adams county regional park south and northeast areas

Master Plan Update

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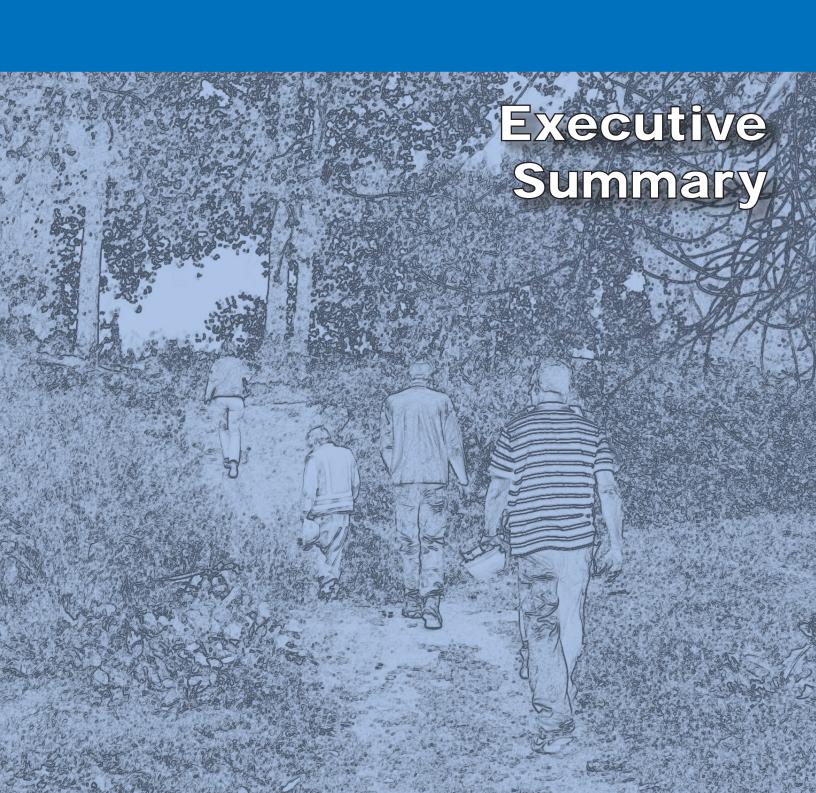
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Contents

Ac	knowledgements	
Ex	ecutive SummaryS-	-1
Se	ction 1: Introduction	
	Purpose and Location	. 2
	Planning Process	
Se	ction 2: Existing Conditions	
	Regional Context	.6
	Water Resources	.6
	Natural Resources	(
	Cultural Setting	2
	Circulation	2
	Existing Park Use	E
	Qualities and Issues	8
Se	ction 3: Vision, Goals, and Use Program	
	Vision	16
	Goals	16
	Use Program	!7
Ch	apter 4: Master Plan	
	Overview	(
	Key Elements 3	12
	Description of Master Plan by Area	, 2
Ch	apter 5: Phasing and Cost	
	Phasing 5	2
	Cost Estimate5	, 2
Αp	pendix	
	Appendix A: Master Plan Alternatives	8



Executive Summary



Looking east toward the south part of the project area, including the agricultural field and future lakes at Adams County Regional Park.

INTRODUCTION

The Adams County Regional Park Master Plan Update is an update to the master plan completed in 1999. Since the completion of the original master plan, two areas of the park, south of Henderson Road and north near the Nature Preserve, have undergone numerous changes requiring the need to rethink their function and uses. This update to the Adams County Regional Park Master Plan serves as a guide for future development.

Providing quality recreation, education, and visitor experiences compatible with the unique natural and cultural resources of site and surrounding neighborhoods was a primary consideration when developing the plan. The program developed for the Regional Park provides for a broad diversity of passive recreational opportunities including non-motorized boating, fishing, walking, biking, picnicking, nature viewing, and play. Education and interpretation of site resources is also emphasized. ADA accessibility are provided on the paved pathways and to facilities.

The master planning effort spearheaded by Adams County included a stakeholder group comprised of various public agency staff and project consultants. Meetings and field trips were essential components of the inventory and analysis stage. The planning process included an analysis of existing resources, facilities, issues, and opportunities. With the stakeholder group feedback, a draft master plan was developed that addressed the desires and needs of Adams County. The final steps in the planning process will include approval by the Board of County Commissioners

EXISTING CONDITIONS

A major focus of the planning process is the gravel mining area south of Henderson Road. Soon the excavation of three large gravel pits will be competed, which will provide the opportunity to develop the south end of the park. The pits will become lakes for both passive recreation and water storage. A new access road connecting 120th Avenue to the current park

entrance at 124th Avenue is part of the Master Plan and is currently being graded. A section of the Colorado Front Range Trail along the South Platte River is also planned in this area and will be constructed in 2008.

The riparian corridor along the South Platte River that borders the entire east side of the Regional Park, including the Nature Preserve is in a relatively natural state. This area is an important resource for migrating birds, raptors, deer, and other wildlife.

A major issue that is integral to the planning process is related to the water storage within the lakes. Unknowns include identifying the user of the water storage, the source of the water, and how the water fills and releases will be managed. These factors will affect the levels of the lakes, the quality of the visitor experience, and the overall use of the park. The most advantageous scenario for the park as a recreation resource will be to have a high conservation pool in at least one of the lakes and a moderately high conservation pool in another one. This will help provide a quality visitor experience for park users while allowing Adams County to potentially lease water to a nearby entity.

VISION

At the Adams County Regional Park, visitors enjoy a natural retreat from the park's outlying developed areas. The South Platte River borders the park to the east and supports a diversity of healthy wildlife habitats. The park's setting hosts a number of recreational, educational, and art amenities including trails, nonmotorized boating, fishing, and integrated sculpture. Water and its journey from the mountains to the plains is interpreted and experienced in many ways both functionally and aesthetically throughout the park. Visitors' understanding of and appreciation for Adams County's natural and cultural resources will grow with each visit to the park.

GOALS

- Provide a broad diversity of recreational and educational uses compatible to the plains ecosystem, including biking, hiking, non-motorized boating, fishing, wildlife viewing, and environmental education.
- Interpret the natural, cultural and historic resources of the site such as its agricultural and ranching heritage.



Remnants of the historic Brantner Gulch still cuts through the Nature Preserve, Adams County Regional Park.

- Create a "Plains Ecological Center", including a Nature Center for the County, devoted to the areas diverse heritage, culture, and environment.
- Enhance the health and diversity of the various plains habitats in the park, including riparian areas and prairie grasslands.
- Promote sustainable environments.
- Preserve and enhance wildlife habitats and other natural resources.
- Utilize water aesthetically, sustainably, and educationally.

MASTER PLAN

The majority of the improvements to the south gravel lakes area are focused in the central area between the three lakes, while the outlying areas will be less developed, utilizing native vegetation and requiring less maintenance. A central plaza and Nature Center in the south area will be a place for community gathering, education, and events. Water will be interpreted throughout the park and

will be used as an aesthetic, functional, and educational component. A diversity of experience will be provided through beaches, native vegetation, shaded grassy areas, moist lands, and the native riparian corridor. Trails for biking as well as walking will connect throughout the area.

The existing agricultural field in the southwest will be retained and enhanced. Farm buildings found in Adams County, slated for demolition, will be salvaged, restored, and utilized for education and interpretation. Space will be provided for activities such as festivals, outdoor markets, outdoor education, and a farming demonstration water feature.

The north portion will remain a non-motorized area focused on nature based experiences. The Nature Preserve will be revitalized with the reintroduction of water into the Brantner Gulch, additional native plantings, and the development of landscaped moist areas. An open air pavilion for educational programs and interpretive trials will also be provided. This area will be utilized for education and interpretation of the natural



Fishing is one of the recreational activities enjoyed at Adams County Regional Park.

cycles and changes that occur along the South Platte River. The separation between conflicting uses within the park will be reinforced, through the planting of dense thorny shrubs and trees between the golf course and the park. In addition, the Fishing is Fun Pond and adjacent area will be enhanced with the addition of native shade trees and picnic shelters so visitors will be less tempted to picnic on the golf course.

All vehicular access will be limited to the major roads. Park Boulevard will bisect the south side of the park but other vehicular access will be limited in order to promote a non-motorized environment. Parallel parking will be provided along Park Boulevard and small parking areas will be provided at appropriate locations associated with areas of activity. The entire park will be linked by an extensive trail system. The South Platte River Trail will run through the park and will provide an important link of the Colorado Front Range Trail (CFRT), to the north and south.

Adams County Regional Park is already an important part of the community through events associated with the fairgrounds and the Adams County Historical Society. The Adams County Regional Park Master Plan Update provides an opportunity for the park to become an even more integral and significant asset to the region.

IMPLEMENTATION

Adams County Parks will budget for the implementation of this plan and will also seek grants from GOCO, Division of Wildlife, State Trails, Urban Drainage and Flood Control, and other partners. The projects outlined in the update to the master plan will be implemented in phases.

Adams County has obtained a grant for a portion of the South Platte River Trail and has submitted a Legacy Grant to GOCO for completion of the trail through the Regional Park including the two focus areas of the master plan update.

Prior to construction some early needs should be identified, such as the determination of the specifics of the water storage (identify water partner, determine quantity of water in conservation pools, storage, and amount of flow through connecting water feature). Ascertaining historic farm buildings slated for demolition should also be considered.

section 1



Introduction



Stakeholder meetings were an important component of the planning process for the northeast and south areas of the Adams County Regional Park Master Plan Update.

PURPOSE AND LOCATION

As the Front Range grows, suburban development consumes more and more agricultural lands. Adams County Regional Park provides relief from the ever encroaching development and will become more important each day as a place that preserves some of the rural agricultural character and heritage of the region.

This document is an update to the Adams County Regional Park Master Plan completed in 1999. Since that time numerous changes have occurred in the northeast and south areas of the park requiring the need to re-think their functions and uses.

The project area includes approximately 550 acres and entails the south half and the east side of the north half of the Adams County Regional Park. The project includes all the regional park lands between 120th Avenue and 124th Avenue from Riverdale Road to the South Platte River and the lands around the Fishing is Fun Pond near 136th Avenue, including the Nature Preserve.

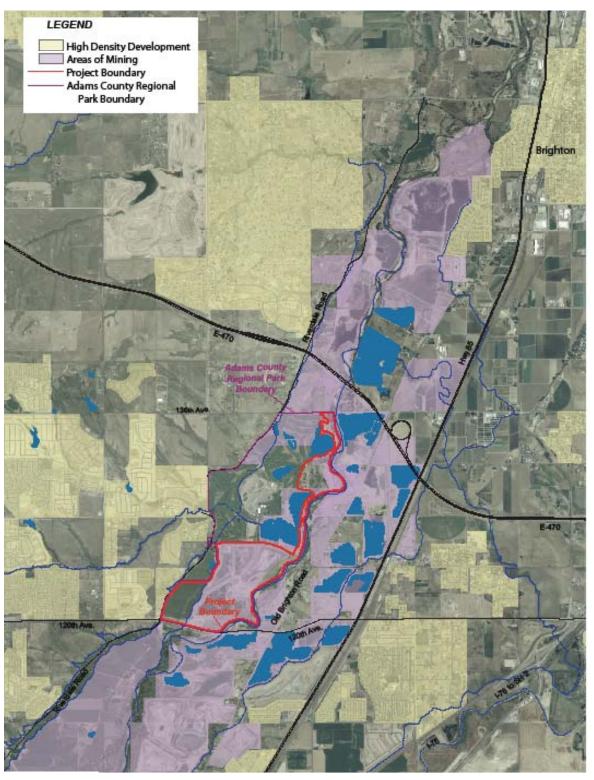
This plan is a guide for the long-range development of the park and proposes methods for enhancing recreation and visitor opportunities while conserving the site's natural, cultural, and scenic resources. It defines the program for long term park enhancement, including recreational, educational

and interpretative programs, facility and infrastructure development, and natural resource management.

