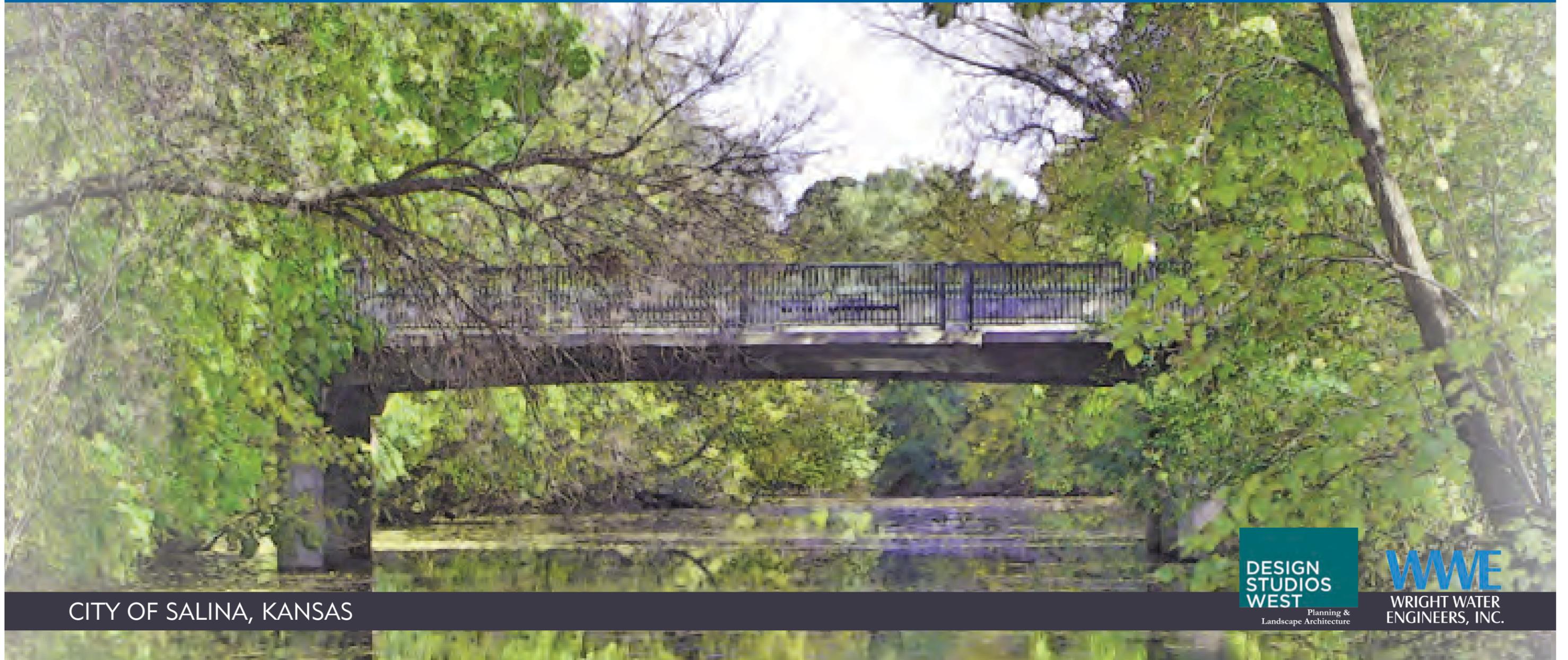




# SMOKY HILL RIVER RENEWAL MASTER PLAN

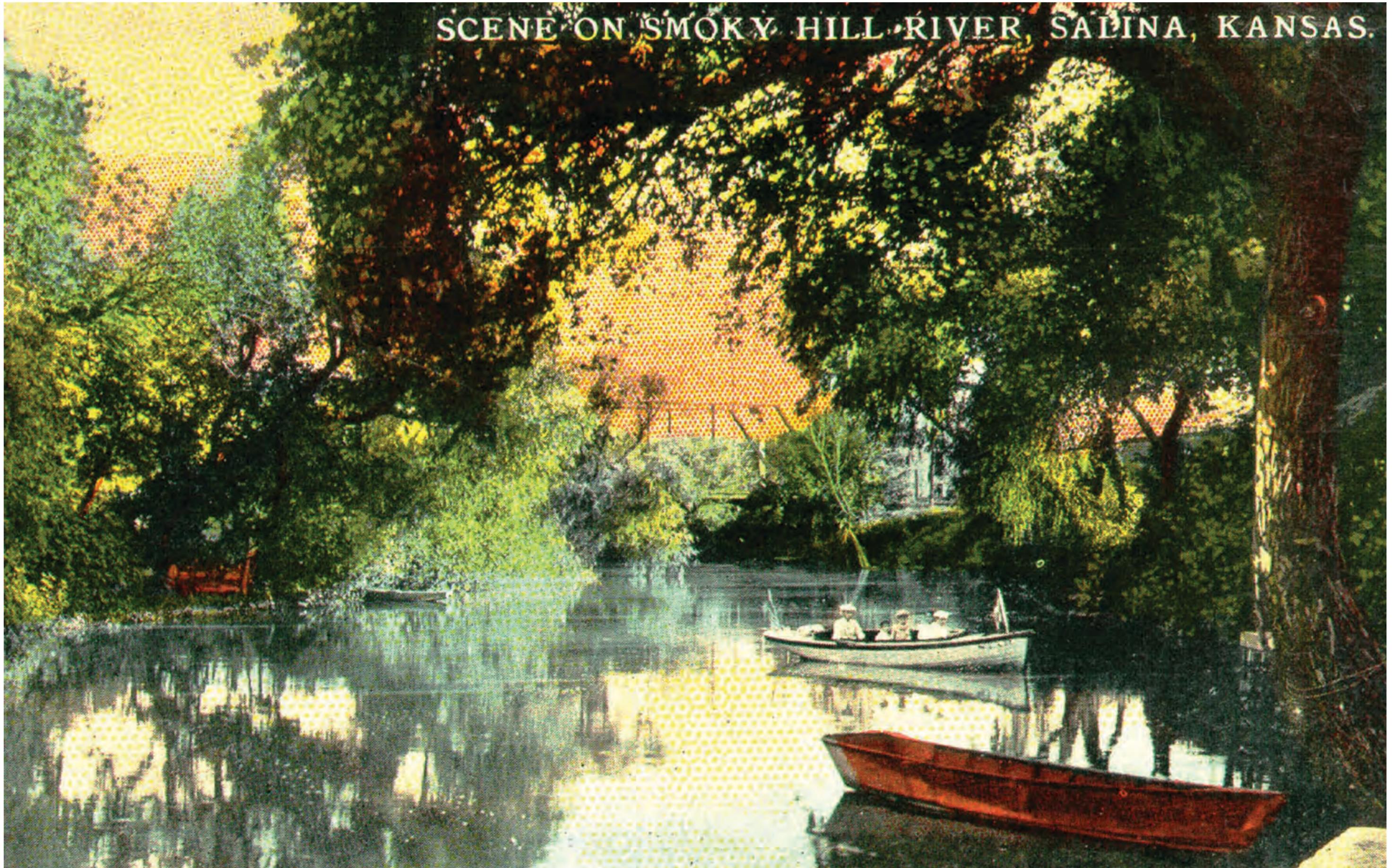


CITY OF SALINA, KANSAS

DESIGN  
STUDIOS  
WEST  
Planning &  
Landscape Architecture

WWE  
WRIGHT WATER  
ENGINEERS, INC.

SCENE ON SMOKY HILL RIVER, SALINA, KANSAS.



## Rivers across the nation continue to be historical landmarks tracing our settlement pattern from the historic eastern seaboard to the new California coast.

