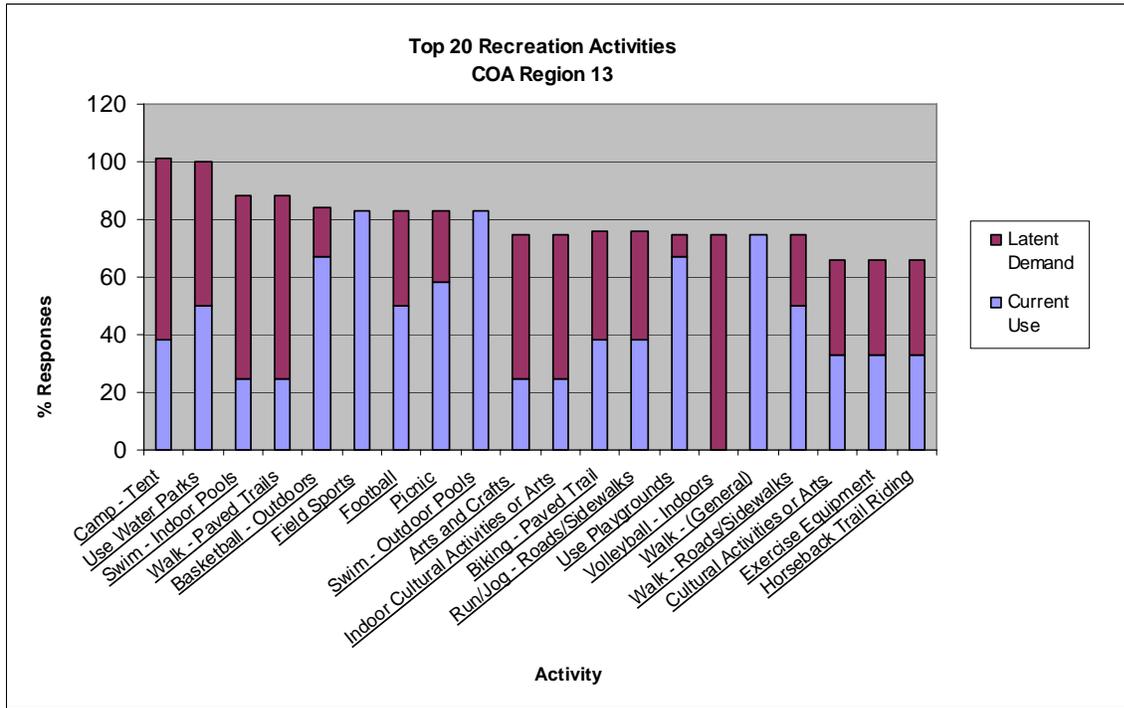


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Figure Rec - 7 Timber Creek Recommended Plan

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Figure Rec- 8 Existing and Latent Demand for COA Planning Region 13



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Figure Rec-9 OCFYB Recommended Plan

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Figure Rec – 10 Williamson Creek Proposed 25 YR Combined Non-Structural

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Figure Rec - 11 Williamson Creek 25 YR Proposed Combined Structural

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Figure Rec - 12 Williamson Creek Greenbelt Potential

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