PLANNING PROCESS

The development of the master plan relied heavily upon assistance from a well informed group of stakeholders that consisted of representatives from Adams County Parks, Planning, & Public Works, Love & Associates, ESCO Associates, the County Extension Service, LaFarge, Colorado Division of Wildlife (DOW), Urban Drainage and Flood Control District (UDFCD), Helton-Williamsen, and Shapins Associates.

During the course of the master planning effort, three stakeholder meetings were held. The initial stakeholder meeting included an overview of the park's history and assets as well as a site visit to better understand the nuances and complexities of the site and its issues, especially water. Subsequent stakeholder meetings focused on key issues, overall park development, and specific area site plans. Feedback from the stakeholder group guided development of the master plan during each phase.



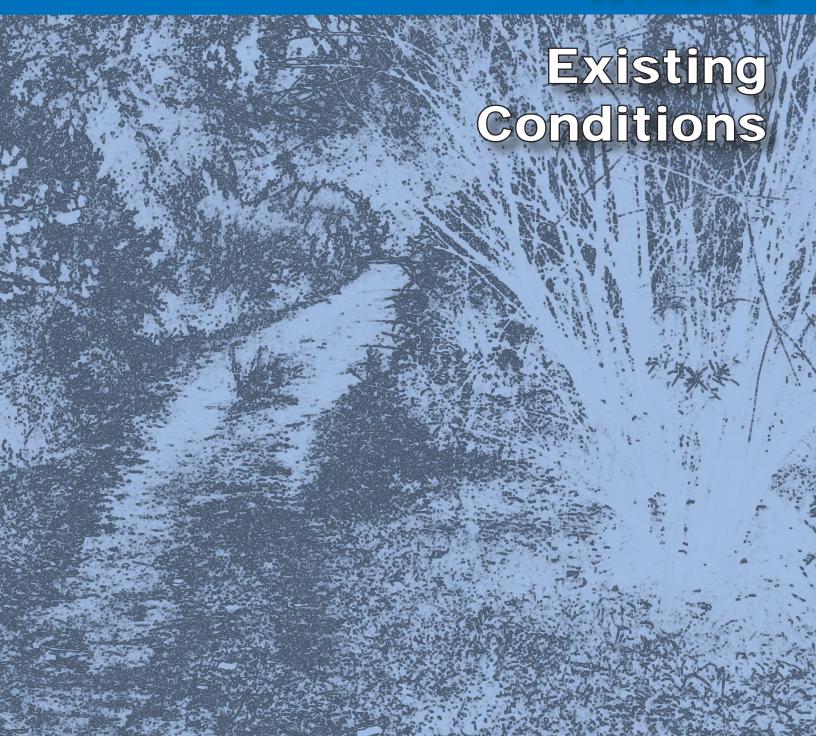


MASTER PLAN UPDATE Area Context Map ADAMS COUNTY REGIONAL PARK





section 2



Existing Conditions



The corn field and gravel pits in the south portion of Adams County Regional Park.

REGIONAL CONTEXT

Location

Adams County Regional Park is located along the west side of the South Platte River 15 miles north of Denver at the eastern edge of the city of Thornton. The city of Brighton is 5 miles to the north. Barr Lake State Park is approximately 4 miles to the east, the Rocky Mountain Arsenal National Wildlife Refuge (NWR) is 3 miles to the south, and Denver International Airport is 9 miles to the southeast (see Area Context Map, p. 3).

Regional Connections

Adams County Regional Park can be accessed from three major roads: I-25 via 120th Avenue, State Highway 85 (Old Brighton Road) which links Denver to areas north, and 128th Avenue which meets Riverdale Road on the west side of the park. The only road in the area that crosses the river, Henderson Road (124th Avenue), bisects the park and intersects with Old Brighton Road just east of the park. Sections of E470 pass just to the east and north of the site. The nearest interchange is to the north, bringing visitors to the park via 120th Avenue.

The South Platte River Trail, a major regional, multi-use trail, will pass through the park once completed. The trail will connect users from

Chatfield Reservoir south of Denver to lands north of the park into Weld County. This trail is part of the Colorado Front Range Trail (CFRT), a proposed multipurpose trail extending from Wyoming to New Mexico along the Front Range of Colorado. When completed, it will provide a highly accessible multi-use trail connection to the regional park.

WATER RESOURCES

Lakes

The existing lakes, Fishing is Fun Pond and Mann-Nyholt Lake, north of 124th Avenue at the Adams County Regional Park are a result of gravel mining activities. They are unlined and groundwater seepage keeps them relatively full making them a valuable recreational resource. Three new gravel pits in the south half of the park are currently being mined. These pits will be clay lined and transferred to the county to be used for water storage and recreation. The clay liner will prevent natural ground water from replenishing the water contained in the lakes, so water will have to come from an outside source. All three lakes are being reclaimed and are scheduled to be completed in late 2008.

The three new lakes are fairly large and deep with an estimated total water holding capacity of 3764 acre feet. Significant issues affecting the development and use of Adams County Regional Park are how and who will provide the water to fill the lakes and what surface levels can be maintained. Adams County, at present, does not own enough water rights to keep the lakes full, but for quality recreation, a relatively large amount of water sustained in one of the lakes with a moderate amount of water sustained in one or more of the other lakes is desirable. Without added water, the lakes will become unsightly with steep dry banks prone to erosion with a

shallow pool of water in the bottom. These partially filled lakes will also harbor noxious weeds that will be difficult to control.

The specifics of water storage have not yet been determined. The identification of a potential water provider, the amount of conservation pool, and the source of the water are still unknown. Colorado water rights and water law are very complex and will affect how the water is managed once the user and the source of the water have been identified. Currently three options are being discussed:



Fishing is Fun Pond at the Adams County Regional Park.

OPTION 1 – Adams County would acquire junior water rights that would allow the lakes to be filled periodically, possibly as little as once every 5-6 years. These new junior rights would only provide water during an excess of water in the South Platte River that occurs typically with spring runoff or a large storm event. This water would supplement the water provided by Adams County senior water rights from the Brantner Ditch. Additionally, Adams County currently has filed a water court case to allow for 60 acre feet of water to be stored in the reservoirs



Current mining in the south area of the Adams County Regional Park

and returned to the South Platte River to cover evaporative loss on other Regional Park lakes and areas where ground water has been exposed.

Note: This 60 acre feet of water will have to be returned to the South Platte River on a call system.

OPTION 2 – Additional senior water rights would be purchased by the County and again a change of use and point of diversion would have to be approved by a water court. Water in the South Platte Basin is overappropriated making these water rights difficult and expensive to acquire. If the County were to gain additional water rights it could maintain a larger conservation pool in all or one of the lakes. The water source is the South Platte River, potentially it could be pumped from the Mann-Nyholt Lake or drilled alluvial wells.

OPTION 3 – With this option a relationship with a partner, most likely a municipality or other water provider would be established to lease the water storage of the lakes from Adams County. This option could provide the flexibility of maintaining a conservation pool in one or more of the lakes by leasing less space to the partner or setting up guidelines. The preferred solution for recreation would be to maintain a minimum conservation pool in at least two of the lakes, with

one of lakes maintaining a fairly large conservation pool, keeping it full or nearly full. It must be emphasized that there is a direct relationship between the County's control over water storage and the cost that a potential lessee of storage space would be willing to pay to the County for the lease. The more control the County has over release schedules and minimum pools, the less a potential lessee would be willing to pay for the storage space and vice versa.

Ditches

Irrigation ditches that divert water from streams and rivers to agricultural fields are prevalent in Adams County and embody the agricultural heritage of the region. The Brantner Ditch runs north-south through the park and historically the Brantner Gulch ran through the Nature Preserve. The Lower Clear Creek Ditch currently irrigates the agricultural fields in the southwest corner of the park.

Adams County owns a significant amount of irrigation water rights from the old Brantner Ditch that will no longer be used for irrigation of the agricultural lands that are currently being converted from the area of the three lakes. Those water rights may become available to potentially irrigate non-historically irrigated areas of the park.



Drop structures designed to improve the water quality of the South Platte River were constructed at the eastern edge of the project area, adjacent to Adams County Regional Park.



The Brantner Ditch, Adams County Regional Park.

Historically, the Brantner Gulch transported water through the Nature Preserve with the original outfall located to the north. However, when the Mann-Nyholt Lake was built, the outfall from the Brantner Gulch was relocated to the south of the Nature Preserve. This, along with the construction of the levee reduced the water regime which negatively affected the vegetation.

South Platte River

An average of 411,000 acre-feet of freshwater flows down the South Platte River each year. The primary source of this water is from winter snows and spring rains. Near the source of the river in the Rocky Mountains, as much as 300 inches of snow can fall between October and March. In the plains, 7-15 inches of rain falls primarily between April and September. This precipitation replenishes the

groundwater and contributes to the flow of the river. The majority of excess runoff and flooding can occur during these periods.

The South Platte River is over appropriated and during the summer the entire river is generally controlled by direct flow calls that have priorities from the 1870-80s. Today, as urban growth increases, the use of water also increases, while the water supply remains relatively constant, making water increasingly scarce.

Providing habitat for a diversity of species is another valuable function of the South Platte River. However the decline of water quality and channelization of the river for flood control and bank stabilization have modified its natural flow regime and degraded the native aquatic habitats. Constructed wetlands and other projects, such as Metro's low-head drop structures to reaerate the stream are being designed to help improve the water quality.

Floodplain

Historically, the bluffs on the far west side of the park, along Riverdale Road, were the banks of the South Platte River. When the river was channelized, more of the floodplain became usable agricultural land. With less than two feet of elevation gain from the South Platte River to Riverdale Road, there is very little slope within the old floodplain. Due to the small amount of topographic relief, almost the entire park, including the Nature Preserve is within the 100-year floodplain. Only the agricultural fields and the Brantner Ditch on the western edge of the site are outside of the South Platte River floodplain.

While most of the site is in the floodplain, a levee along the east side of the site restricts some floodwaters. The levee was constructed by early Army Corp efforts to control floods and now serves as a maintenance road along the South Platte River. The levee inhibits some water from reaching the original floodplain west of the river. Consequently, portions of the area west of the levee do not benefit from seasonal flooding, and are not the vital

riparian areas they once were. This phenomenon has been heightened by the highly controlled water flow in the South Platte River, and is evident in the Nature Preserve, where there is limited regeneration of willow and cottonwood species.

NATURAL RESOURCES

Climate

The climate of Adams County consists of warm summers and cold winters. The highs in the summer can be in the upper 90's to the low 100's and lows in the winter can reach sub zero. Temperature variations between day and night tend to be high. During the summer the temperature can vary as much as 31 degrees Fahrenheit and in winter 27 degrees Fahrenheit.