For so many communities the location, history, condition and use of their City's river was the source of how the community was founded, how it survived and how it evolved. For many communities, the river was both a utilitarian and functional source for agriculture, industry, drinking water, and commerce. Communities that once used their rivers only for basic water supply and waste disposal are increasingly re-evaluating their rivers for their intrinsic value for storm drainage, flood control, natural restoration, recreation and private riverfront investment opportunities. Perhaps the best mark and measure of the relative value of our community rivers and creeks is their market value – not so long ago the value of an acre of land far exceeded the value of an acre foot of water. Today, the value of an historic and priority acre-foot of water can far exceed the cost of an acre of agricultural land. Water informs us about our ancestors, their settlement patterns and, in current times, our commitment to renewal and community building.

Salina has a long history of embracing, using, ignoring and being damaged by the Smoky Hill River. This love-hate relationship is the reality of the Mid-West. The Smoky Hill River always flowed through the center of the City and despite its tendency to flood - the community celebrated the river as a vital part of its identity. The 500 year flood event of 1951 was the last straw. Soon state and Federal monies were dedicated to diverting the Smoky Hill River through a levee system that separated the natural flow of the river from the City to a diversion by-pass channel. From a functional, practical and public safety perspective the construction of the diversion

channel made perfect sense and was done throughout the U.S. by hundreds of similar communities that experienced repeated flooding. The result was a riverbed that received minimal and regulated flows causing increased sedimentation and, over time, a slow decay of the rivers natural hydrology. In 1961, upon the completion of the diversion by-pass channel the Old Smoky Hill River slowly died for lack of adequate flows, increased sediment loading, lack of maintenance and operations.

As often happens, a small group of concerned citizens organized to periodically clean the garbage and refuse along the Old Channel of the Smoky Hill River. This group of volunteers, called "The Friends of the River", officially organized a community outreach process to test the Salina community with the proposition; "Do we as a community care about the river and want to try and improve its overall condition?" The Friends of the River (FOR) formed a 501 c3 foundation and asked the City of Salina if they could conduct a public engagement process with the citizens of Salina to test their willingness or un-willingness to improve the condition of the river. With City technical support and encouragement, the FOR conducted a series of community outreach meetings and discussions that confirmed the desire to improve the river. For well over a year, FOR asked the Salina community to gauge their support and desire to actually improve the Old Channel of the Smoky Hill River into a community resource that they could be proud of once again.

The privately funded FOR public engagement process was enormously successful. It demonstrated strong community support to improve the Old Channel of the Smoky Hill River and to forge a community master plan that outlines a framework for future improvements to the river that are viable and feasible. Based, in part, on the strong community support to improve the use and quality of the river, the City of Salina authorized a



comprehensive River Master Plan to be prepared. Seldom do you find this public and private passion to join forces for a common good. The FOR and City of Salina have re-defined the over-used and often misunderstood "public private partnership" notion of community building. The fact is, both the FOR and City of Salina have practically and legally joined funding sources and technical resources to prepare the Smoky Hill River Renewal Master Plan. This "community building" public and private effort is perhaps the mark and measure of how important the Master Plan is and will become to the future generations of Salina residents.

The Smoky Hill River Renewal Master Plan is a testament – a covenant with future generations that a plan is in place to improve the quality of the river. Each generation will be obligated to do its part to fulfill this vision and plan of action. Some will enjoy more dramatic results than others, but all existing and future citizens can be confident that the process outlined in the master plan produced a community vision that was far-reaching, ambitious and technically sound.

**Donald H. Brandes, Jr., ASLA**  
**Design Studios West, Inc.**



# TABLE OF CONTENTS

## PREFACE

Forward .....	i
Table of Contents.....	ii
Index of Figures .....	iii
Acknowledgements.....	iv
Resolution of Authorization .....	vi
Resolution of Approval.....	vi

## SECTION 1.0

### OVERVIEW AND CONTEXT

Introduction.....	1
Historical Context .....	2
Regional and Local Context .....	9
The Planning Process.....	12
The Project Team.....	15

### INVENTORY AND ANALYSIS

Introduction.....	18
Planning Area Boundary .....	18
Planning Area Context .....	19
Floodplain .....	22
Access and Circulation.....	23
Ownership.....	25
Utilities.....	26
Long Range Planning, Land Use and Zoning .....	28
Technical Issues.....	31
Inventory and Analysis Summary/Opportunities and Constraints..	33