The average annual precipitation is approximately 14 inches, with the rainfall fairly evenly distributed throughout the year. The wettest month is May with an average precipitation of 3 inches.

Vegetation

The South Platte River, the largest river in the area, historically had a very large and dynamic floodplain with a migrating braided channel. Today, the river is constrained and encroached upon by development such as gravelmining, residential communities, and

agriculture. Even so, it continues to provide valuable wildlife habitat and is part of a larger ecosystem in conjunction with Barr Lake State Park and the Rocky Mountain Arsenal National Wildlife Refuge. The presence of water promotes a broader diversity of vegetation, including dense tree, shrub, and grass cover. Willow and cottonwood trees, as well as several different sedges, rushes, and native grasses flourish within the corridor.

In arid regions such as Colorado's Front Range, riparian corridors are an especially vital resource for wildlife. Grasslands in conjunction with the diverse vegetation of the riparian corridor provide habitat for nesting birds, mammals, reptiles, and insects. Many bird species, such as great blue herons, osprey, and bald eagles live or feed within the corridor. Large, decaying trees near water are ideal habitat for the eagles, similar to those found east of Mann-Nyholt Lake and the Fishing is Fun Pond. Additionally, deer, coyote, fox, turkeys, rabbits, and squirrels inhabit the river corridor.

The condition of the vegetation has deteriorated in the Nature Preserve due to the reduction of water that occurred during the construction of the levee and the re-routing of water from the Brantner Gulch. Water flow was restricted from the South Platte



Riparian habitat adjacent to the South Platte River on the eastern edge of the project area at Adams County Regional Park.



Successful constructed Wetland south of 120th Avenue.

River so the natural periodic flooding no longer occurs. Many of the existing cottonwood trees are dying, except those in depressions which appear to be utilizing surface runoff. Some native shrubs and grasses occur, though much of the vegetation consists of prickly pear cactus.

Wetlands

Both naturally existing and constructed wetlands occur within or near the site. Existing wetlands occur in low lying areas along the South Platte River that have not been impacted by mining and provide important habitat for resident and migratory wildlife.

A constructed wetland south of 120th Avenue is extremely successful with healthy vegetation that supports a variety of wildlife species especially migratory birds. It can serve as a model for park and habitat improvements all along the South Platte River.

Upland Grasslands & Agricultural Lands

To the west of the levee and on the south end of the park, are significant areas of upland grasslands. These

native grasslands provide food and cover for a variety of animals. The lands on the southwest corner of the park have been cultivated with several plant species, including alfalfa, cabbage, celery, onions, sugar beets, and corn, all of which attract a variety of wildlife. Deer use the grasslands for food, while turkey, ducks, and geese use the area for food and cover.

Three small prairie dog towns are found on the north half of the park. Although the prairie dogs conflict with recreational uses such as golf, they are an important source of food for bald eagles and other raptors. The prairie dog communities in Adams County Regional Park are not in their natural environment. The area is artificially dry due to the construction of the levee which inhibits periodic flooding and the relocation of the outflow of the Brantner Gulch which restricted water from flowing into the historic drainage channel.

Wildlife

Adams County Regional Park is part of an important regional wildlife corridor. The South Platte River, which flows along the east side of the park, is



a significant riparian corridor that provides critical wildlife habitat for a wide diversity of species, especially birds. Nearby large scale natural areas such as Barr Lake State Park and the Rocky Mountain Arsenal National Wildlife Refuge (NWR) also provide highly significant plains habitats. The adjacent lakes, drainages, and grasslands within the park enhance the corridor's habitat and create an exceptional opportunity for environmental education.









Diverse wildlife at Adams County Regional Park.

The existing lakes within the park, such as Mann-Nyholt Lake are unlined and remain full due to the shallow groundwater table in the area. Colorado Division of Wildlife stocks the lakes with bass, catfish, blue gill, and trout. In a region where water is scarce, the lakes are a valuable resource for wildlife, attracting many species of animals and birds to the park. In these artificial lakes several factors, including water level, water quality, and lake edges affect the health of wildlife habitat and value for recreation.

Soils/Geology

Adams County Regional Park is located along the South Platte River where the soils consist primarily of gravelly alluvial river soil deposits. This is evidenced by the prolific number of gravel mines along the river.

CULTURAL SETTING

Agricultural Heritage & Character Adams County has been an important agricultural area along the Front Range since its settlement. Truck and dairy farms and agricultural fields sculpted the landscape. Although growth is changing the region, much of the County remains rural. The importance



The agricultural heritage of Adams County still lives in the vicinity of the Adams County Regional Park..

of this rural area is reinforced by the location of the fairgrounds and CSU Extension Service at the park, which supports these agrarian land uses.

Truck and dairy farms still dominate much of the Adams County landscape. Agricultural fields, farmsteads, cattle, and trucks transporting crops are a common sight. Narrow dirt farm roads wind along the edges of fields. Clusters of farm buildings set in vast agricultural fields and the rural fences that define property boundaries are an indelible part of the landscape. Many farmsteads are composed of historic structures, such as farmhouses, barns, silos, and outbuildings.

Irrigation ditches used to divert water from creeks and rivers to agricultural fields are prevalent in Adams County and are important components of the agricultural landscape.

Historically, the site of the Adams County Regional Park was used as a cattle and dairy ranch and later the Denver Poor Farm, a welfare home for convalescents and the elderly. People from Denver worked the farm to aid in the production of food for Denver's poor. On April 11, 1960 Adams County purchased the approximately 240 acres for \$176,500 for use as a regional park.

Mining Heritage & Character

The shape of the landscape including the lakes at the Adams County Regional Park was formed through gravel mining activities. This heritage historically and today has a tremendous impact on the land and the economics of the area. Many of these mines replaced earlier farmsteads composed of clusters of buildings, which are often demolished but could be available for relocation to the park.

Suburbanization and the Loss of Agricultural Lands

As the Front Range grows, suburban development continues to consume much of the agricultural lands. On all sides of the park, residential development is rapidly encroaching on the rural area. As the metro Denver area continues to grow, more of the agricultural character and heritage that draws people to Adams County will be threatened. Adams County Regional Park provides an opportunity to preserve some of the rural, agricultural character and heritage of this unique area, which will become increasingly important in the future.

CIRCULATION

Vehicular

There are two primary destinations within Adams County Regional Park: the fairgrounds area and the golf courses. The golf complex is accessed from Riverdale Road. The fairgrounds are accessed from Henderson Road, one of the only roads adjacent to the park that bridges the South Platte River. Henderson Road intersects Riverdale Road on the west and Old Brighton Road on the east side of the park. 120th Avenue runs along the southern edge of the park.

Existing motorized circulation within the park focuses on accessing the fairgrounds area. A landscaped boulevard intersects with Henderson Road and provides access to parking on the north side of the park, especially for the fairgrounds and concert facility. A gravel road forks to the east, providing access to parking at the Mann-Nyholt Lake picnic areas. This road provides the nearest parking to the Nature Preserve and the Fishing is Fun Pond, which are only accessible by non-motorized means. None of the existing public access roads go through the park. All of these roads dead end at specific destinations, causing access and circulation problems during times of high use and emergencies. Also, people not participating in the special events, such as picnickers or campers, have difficulty getting to their destinations, due to excess traffic. An effort has been made to help reduce this congestion by opening a dirt

road that links the fairgrounds with the Adams County Historical Society entrance at Henderson Road.

Currently the south side of the park is closed due to mining. Eventually Park Boulevard will bisect the south side of the park between 120th Avenue and Henderson Road (124th Avenue) providing access completely through the south side with a direct link to Park Boulevard on the west.

Trails

The South Platte River Trail which is a part of the Colorado Front Range Trail (CFRT) begins south of Denver at Chatfield Reservoir and will extend north into Weld County. It is a major regional trail connection for Adams County and metro Denver and will pass through Adams County Regional Park. Long sections of the trail within Adams County have been completed, including several sections within the park. However, sections within the park are disconnected, and bridge crossings are needed at the proposed 120th Avenue crossing to the south, and the 136th Avenue crossing to the north. Other proposed trails accessing the regional park include the Brantner Gulch trail and proposed trails associated with 120th Avenue and E-470.

Within the park, the only portions of the South Platte River Trail which have been constructed include a section along the Fishing is Fun Pond, along the eastern edge of Mann-Nyholt Lake, and a section in the Nature Preserve. Additionally, approximately 2000 linear feet of the South Platte River Trail



The completed portion of the South Platte River Trail along the Fishing is Fun Pond at the Adams County Regional Park.



Parking at Adams County Regional Park during the Adams County Fair.

in the southern area of the park has been built. A grant has recently been awarded to complete the South Platte River Trail through Adams County Regional Park between 120th Avenue and Henderson Road (124th Avenue).

Parking

Parking within the park works well, except during special events such as the county fair, when parking can be a problem. Fields and unpaved areas throughout much of the north area become filled with vehicles. The use of these areas can be problematic during rain, since none of these

areas are paved. The Adams County Historical Society does not have enough parking for its events, and will not have adequate parking as it expands. To minimize problems, scheduling is needed to avoid having two large-scale events occur simultaneously.

Currently there is no parking on the south side of the park. Eventually, the south side will provide parking that can be used for overflow during events.

development and future use that will occur in the south and northeast areas of the park, the focus of this Master Plan Update and conversely the new development will impact the existing uses.

The existing lakes at the Adams County Regional Park provide recreational uses such as fishing, wildlife viewing, non-motorized boating, walking, and picnicking. This plan provides direction for the recreational use of the three new lakes that will be added to the south half of the park by the end of 2008.



Riverdale Dunes golf course at the Adams County Regional Park.

EXISTING PARK LAND USE

Well established uses occur within the Adams County Regional Park, many of which are outside the Adams County Master Plan Update project area. They will, however, affect the new Two golf courses are part of Adams County Regional Park, the 18-hole Riverdale Dunes course and the 18-hole Knolls course. The Knolls is a relatively flat public golf course consisting of large trees and irrigated turf. The Dunes course is highly unique











Multiple events are held at the Adams County Fair.

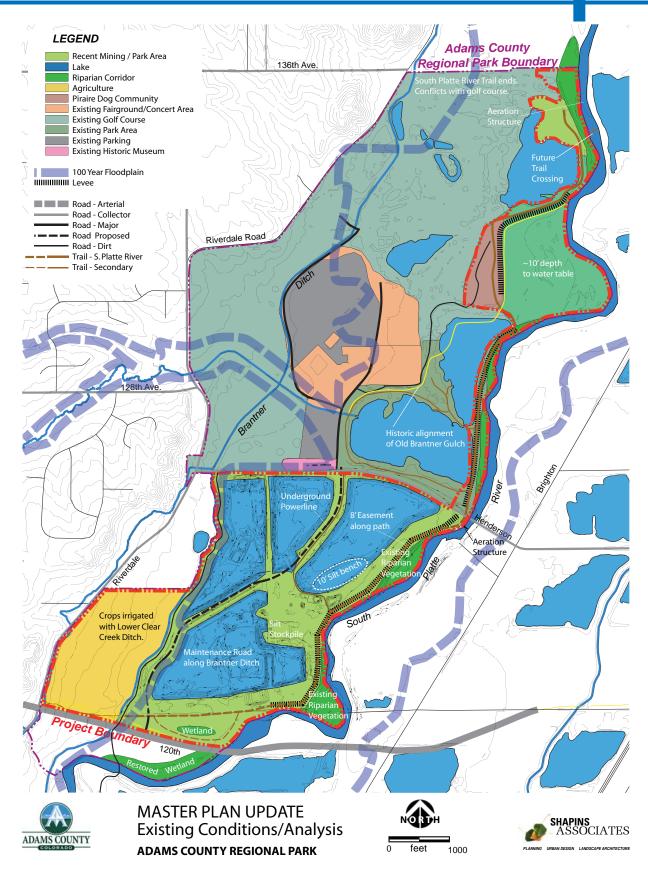
due to the many diverse landforms and integration of more natural grass areas. The course annually ranks as one of the ten best public golf courses in the state, and is recognized as one of the outstanding public courses in the nation. While the golf courses have been very successful, negative impacts from other uses in the park can quickly affect them. The majority of golf course use occurs between May and September, at the same time as concerts, fairs, and most other uses in the park, creating traffic congestion on adjacent roads. Occasionally, visitors wander onto the inviting greens of the golf course to picnic or play.

The Adams County Fairgrounds are a focal area for the park. The fairgrounds host the Adams County Fair, an annual fair and stock show. Many other events take place throughout the year, particularly in the summer. The county fair attracts over 50,000 visitors to the park during the 5 day event, stressing the available infrastructure and impacting other uses. During the County Fair and other large events, traffic and emergency access are an issue, as well as noise and visitor spill over into other areas that adversely impact fishing and golf activities.

The concert area is another highly active entertainment node. Concerts are held throughout the summer, mostly in the late afternoon until midnight and during weekends. The primary issues resulting from the concerts are noise, crowds, and limited parking.

The Adams County Regional Historical Society Museum is located at the corner of Henderson Road and the park entry road. The museum's mission is to educate youth, and other interested individuals on the influences that shaped Adams County. Topics covered by the museum include the multicultural, agricultural, and natural history of the County.

Picnic areas in the Adams County Regional Park are confined to a large bluegrass area between the fairgrounds and Mann-Nyholt Lake. Two large





The quality experience currently at Adams County Regional Park will be enhanced.

group rental sites, including volleyball courts, horseshoes, and group picnic tables can accommodate over two hundred people each. In addition, ten smaller structures, with one or two tables are available on a first come first served basis to locals and groups under twenty people.

The southern area of the park currently has limited use. Visitors can bike or hike along the levee outside the boundaries of the mines, and fish and kayak in the South Platte River.

The northern portions of the site, the Nature Preserve and Fishing is Fun Pond, remain low use areas. The lake is used for fishing, picnicking, and hiking while the Nature Preserve is primarily unused except as access to the Fishing is Fun Pond from Mann-Nyholt parking lot.

QUALITIES AND ISSUES SUMMARY

The information gathered during the inventory and analysis stage was synthesized into a qualities and issues list. Qualities are defined as the positive features that should be enhanced or preserved through the planning process. Issues are the challenges that the Adams County Regional Park Master Plan should attempt to address.

QUALITIES

Climate

 Warm summers and often comfortable winter days, provide good conditions for activities such as fishing, walking, and biking

Water Resources

ENTIRE PARK

The section of the South Platte
River on the eastern edge of the
park is part of a dynamic, ever
changing environment with a
diversity of flows and riparian
edges.

SOUTH AREA

 The Brantner Ditch has a large quantity of associated water rights



The agricultural field on the southwest end of Adams County Regional Park.

- which can be used for irrigation or water features in the southern portion of the park.
- The three new lakes and their adjacent lands, provide opportunities for a diversity of passive recreational uses.
- The three new lakes can be connected both with surface water features that can be amenities when flowing.

Natural Resources

ENTIRE PARK

The rural setting of Adams
 County Regional Park provides
 an opportunity to provide a
 nature based experience for the
 communities in the surrounding
 rapidly growing residential areas.

SOUTH AREA

 Portions of the remaining excavation anticipated to complete the mining process could be used to sculpt the landscape in order to provide interesting and diverse spaces.

Vegetation

ENTIRE PARK

 Much of the riparian area along the river is densely vegetated, forming healthy wildlife habitats and providing shade and solitude for visitors.

- Cottonwood and willows are existing native species that are highly suitable for revegetation and restoration projects to enhance the ecological system.
- Multiple opportunities exist to restore wetland and grassland habitat.

Wildlife

ENTIRE PARK

- An exceptional wildlife corridor along the South Platte River has high potential for enhancement and expansion.
- The South Platte River and lakes provide many opportunities for wildlife viewing and photography.

NORTHEAST AREA

 The existing lakes provide exceptional opportunities for recreational fishing and wildlife viewing.

Cultural Resources

ENTIRE PARK

 The potential for heritage education is exceptional within the park and can easily be expanded to encompass the surrounding area. Strong ties to Adams County heritage exist through the fairgrounds, Adams County Historical Society, historic ditches and neighboring historic farms.

SOUTH AREA

- The irrigated fields on southwest corner of park illustrate the historic economics of Adams County, where agriculture remains an important component.
- Due to ongoing mining in the region, there is the possibility that old farm structures slated for demolition could be found and moved to the southern portion of the park.
- The Brantner Ditch is an attractive historic water resource that runs through the length of the southern site.

NORTHEAST AREA

 Although currently dry, the Old Brantner Gulch historic alignment runs through the Nature Preserve area.

Transportation

ENTIRE PARK

- Henderson (124th Avenue) provides good access from the north to both the southern and northern portions of the park.
- Riverdale Road is an attractive historic route, which remains surrounded by agriculture in many areas.

SOUTH AREA

 120th Avenue provides easy, direct access to the southern portion of the park.

Recreation/Education/ Interpretation

ENTIRE PARK

- Extensive opportunities exist to upgrade the site for a diversity of passive recreation and educational uses.
- Excellent opportunities exist to provide for environmental, cultural, and agricultural related interpretation.
- The South Platte River provides opportunities for river kayaking

and canoeing from the southern and northern portions of the park.

SOUTH AREA

- A major portion of South Platte River Trail is constructed and a recent grant will facilitate the portion of trail through the southern portion of the park to be completed. This trail will provide exceptional linkages for many miles to the South. It is along the top of an old levee built by Urban Drainage & Flood Control to contain flood waters.
- The maintenance road along the Brantner Ditch provides an opportunity for a multi-use recreational trail.

ISSUES

Climate

- Temperatures can be erratic with hot summers and cold winters.
- During the hot summers, shade is necessary for passive recreational activities such as fishing and picnicking while during the winter, the weak sun is an asset.

Water Resources

ENTIRE PARK

- The majority of Adams County Regional Park is within the 100 year floodplain.
- The South Platte River has little dissolved oxygen in the water.
 However, the construction of aeration structures in several places along the park's boundaries helps to improve the water quality.

SOUTH AREA

 The specifics of water storage have not yet been determined in the three new lakes. The identification of a potential water provider, the amount of conservation pool, and the source of the water are still unknown. The quality of recreation and wildlife habitat will be affected by the amount of water contained in the lakes.



The vegetation of the Nature Preseve is drier than in the past due to the change of the South Platte River water regime.

- The water level in the lakes may fluctuate, with the possibility of all three lakes becoming dry, which is detrimental for aquatic wildlife and recreation users.
- The shape of the new lakes are difficult to change due to the clay liner, however some reshaping can occur by adding material on top of the liner.

Natural Resources

SOUTH AREA

- Within the southern portion of the park, limited land is available for recreational use due to the large footprint of the three lakes.
- The lands are highly disturbed and will need significant enhancement to insure they are comfortable and pleasant for recreation.

Vegetation

SOUTH AREA

- Little vegetation exists in the mined areas other than some native grasses and trees.
- Parts of the riparian corridor are in need of restoration.

NORTHEAST AREA

• In the vicinity of the Fishing is Fun Pond, little shade is available and

- invasive weeds are pervasive.
- The Nature Preserve is a disturbed area where ditches have been dug and roads and trails have been cut.
- The natural flooding regime of the South Platte River in the Nature Preserve has been reduced causing the cottonwood trees and native shrubs to decline or not regenerate, while drier plants, such as prickly pear cactus are thriving.

Wildlife

ENTIRE PARK

 Surrounding development is pushing wildlife into an increasingly narrow riparian corridor and occasionally wildlife venture into neighborhoods and disturb nearby residents.

SOUTH AREA

- Steep bank edges of the lakes reduce the quality of wildlife and fish habitat and reduce ease of access for recreational use.
- Trout require a minimum of ten feet depth of water in order to spawn and survive the winter. This depth may not be available in the lakes.



NORTHEAST AREA

 Conflicts exist between the prairie dog community in the Nature Preserve and the golf course.

Cultural Resources

ENTIRE PARK

 Numerous interesting stories related to the history of Adams County Regional Park and the County have not been interpreted at the park.

SOUTH AREA

 The agricultural parcel in the southwest end of the park is in a contained area, separate from the other agricultural parcels.

Transportation

SOUTH AREA

- Park Boulevard needs to be carefully designed to accommodate traffic and to provide additional parking during events.
- Park Boulevard must be carefully designed, to discourage overuse by non-park visitors for shortcuts and commuting.

NORTHEAST AREA

 Motorized access to the northeast areas is for maintenance and safety vehicles only, making access difficult for some people since they must walk or bike. At the same time, this area remains quiet and peaceful.

Recreation/Education/ Interpretation

SOUTH AREA

 Currently recreation, education, and interpretation on the southern portion of the site are exceedingly limited.

NORTHEAST AREA

 Recreational use and facilities need to be carefully designed to minimize impacts to golfers.

Vision, Goals, and Use Program



Vision, Goals, and Use Program



The South Platte River at the south end of Adams County Regional Park.

This section articulates the vision and goals for the future development of Adams County Regional Park, primarily in the south and northeast areas.

Desired uses and facility programming are also summarized.

DEFINING THE VISION, GOALS, AND USE PROGRAM

The vision statement expresses the desired future conditions for Adams County Regional Park, including the management of its natural and cultural resources and the quality of the experience of its visitors. Concise goals are determined in order to guide management in achieving the conditions described in the vision. The use program defines the uses that are most suitable within the planning area.

VISION

At Adams County Regional Park, visitors enjoy a natural retreat from the park's outlying developed areas. The South Platte River borders the park and supports a diversity of healthy wildlife habitats. The park's prairie setting hosts a number of recreational, educational, and art amenities including trails, non-motorized boating, fishing, a native prairie environment, and integrated sculpture. Water and

its journey from the mountains to the plains are interpreted and experienced in many ways both functionally and aesthetically throughout the park. Visitors' understanding of and appreciation for Adams County's natural and cultural resources will grow with each visit to the park.

GOALS

- Create a "Plains Ecological Center" for the County, devoted to the areas diverse heritage, culture, and environment.
- Enhance the health and diversity of the various plains habitats in the park, including riparian areas and prairie grasslands.
- · Promote sustainable environments.
- Preserve and enhance wildlife habitats and other natural resources.
- Provide a broad diversity of recreational and educational uses compatible to the plains ecosystem, including biking, hiking, canoeing, fishing, wildlife viewing, and environmental education.
- Interpret the natural, cultural and historic resources of the site such as its agricultural and ranching heritage.