### PUBLIC OUTREACH AND COMMUNITY PREFERENCES

Introduction.....	34
Process Overview .....	34
Public Outreach and Engagement.....	40
Public Outreach and Community Preference Results .....	41
Final Presentation and Summary.....	50

## SECTION 2.0

### THE MASTER PLAN

Master Plan Overview and Process .....	53
Framework Planning and Site Relationships .....	54
Preliminary Framework Plan.....	59
Alternative Concepts .....	64
Preferred Plan .....	74
Preliminary Master Plan.....	75
Final Master Plan.....	78
Featured Areas .....	82
Final Master Plan - Planning Summary.....	94
Engineering Issues .....	97
Wright Water Engineers - Engineering Issues Document .....	98

## SECTION 3.0

### IMPLEMENTATION

Introduction.....	191
Land Acquisition and Easements.....	192
Primary Phase - Improvements and Cost .....	194
Additional Phases - Improvements and Cost .....	196
Potential Funding Sources and Strategies .....	198
Next Steps.....	200

## SECTION 4.0

### APPENDIX

Appendix A .....	A.1
<i>Smoky Hill River Renewal Master Plan - Engineering Issues</i>	
Appendix B.....	B.1
<i>2009 - Phase One - Public Outreach Summary</i>	
<i>Uses and Activities</i>	
Appendix C .....	C.1
<i>2010 Phase Two - Public Open House Outreach Summary</i>	
<i>Master Plan Alternatives</i>	
Appendix D .....	D.1
<i>2010 Phase Two - Public Outreach Summary</i>	
<i>Preliminary Master Plan</i>	

**SECTION 1.0  
OVERVIEW & CONTEXT**

FIGURE 1.1 - Flood Control Improvements..... 7  
 FIGURE 1.2 - The Smoky Hill River Watershed..... 9  
 FIGURE 1.3 - Climate Data for Salina, Kansas..... 10  
 FIGURE 1.4 - A Five (5) Phase Process..... 12  
 FIGURE 1.5 - Phase 1 - Project Team Organization ..... 15  
 FIGURE 1.6 - Phase 2 - Master Plan Project Team Organization..... 16

**INVENTORY AND ANALYSIS**

FIGURE 1.7 - Planning Area Boundary..... 18  
 FIGURE 1.8 - Planning Area Context Map..... 20  
 FIGURE 1.9 - City Wide Floodplain..... 22  
 FIGURE 1.10 - Draft Project Area Floodplain (URS, 2009)..... 22  
 FIGURE 1.11 - Approved Project Area Floodplain (FEMA, 1987)..... 22  
 FIGURE 1.12 - Regional Access Plan ..... 23  
 FIGURE 1.13 - Existing Access and Circulation ..... 23  
 FIGURE 1.14 - Existing River Channel and Adjacent Ownership ..... 25  
 FIGURE 1.15 - Existing Utilities ..... 27  
 FIGURE 1.16 - Salina Comprehensive Plan Infill & Redevelopment..... 28  
 FIGURE 1.17 - Salina Comprehensive Plan Future Land Use..... 28  
 FIGURE 1.18 - Strategic Plan Goals and Actions Table ..... 29  
 FIGURE 1.19 - Existing Zoning ..... 30

**PUBLIC OUTREACH AND  
COMMUNITY PREFERENCES**

FIGURE 1.20 - Goals and Objectives for the River Renewal..... 36  
 FIGURE 1.21 - Uses and Activities Boards ..... 38  
 FIGURE 1.22 - Community Preferences by Data Input ..... 39  
 FIGURE 1.23 - Four River Reaches..... 41

**SECTION 2.0  
THE MASTER PLAN**

FIGURE 2.1 - Kenwood Park - Bicentennial Activity Center..... 55  
 FIGURE 2.2 - Downtown - Regional Health Activity Center..... 56  
 FIGURE 2.3 - Downtown Historic / Cultural Activity Center..... 56  
 FIGURE 2.4 - Land Use Opportunities ..... 57  
 FIGURE 2.5 - Urban Design Opportunities..... 58  
 FIGURE 2.6 - Concept Program Plan..... 59  
 FIGURE 2.7 - River Channel Framework ..... 60  
 FIGURE 2.8 - Natural Channel Section (typ.)..... 61