 Utilize water aesthetically, sustainably, and educationally.

USE PROGRAM

The uses and facilities determined suitable for the areas within this plan will provide for a broad diversity of passive recreational and educational experiences. They will also significantly enhance the existing natural environment and help preserve and interpret the unique qualities of Adams County's cultural heritage. The program developed for Adams County will provide passive recreational opportunities including non-motorized boating, fishing, walking, biking, picnicking, and associated facilities including accessible facilities. A major component of the plan will include the interpretation of park resources and facilitate a broad diversity of educational programming.

Below is a summary of the program elements that the master plan includes:

NATURAL RESOURCES

- Native ecological environment
- Riparian corridor wildlife viewing/ photography
- Moist areas to diversify and enhance the native habitat
- Lake sculptures/fountains to aerate lake water
- Storm water use through plaza catchment/cistern area
- Bioswales that support nonirrigated vegetation

LANDSCAPING

- Utilization of native trees, shrubs, and grasses
- Deep planted cottonwoods
- · Turf areas in central core area only

RECREATION/EDUCATION

- Multi-use non-motorized trails, paved and unpaved
- South Platte River Trail, major paved trail
- Group picnic areas with shelters
- Individual picnic sites, some with shade trees or shelters
- Seating
- Fishing piers

- Non-motorized boating and lake access
- Interpretive areas
- Educational playgrounds
- Educational water playgrounds
- · Major central plaza, gathering area
- Environmental education program/ small event area
- Irrigated and landscaped mounds
- Sand beaches
- Large native grass mound overlooks
- Nature center earth building (+/-2500 sq. ft.)
- Nature Preserve interpretive open shelter
- Historic farm cluster (farm buildings relocated from other sites)
- Crop demonstration area
- Farm area outdoor and indoor classroom(s)/farmer's market space
- Small outdoor educational demonstration/entertainment area
- Mountain to plains agricultural use demonstration area
- Restrooms

ART

- Lake sculpture
- Sculpture interpreting water
- Historic Agriculture

CIRCULATION

- Park Boulevard narrows at entrance to plaza area with raised pedestrian crossings
- Paved non-motorized multi-use trails-includes South Platte River Trail
- Unpaved non-motorized multi-use trails
- · Raised trail access to moist areas

section 4



Master Plan



The riparian corridor along the South Platte River, Adams County Regional Park.

After reviewing alternatives 1 and 2 (see appendix A), the stakeholder group developed the following preferred master plan. This plan will be a combination of the two initial alternatives, utilizing aspects from both. The plan will incorporate low maintenance development and the use of native plants in the majority of the park. This plan will provide a quality experience and needed infrastructure for a diversity of passive recreational uses. The environmental and cultural settings will facilitate the development of many different educational and interpretive programs for all ages and interests. A centralized park zone will be provided with direct access to all three lakes and the South Platte River.

OVERVIEW

As water flows from the mountains to the plains, the shape of its path and speed of travel changes with topography. These patterns of water embody the design concept and will be interpreted throughout the park, where water will be used as an aesthetic, functional, and educational component.

The master plan will focus the majority of improvements and maintenance

needs in the central core area between the three lakes. Here, a well landscaped pathway system will lead users to a diversity of activity areas ranging from beaches and cottonwood shaded mounds to a central plaza with a storm water fountain, nature center, and water play environment. The plaza will provide a center for gathering, education, and relaxing under the shade of cottonwoods.

Vegetation

The outlying areas will be less developed and require little maintenance. Native trees, shrubs, and grasses will be used extensively. Irrigation will be kept to a minimum except in the high use areas such as the central core and streetscapes along Park Boulevard and Henderson Road. Bioswales in outlying areas will take advantage of storm water that flows from adjacent paths and ground surfaces to support native trees and other vegetation.

Moist lands will be located in various locations throughout southern portion of the park and the Nature Preserve. Though not as wet as a true wetland, the moist areas will support a broad



An example of moist lands with enhanced vegetation through the introduction of additional available water.

diversity of plants and wildlife habitat. These areas will be irrigated through the use of historic irrigation water rights associated with the Brantner Ditch. By not creating actual wetlands, the water needs will be lessened and a potential mosquito problem will be significantly reduced.

Recreation, Education, and Interpretation

The master plan will provide numerous opportunities for passive recreation. Throughout the park, paths that range from 10' wide paved accessible walkways to 3' wide soft surface trails will provide a diversity of experiences. Non-motorized boat access will be provided and piers will be placed on each of the lakes to facilitate fishing and lake viewing experiences. Group picnic areas, shelters, and numerous individual picnic sites throughout the park will give ample opportunity

for private and group outings. Sand beaches, irrigated fields, native grass, and moist areas will be sited together to provide a diversity of experiences in a small area.

Education and interpretation will be an important component of the plan. Significant cultural resources will be interpreted and the County's agricultural heritage will be highlighted. Water (including the river, lakes, storm water, irrigation water, stored water, and the complex Colorado water right law) and the mining that formed the landscape of the park, will provide extensive opportunities for interpretation. The riparian areas preserved and enhanced as wildlife habitat will be integrated into the interpretive experience and will provide for passive activities such as bird watching.



An example of the design concept of the surface connection between the lakes. Photo and design from Shlomo Aronson.

Key Facilities

The Nature Center in the central core area and the open air nature pavilion in the Nature Preserve will provide for educational programs. Restrooms will also be provided in key locations throughout the park. In addition a range of passive use facilities will be provided, such as picnic sites, outdoor program spaces, beaches, spontaneous play fields, playgrounds, and interpretive exhibits. Additionally, extensive landscaping will occur to provide a broad diversity of visitor experiences, enhance wildlife habitats, and provide for human comfort during a variety of seasons.

Circulation and Parking

In the southern area, vehicular access and parking will be concentrated along Park Boulevard with direct access provided to 120th Avenue and Henderson Road. During major events for both ingress and egress, Park Boulevard may be utilized as a one way road without parallel parking to efficiently manage traffic flow. At all other times, the boulevard will provide parallel parking along the majority of its length. Off street parking will also be provided at key locations just off the road in small lots. The Nature Preserve and Fishing is Fun Pond area will remain walk/bike in only with parking provided at the Mann-Nyholt lot.

Pedestrian and bike circulation will be the primary mode to move throughout the park. The major riparian areas will have little or no access to preserve them as natural areas. Uses in these areas will focus on interpretation and other passive activities such as bird watching and nature programs. An extensive trail system in the park, some ADA accessible, will be created to link all destination areas. This path system will connect to the South Platte River Regional Trail and the Colorado Front Range Trail System broadening access and use.

KEY ELEMENTS

The following list summarizes the key elements of the master plan concept:

ENTIRE PARK

- Provide a broad diversity of facilities for passive recreation throughout the park.
- Walking
- Biking
- Fishing
- Non-motorized boating
- Picnicking
- Wildlife viewing
- Outdoor and indoor educational programs
- Spontaneous play
- Provide interpretive and educational opportunities throughout the site. Theme topics include:
- Water (water in Colorado, the plains, South Platte River, irrigation, water storage, storm water).
- Agriculture
- Mining
- Plains ecosystems (climate, hydrology, geology/soils, vegetation, wildlife).
- Provide support facilities to meet visitor needs - e.g. roads, parking, needed restrooms, and pedestrian crossings.
- Provide parking at key destinations.
- Create a diverse trail system that links all key destinations within the southern portion of the park and links to the north side of the park via the South Platte River/Colorado Front Range trail system.

SOUTH AREA

- Locate the majority of development, higher use, and more maintained areas in the central core area between the three lakes.
- Provide more natural, less maintained areas on the outer edges of the site.
- Use native shrubs, grasses, and trees, especially cottonwoods

- throughout the site, with irrigated turf only in the higher use areas of the central core.
- Utilize lake sculptures/fountains to aerate the water and create an attractive focal element for the park.
- Design Park Boulevard so it is attractive, links key destinations, helps accommodate needed parking and encourages vehicles to move slowly, especially in the central area of the park.
- Ensure Park Boulevard is designed to accommodate the increase of traffic and parking associated with large scale events.
- Utilize traffic calming techniques at the Pedestrian Crossing Area, such as raised cross walks and rough patterned paving to slow traffic and ensure the safety of pedestrians.
- Retain and enhance the agricultural area to illustrate Adams County agricultural practices and historic farm character.
- At the agricultural site, provide facilities to accommodate a farmers market and related events and to allow for a diversity of educational programs.

NORTHEAST AREA

- Retain the Fishing is Fun Pond and Nature Preserve as hike/bike in only areas to maintain the quiet natural atmosphere of both places.
- Revitalize the Nature Preserve through the re-introduction of water into the existing Brantner Gulch, the addition of moist areas, planting of appropriate native plants and carefully maintaining the area as a naturally terraced plains ecosystem along the South Platte River.
- Provide a pavilion and shaded outdoor spaces that can be used for a diversity of educational programs.
- Enhance the visitor experience along the Fishing is Fun Pond by adding picnic facilities, native trees such as cottonwoods, native grasses, and other native vegetation.
- Clearly separate the Fishing is Fun Pond from the golf course through the use of difficult to penetrate vegetation.
- Extend the South Platte River Trial to link the north and south areas of the park and to connect to regional areas to the north and south.



The landscape of the Nature Preserve illustrates the changed environment that occurred with the reduced available water.



An example of a sculptural water feature, Ittigen, Berne. Photo and design Herbert Dreiseitl.

DESCRIPTION OF THE MASTER PLAN BY AREAS

This section expands on the master plan and provides a more detailed account of proposed development by area. Please reference the maps flowing this section for a graphic representation of the master plan.

South Area

Central Core

In the center of the park, the plaza will be a place for the public to gather. This area will provide many opportunities for recreation, education, and interpretation. While the majority of the park will be characterized primarily by native vegetation, this area will utilize irrigated turf, native vegetation, and native trees such as cottonwood to provide sunny and shaded spaces for play and relaxation. Beach areas adjacent to shaded turf hillsides will be located on several of the lake edges.

Park Boulevard, the primary vehicular entrance will utilize traffic calming techniques such as raised cross walks and rough textured paving at the section of road that traverses the central area. This will allow for easy and safe pedestrian access back and forth between all three connecting lakes and will connect the park on both sides of the road.

The majority of the year only the two center lanes will be utilized for automobiles. However, during large scale events such as the fair, the patterned section of road will be utilized to accommodate the traffic increases. Off street parking will be provided along Park Boulevard at the entrance to the central core with space for expansion.

From the central parking area, visitors will be drawn into the park along a shady walk that follows a water channel. This paved path, with seating areas, will lead to the central plaza and nature center which will be the main focus of the park. The bermed slopes adjacent to the plaza will provide an amphitheatre-like setting for environmental education and a



Proposed seating on the bermed slope in the central plaza overlook a sculptural storm water cistern, pond connection water feature, and education/entertainment area.

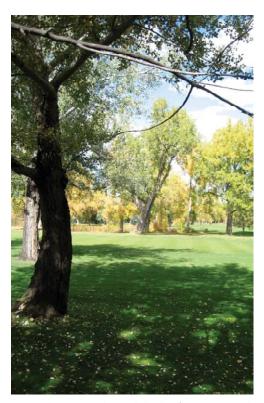


Image illustrating the cool shade of a cottonwood grove and turf grass.

stage for small events. Turf under the native trees will create a parklike setting for play and relaxation. A diversity of landscape spaces with a variety of amenities will be provided including individual and group picnic sites, sandy beaches, shaded grass areas, spontaneous play fields, and a diversity of children's play areas. All these spaces will connect to the different lakes and to each other. The Nature Center earth building will provide indoor space for environmental education and will use sustainable technology, such as solar, wind, green roofs, and water catchment systems.

Water will be the dominant theme of the central area providing dynamic experiences that will engage the visitor in the many unique qualities of water. The connections between the lakes will be via water channels that illustrate the stream flows from the mountains to the plains. This feature will have different amounts of water depending upon the season and water levels in the lakes; therefore they will be designed to be attractive



Children can learn while they play at this water playground in Pforzheim Germany designed by Herbert Dreiseitl. The design is based on ancient water lifting techniques such as the archimedean water screw and shadoof.

even when the stream corridor is dry. A storm water cistern sculpture will educate visitors about storm water by revealing how the flow of water is dependent on the weather and amount of precipitation. The sculpture may be dry in the summer and frozen in the winter. A water playground will make play both fun and educational by using interactive ancient water lifting and movement techniques. A well will supply water for the water playground. This recirculating water will then be recycled and filtered through a wetland or a living machine. The living machine is an intensive form of biological wastewater treatment designed to cleanse the water naturally, similar to a well functioning wetland. Water will be

cleansed while providing another story for interpretation.

Areas Outside of the Central Core Along the east side of Lake 1, as the user moves north away from the central core area, the landscape will be less developed and will be planted with native grasses, shrubs, and trees. A diversity of experiences will be encountered between the lake and the river. From the beach, the visitor will pass under the high canopies of native trees shading turf, through native grass and a moist land with enhanced vegetation, and then venture out to the riparian corridor along the South Platte River. The paths which will wind through these varied landscapes will

then tie into the South Platte River Trail system. Picnic areas will be provided throughout the park though will be limited in the existing riparian area.

To the south of the core area, the landscape will also become more natural, with trails that tie into the South Platte River Trail and the trail along Park Boulevard.

On the west side of Lake 2 and 3, the trail will connect with the path system along Henderson Road (124th Avenue), providing access to fishing and picnicking areas along the way. The trail on the west side of Lake 2 will be narrow with few facilities in order to respect the privacy of the adjacent private properties. The maintenance road along the Brantner Ditch will be utilized as a multi-use trail.

The desired lake scenario will provide a fairly large conservation pool in at least one of the lakes, with some water maintained in the other two lakes which will provide for quality recreation and use.

In the southwest corner of the site. the County will work with local farmers to retain and enhance the existing agricultural use of this area. A small agricultural center will be developed to provide school groups and other interested entities with a hands-on learning facility. Historic or other farm structures, in the area, that are slated for demolition will be moved to the site and restored to support farming operations and provide space for indoor programs. The area will also have designated spaces for a farmer's market, outdoor education, farming demonstration water feature, and support facilities such as a parking lot and trails.

Northeast Area

Nature Preserve

The condition of the vegetation has deteriorated in the Nature Preserve due to the altered water cycles and flows along the South Platte River and the removal of water from this section of the Brantner Gulch. These changes have reduced natural periodic flooding and reduced water in this area, causing the native riparian vegetation to die or



Proposed path from the parking area to the central plaza follows the surface pond connection. It widens into 'eddys' providing seating and shade.



Example of enhanced vegetation due to the additional stormwater and access to a shallow water table provided by a bioswale.

deteriorate.

The revitalization concept for the Nature Preserve will provide for a diversity of vegetation and natural habitats based on the distance from the river, the depth of the water table, and water re-established in the ditch.

Historically, water flowed across the site through the historic Brantner Gulch. This plan calls for the re-introduction of water into the historic Brantner Gulch through a water connection from Mann-Nyholt Lake. Water seepage along the ditch will moisten the soil adding to the health and vigor of the surrounding vegetation. This will also provide a cultural link to the historic use of the area but with a modern twist.

Except for weed management, limited improvements will occur at the river's edge. Here change will be based on the flow of the river and its conditions and cycles. These changes and cycles will provide limitless opportunity for interpretation and enhance the experience and awareness of natural

phenomena.

In the second tier back from the river's edge, cottonwoods will be deep planted so the roots will reach the natural water table. The existing, much drier vegetation, such as prickly pear cactus, will be retained to illustrate the effects the water table has on vegetation.

A covered shelter/nature pavilion and upgraded restroom will be provided within the upper terrace, a short distance from the Mann-Nyholt parking area. Additional water will be added in specific areas by creating depressions for water to collect in and adding irrigation. This moist environment will diversify the vegetation and enhance the opportunities for interpretation. This will provide an excellent location for environmental education programs. Due to the re-introduction of water into this area, the existing prairie dogs will likely leave. These amenities will create a highly diverse plains natural area with excellent opportunities for educational and interpretive programs.

Along the edge of the back terrace, a berm will be constructed in order to further separate the uses of the golf course and the park.

North Edge of the Park
Along the Fishing is Fun Pond,
especially along the north edge, native
cottonwoods will be deep planted,
native grasses will be enhanced and
several picnic tables will be provided
for fishing and other users seeking a
quiet relaxing spot.

A densely planted bioswale will be provided along the western edge of the Fishing is Fun Pond and along the length of 136th Avenue's southern edge to deter park users from accessing the golf course in these locations. Parking will be provided at the Mann-Nyholt parking lot.

The river corridor will remain a productive natural area keeping development to a minimum. Native grasses and riparian habitats will be preserved and enhanced along the river, ditches, and around the lakes, which will expand the available habitat and provide more diverse experiences. Recreation will remain passive and not interfere with natural systems yet will provide a unique and interesting experience with each visit to Adams County Regional Park.

A variety of trail systems will provide access to the diverse facilities and areas within the park, including picnic areas, moist lands, piers, and the rivers edge. This trail system within Adams County Regional Park will also connect to the South Platte River Trail.

Many opportunities for education and interpretation are found at Adams County Regional Park.