FIGURE 2.9 - Parkside Channel Section (typ.)..... 61  
 FIGURE 2.10 - Concrete Channel with River Walk (typ.) ..... 61  
 FIGURE 2.11 - Access and Circulation Framework ..... 62  
 FIGURE 2.12 - Preliminary Framework Plan..... 63  
 FIGURE 2.13 - Elements common to all alternatives ..... 64  
 FIGURE 2.14 - Concept Alternative A - Convention Center..... 67  
 FIGURE 2.15 - Concept Alternative B - Recreation and Wellness ..... 69  
 FIGURE 2.16 - Concept Alternative C - Downtown Riverwalk ..... 71  
 FIGURE 2.17 - Open House Response Table - Master Plan Alternatives..... 73  
 FIGURE 2.18 - The Preferred Plan ..... 74  
 FIGURE 2.19 - Preliminary Master Plan - Questionnaire Results Table ..... 77  
 FIGURE 2.20 - Final Master Plan ..... 78  
 FIGURE 2.21 - Land Use - Final Master Plan ..... 80  
 FIGURE 2.22 - Circulation - Final Master Plan ..... 80  
 FIGURE 2.23 - River Improvements - Final Master Plan..... 81  
 FIGURE 2.24 - Private Sector Investment - Final Master Plan..... 81  
 FIGURE 2.25 - Historic Headgate Plaza and Fishing Pier ..... 82  
 FIGURE 2.26 - South Ohio Street Bridge and Trailhead..... 83  
 FIGURE 2.27 - Trail Types and Section ..... 84  
 FIGURE 2.28 - Kenwood Park South ..... 85  
 FIGURE 2.29 - Kenwood Park Entry / Convention Center ..... 86  
 FIGURE 2.30 - Kenwood Park Entry / Convention Center Aerial Sketch..... 87  
 FIGURE 2.31 - Downtown Mixed-Use Development..... 88  
 FIGURE 2.32 - Downtown Mixed-Use Development Aerial Sketch ..... 89  
 FIGURE 2.33 - Cultural Heritage Center..... 90  
 FIGURE 2.34 - Cultural Heritage Center Aerial Sketch ..... 91  
 FIGURE 2.35 - Learning Laboratories at Lakewood Middle School ..... 92  
 FIGURE 2.36 - Lakewood Park and Amphitheater..... 93

**SECTION 3.0  
IMPLEMENTATION**

FIGURE 3.1 - Land Acquisition and Easements..... 193  
 FIGURE 3.2 - Primary Phase Improvements..... 194  
 FIGURE 3.3 - Primary Phase Construction Cost Table ..... 195  
 FIGURE 3.4 - Additional Phase Improvements..... 196  
 FIGURE 3.5 - Additional Phase Cost Table..... 197  
 FIGURE 3.6 - Matrix of Potential Funding Partners and Sources ..... 199

# ACKNOWLEDGEMENTS

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## The essence and meaning of the Smoky Hill River Renewal Master Plan is based on broad community support.

The public engagement process was planned and designed to encourage public discussion and discourse regarding how the river could be restored, improved and maintained. There may be citizens that are unaware of the Smoky Hill River Renewal planning effort, but it is doubtful. The City of Salina and Friends of the River (FOR) were the two primary organizations that funded and organized this community-wide planning effort. Without either the City or FOR, this master plan would not have been possible. Sincere gratitude and thanks need to be given to both organizations and the leadership they forged.