Ranching and Agriculture



Mining



Cottonwood and Prickly Pear Cactus in the Nature Preserve



Historic Brantner Gulch in the Nature Preserve



River water, stormwater, irrigation water, water storage, water rights

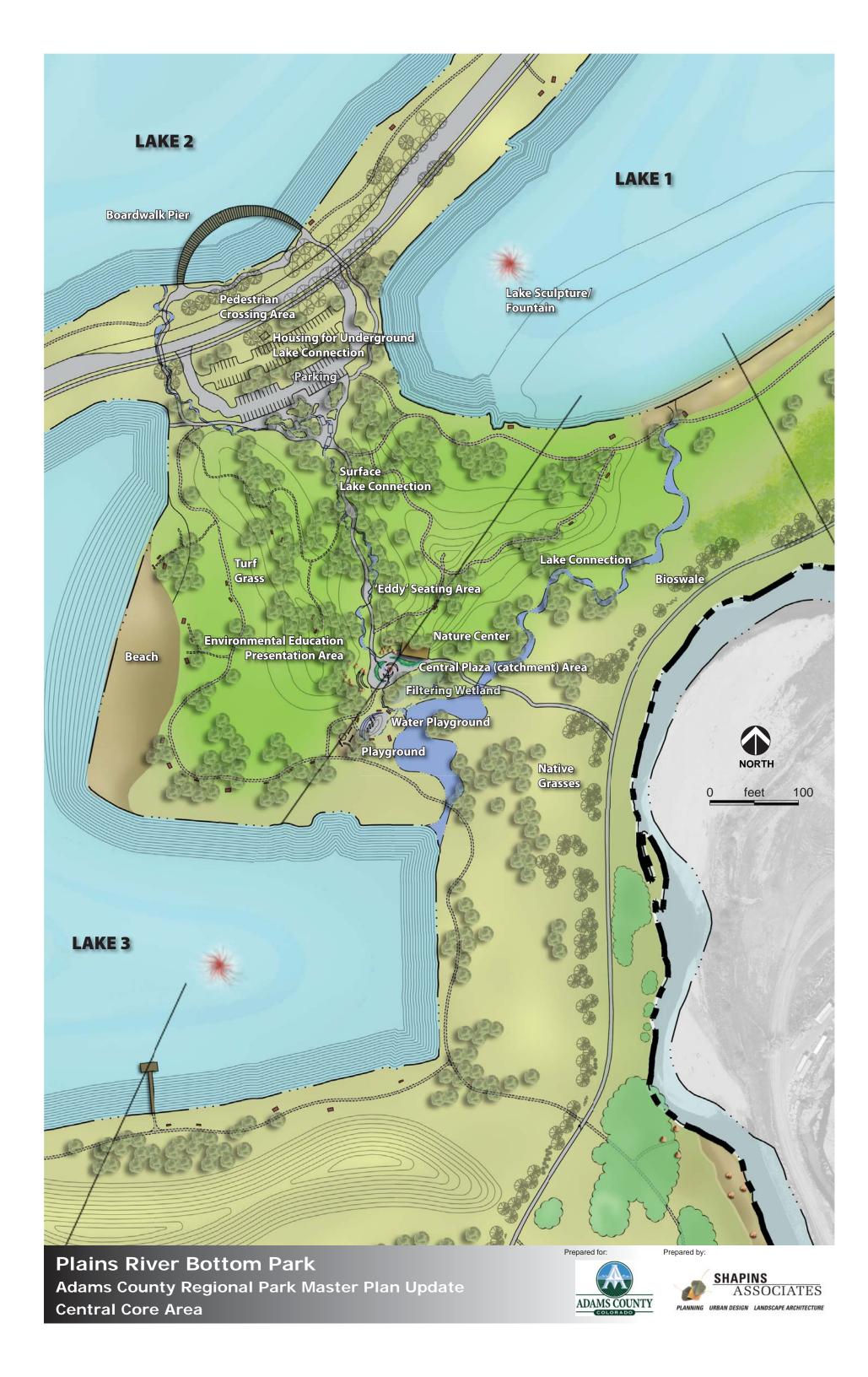


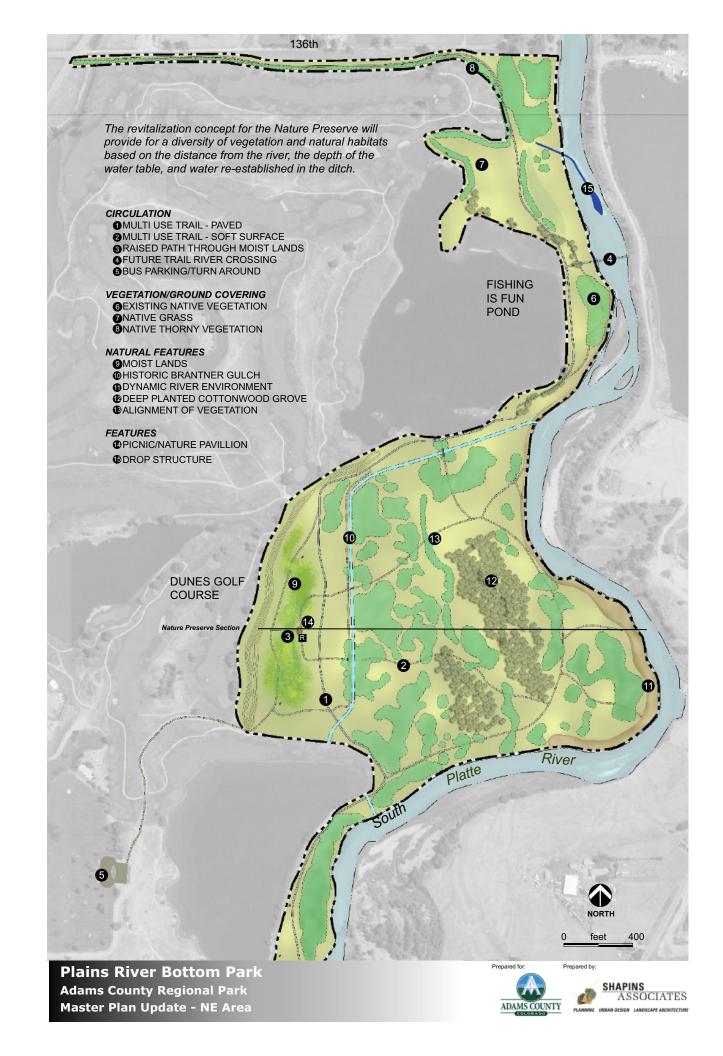




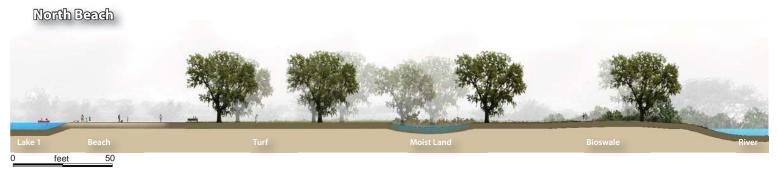






















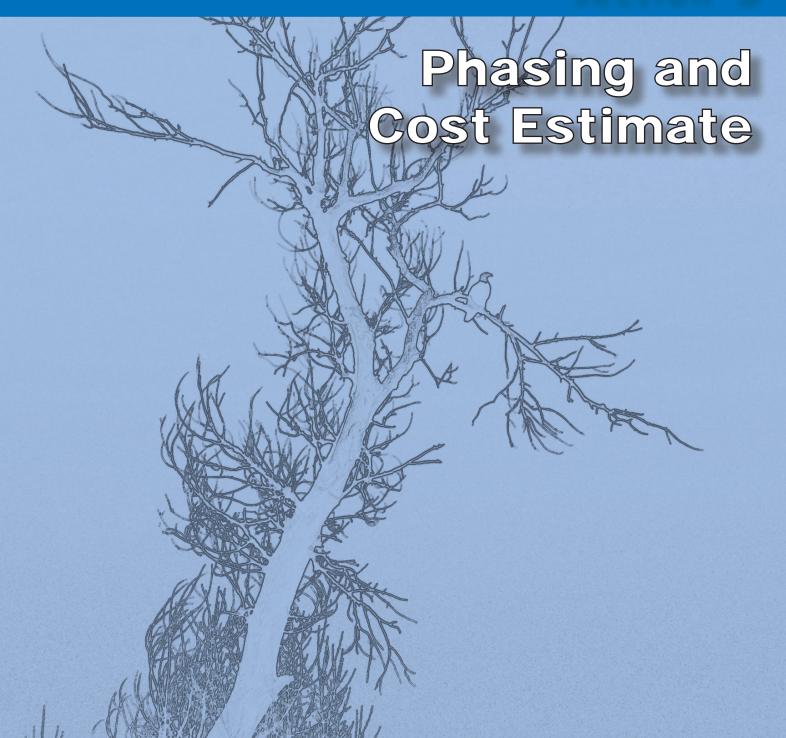








section 5



Phasing

Adams County Parks will budget for the implementation of this plan and will also seek grants from GOCO, Division of Wildlife, State Trails, Urban Drainage and Flood Control, and other partners. The projects outlined in the update to the master plan will be implemented in phases.

Potential phases are outlined below:

Early Needs

- Determine specifics of the water storage:
 - Who the water provider will be
- Determine the amount of conservation pools and storage quantities
- Determine the amount of flow through connecting water features
- For quality recreation, a relatively large amount of water sustained in the lakes or in at least one of the lakes would be desirable.
- Find historic farm buildings slated for demolition that could be relocated and utilized in the agriculture interpretive area.

Phase I

- Construct Park Boulevard, including:
 - Road
- Pedestrian crossing area
- Parking areas
- Paved path
- Landscaping
- Irrigation
- Install all utilities to future building sites:
- Nature Center in central core
- -Interpretive farm area
- Restroom(or septic) in Nature Preserve
- Install all permanent irrigation required on site.

- Grade all areas, including:
- Berms south of Lake 3
- Berms in the Central Core area
- Berms in the Nature Preserve
- Moist lands
- Bioswales
- Trail corridors
- Other amenity areas
- Add all required amendments to soil.
- Seed all designated areas with appropriate native grass seed.

Phase II

- Construct North Nature Preserve Area improvements, including:
 - Trails
- Group shelter with restroom facilities
- Deep planted cottonwoods and all other plants
- Re-introduce water into historic Brantner Gulch.

Phase III

- Construct South Platte Corridor improvements:
 - All additional trails
- Picnic areas
- Landscaping (including cottonwoods, native vegetation, moist land plantings, and bioswales)

Phase IV

- Construct Agricultural area, including:
- Placement of historic structures and restoration for interpretation, education, workshops, and restrooms.
- Maintain agricultural area.
- Farming demonstration water feature.

Phase V

- Construct Center Node Area, including:
 - Entry
 - Paved and soft surface paths
 - Central Plaza
 - Surrounding bermed seating areas
 - Nature center and restrooms
 - Lake connection water features
 - Cistern storm water feature
 - Educational water playgrounds
 - Beach areas
 - Picnic areas (including picnic shelters and group and individual picnic areas)
 - Landscaping

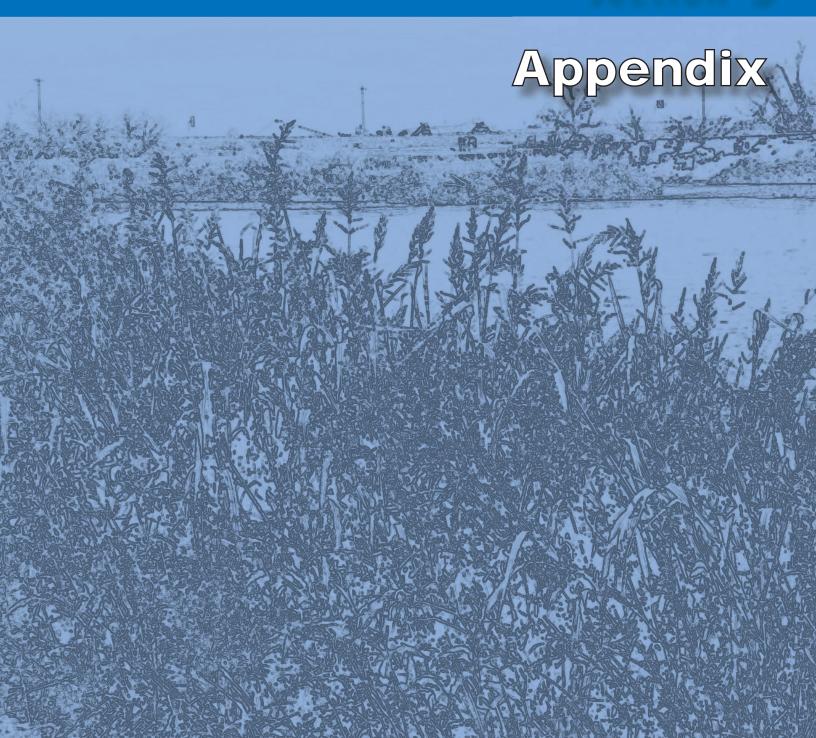
NOTE: Adams County has obtained a grant for a portion of the South Platte River Trail and has submitted a Legacy Grant to GOCO for completion of the trail through the Regional Park including the two focus areas of the master plan update.

Cost Estimate

Vegetation Improvements		Amount	Unit Cost	Total Cost
Native Grass-drilling seed/mulch		281.5	\$100 ac	28150
Native Grass-seed mix		281.5	\$200 ac	56300
Moist Land-native grass-drilling seed/mulch		22.5	\$100 ac	2250
Moist Land-native grass-seed mix		22.5	\$200 ac	4500
South of 120th	6.5 ac			
North of 120th	6.3 ac			
North of core	6.1 ac			
Preserve	3.6 ac			
Turf	17.2 ac	749232	\$0.22 sq ft	164831
Beach Sand - 3' deep	2 ac	9680	\$0.55 cubic yd	5324
East	1.5 ac			
West	0.5 ac			
Trees (Cottonwood)-1 gal		921	\$35 ea	32235
Recreation Improvements				
Fishing Docks/Observation (allowance)		4	\$50000 ea	\$200,000
Boardwalk fishing pier (allowance)		1	\$85,000 ea	85000
Fountains/Pond Sculpture (allowance)		7	\$15,000 ea	105000
Boat Ramp Gravel (allowance)		1	\$5,000 ea	5000
Hard Surface Trails (10' wide)		15663	\$45.00 lf	704835
N. of 122th/Preserve area	11213 ft			
S. Platte Corridor	1104 ft			
Ag. Area/west side	1516 ft			
Central Core	1830 ft			
Soft Surface Trails (6' wide)-crusher fines		35022	\$6.00 If	210,132
N. of 122th/Preserve area	12,852 ft			
S. Platte Corridor	8937 ft			
Ag. Area/west side	10283 ft			
Central Core	2950 ft			
Soft Surface Trails (4' wide)-natural surface		3372	\$4.00 If	13488
S. Platte Corridor	969 ft			
Central Core	2403 ft			
Hard surface Plazas		26265	\$18.00 sq ft	472770
Seating Walls		227	\$95.00 If	21565
Seating Wall Plaza	145 ft			
Seating Wall Path	82 ft			
Restroom Facility-Nature Preserve (allowance)		1	\$90000 ea	90000
Picnic Tables w/crusher fine pad		54	\$1000 ea	54000
Group Picnic Area-w/shelter, concrete (allowance)		4	\$45,000 ea	180000

Cistara Caulatura (allauranaa)		Amount	Unit Cost	Total Cost
Cistern-Sculpture (allowance)		2665	\$75,000 ea	75000 26650
Surface Pond Connection (allowance) Educational Water Playground (allowance)		2665 1	\$10.00 lf \$50,000 ea	50000
Water Filter-Living Machine (allowance)		1	\$10,000 ea	10000
water i liter-Living Machine (allowance)		'	ψ10,000 ea	10000
Earth Building-sustainable 2500 sq ft (allowance)		1	\$500000 ea	500000
Relocate historic farm buildings house (allowance)		3	\$6000 ea	18000
barn (allowance		1	\$25,000 ea	25000
`		1	\$25,000 ea \$150000 ea	150000
Restoration of buildings w/ restroom (allowance)		1	\$150000 ea	150000
Boulder-large		5	\$110 ea	550
Boulder-small		4	\$60 ea	240
Infrastructure				45400
Asphalt Assass read (20) wide		700	Ф 7 О И	15400
Asphalt Access road - 28' wide	00	792	\$79 If	62568
Parking-bermed area	30 spaces	1	\$3500 ea	
Asphalt access road - 28' wide	157 ft.	4	Ф0500	
Parking-ag area	30 sp	1	\$3500 ea	
Asphalt access road	205 ft.		0.1000	
Parking-central core	50 sp	1	\$4200 ea	
Asphalt access road - 28' wide	430 ft		0.1000	
Parking-Preserve	50 sp	1	\$4200 ea	
CONSTRUCTION SUB TOTAL				3368788
Contingency 20%				673757.6
Contingency 2070				0/3/3/.0
Berm fill - south of Pond 3 - estimate		144012	\$16 cubic yd	2304192
Berm grading - south of Pond 3 - estimate		144012	\$4 cubic yd	576048
Berm fill - central core area - estimate		37000	\$16 cubic yd	592000
Berm grading - central core area - estimate		37000	\$4 cubic yd	148000
GRADING SUB TOTAL			* · · · · · · · · · · · · · · · · · · ·	3620240
Henderson Road - planting plan				82466
Park Blvd planting plan (pending)				
Irrigation-Turf area	17.2 ac	749232	\$1.50 sq ft	1123848
Irrigation - temp Native Grass area		281.5	\$500 ac	140750
(highly variable-can range from \$500-\$5000/ac)				
IRRIGATION SUB TOTAL				1264598
sign - entry			\$10000 ea	
sign - wayfinding			\$400 ea	

section 5



Appendix

MASTER PLAN ALTERNATIVES

Based on the stakeholder feedback and discussions with resource and management experts, two Master Plan Alternatives were developed. These alternatives explored a range of recreation, education, and interpretive opportunities as well as resource enhancements. In order to compare the pros and cons of each alternative and to gauge the County's desires, the planning team developed alternatives that were distinct yet provided recreation opportunities that were compatible with the developed vision and goals. The alternatives ranged from a master plan that emphasized more development with higher use and maintenance to a plan with less structured use, development, and maintenance.

Note: The following two alternatives were a means to explore a variety of design scenarios, some of which were not implemented in the final Master Plan.

CONCEPT 1 - "Arboretum Landscape"

The Arboretum Landscape Alternative would call for the design and development of a diversity of landscapes ranging from riparian and wetland to native upland grasslands to turf landscapes. A variety of experiences would occur as one journeys through these diverse landscapes. Passive recreation, education, and interpretation would occur in a centralized, developed park setting with concentrated multi-use areas at each lake. A nature center and outdoor amphitheater would provide a venue for education, events, and other entertainment.

Along Lakes 1 and 3, beaches, edged by turf grass and cottonwoods would provide space for picnics and spontaneous play. South of Lake 3, two large mounds with big swings and long slides would give older children and adults a place to play. Agricultural

heritage and education would be the focus of the agricultural area in the southwest with historic farm buildings and organic crops and flowers reflecting the current agricultural use.

An extensive trail system would be developed with a concrete trail system providing direct access to all key facilities and a secondary unpaved system circling all the lakes extending into more secluded areas would be developed. Boardwalks would also be developed through several of the moist and wetland areas.

The tiered interpreted Nature Preserve would illustrate a broad diversity of native habitats in a small area based on the distance from the river and water provided. The prairie dog town would be maintained but confined to a small area. To the north of the Nature Preserve cottonwood trees and turf would provide a comfortable place to picnic. On the north side of the Fishing is Fun Pond, dense thorny shrubs and trees would be planted along the edge of the golf course to discourage access onto to the golf greens.

The existing high quality riparian areas would be maintained and controlled access would be provided to the various areas with trails. Moist land areas would be created and enlarged and native habitat expanded. Opportunities for recreation and education would increase. Abundant access into and within the site would be provided for both vehicles and pedestrian.

CONCEPT 2 – "Water–Flow from the Mountains to the Valley"

This alternative would focus on minimal development resulting in nominal water use and lower maintenance. Throughout the park only native trees, shrubs, and grasses would be used. This concept focuses the majority of these 'minimal' improvements and maintenance needs in the central core area between the three lakes. Instead

A

of turf, native grasses would be used that could be mowed several times a year for events and to maintain weeds. This area would become a place for education and water experience. The connection between the lakes would be brought to the surface in a water feature, a cistern sculpture utilizing storm water would be in the center of the plaza, and an educational water playground would give children an opportunity to play while learning. The outlying areas would be left less developed and require less maintenance.

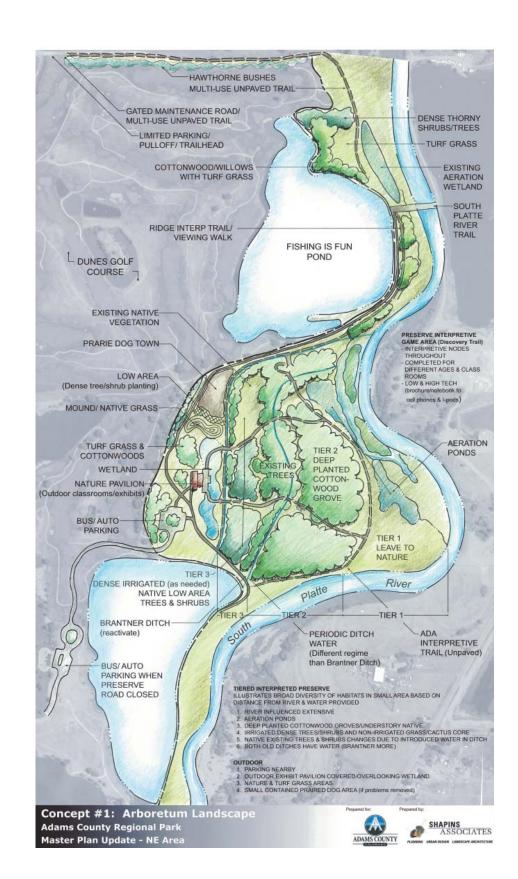
Vegetation in bioswales would be irrigated from the storm water that flows from the adjacent path and surface flow mirroring the technique of dry farming. The major riparian areas would have no access, though viewing platforms would be provided for passive recreational uses such as bird watching. Vehicular access would be limited within the park. Concrete paths through the site would include narrower unpaved trail spurs that control pedestrian traffic and limit impact on the natural resources.

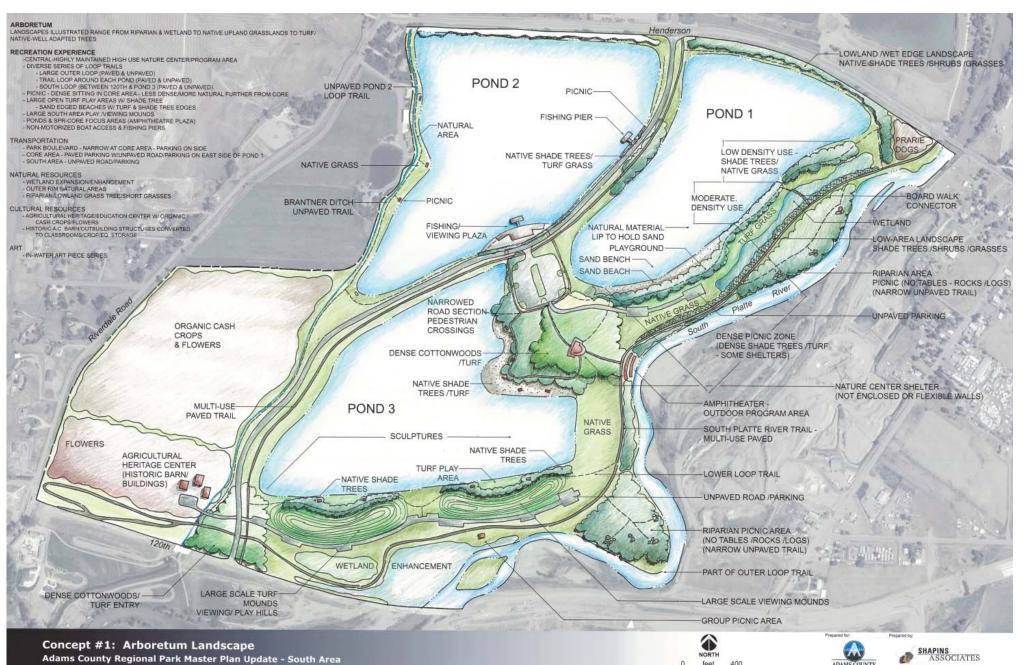
With the dynamic river environment unaltered, the Nature Preserve would focus on interpreting the existing environment, conditions, and cycles. The Nature Preserve would be left to evolve on its own with only minimal maintenance to control weeds. Education and interpretation would focus on the changes that led to its current state and what will happen to this environment in the future due to the reduced availability of water and cyclical flooding. The area around the Fishing is Fun Pond will remain as it is.

Concept #1:

Arboretum Landscape

The Arboretum Landscape represents a diversity of landscapes ranging from riparian and wetland to native upland grasslands to turf. Passive recreation, education, and interpretation occur in centralized, maintenance intensive, high use program areas.





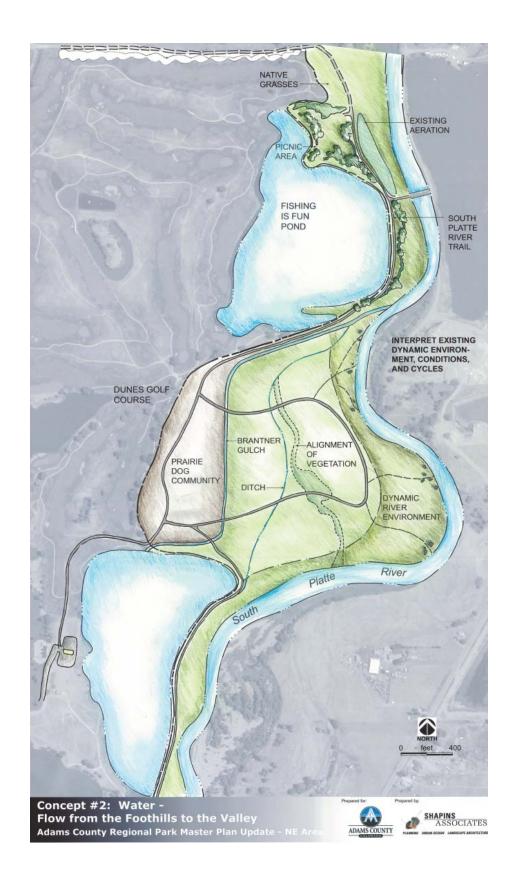
Concept #2:

Water Flow from the Foothills to the Valley

Minimal development with nominal water use and maintenance is the basis of this concept. The central core area between the three ponds becomes the center of the park. Only native vegetation is used throughout the park. The development that does occur is in the central core between the three ponds.

Water in a variety of forms, such as storm water, the surface connection between the ponds, and ditch water are used to enhance the experience of the park, through interpretation, education, and play.

Adams County Regional Park Master Plan Update - South Area



SHAPINS ASSOCIATES