### **CITY OF SALINA CITY COMMISSION - PHASE 1**

Alan Jilka, Commissioner  
John Vanier, Mayor (2008)  
Abner Perney, Commissioner  
M. Luci Larson, Mayor (2009)  
Aaron Peck, Commissioner

### **CITY COMMISSION - PHASE 2**

Aaron Peck, Mayor (2010)  
Samantha Angell, Vice Mayor  
M. Luci Larson, Commissioner  
Norman Jennings, Commissioner  
Tom Arpke, Commissioner

### **PLANNING COMMISSION**

Dave Birdsong  
Karl Ryan  
Merle Hodges  
Patrick Mikesell  
Aaron Householter  
Michael Ritter  
Sydney Soderberg  
Rodney Meier

### **CITY OF SALINA ADMINISTRATION**

Jason Gage, City Manager  
Michael Schrage, Deputy City Manager  
Gary Hobbie, Director of Development Services, and  
Phase 1 - Public Outreach City Liaison  
Mike Fraser, Director of Public Works  
Martha Tasker, Director of Utilities, and  
Phase 2 - Master Plan Project Manager  
Steve Snyder, Director of Parks and Recreation  
Dan Stack, City Engineer  
Dean Andrew, Director of Planning, Floodplain Manager  
Jack Rolfs, Director of Computer Technology  
Sharon Benson, Smoky Hill River Festival

### **FRIENDS OF THE RIVER FOUNDATION BOARD OF DIRECTORS**

Dr. Brad Stuewe, Chairman of the Board  
Troy Vancil, President  
Mary Anne Weiner, Vice President  
Mike Soetaert, Treasurer  
Frank Norton, Secretary

### **SALINE COUNTY BOARD OF COMMISSIONERS**

Jerry Fowler, Chairman, District #3  
Randy Duncan, Vice Chairman, District #1  
John Reynolds, Secretary, District #2  
Rita Deister, County Administrator

Early in the process of engaging the community and attempting to determine the extent of community support to potentially improve the quality of the river the FOR organized seven (7) citizen committees. The Chairs and Co-Chairs of each committee meet weekly for over eight (8) months to inform the community, conduct focus sessions, solicit input, document comments, and expand the public awareness of the Smoky Hill River Renewal effort. Below are the committee leaders that were responsible for engaging the Salina community.

### **FRIENDS OF THE RIVER FOUNDATION CITIZEN COMMITTEE CHAIRS**

#### **Environmental**

Kristin Gunn, Former Mayor, Chemistry Teacher (retired)

#### **Recreation and Wellness**

Phil Guries, Salina Family YMCA  
Tom Martin, Salina Regional Health Center Foundation

#### **Education**

Bill Pierson, Science Teacher, (retired)  
Vicki Koepsel, Saline County, Director of Planning

#### **Economic Development**

Steve Ryan, Former Mayor, Mortician  
Ted Hauser, Executive Director,  
Community Housing Development Organization

#### **Community**

Michael Spicer, Director, Salina Community Theatre

#### **Facilities**

Jay Smutz, Architect

#### **Public Relations**

Phyllis Pickle, Executive V.P., Sunflower Bank  
Laura Skidmore, Manager, Highland Meadows Hamlet



Once the public engagement process was initiated and the master plan was authorized to proceed both the City and FOR did not want to lose the continuity, knowledge and experience from the active membership that was involved in the public engagement process. Two working groups were formed that guided the master planning consultants through the process. The two (2) master planning working committees were;

**MASTER PLAN ADVISORY COMMITTEE**

Brad Stuewe , Chairman, Friends of the River (FOR) Foundation  
 Sydney Soderburg, Planning Commissioner, , Former Mayor  
 David Rodine, District Manager, Burger King Restaurants  
 Daran Neuschafer, past Board Chair, Chamber of Commerce  
 Vicki Koepsel, Saline County Planner  
 Lloyd Davidson, President, First Bank of Kansas  
 Steve Ryan, Former Mayor, FOR Economic Development Chair  
 Andy Martin, Executive Director, Salina Area United Way  
 Dean Andrew, Director of Planning, Floodplain Manager  
 Bob Ash, Superintendent, Parks and Recreation

**TECHNICAL ADVISORY COMMITTEE**

Martha Tasker, Director of Utilities, Master Plan Project Manager  
 Troy Vancil, President, Friends of the River Foundation  
 Kristin Gunn, Former Mayor, FOR Environmental Chair  
 Ron Chandler, PE, Former Owner, Wilson and Company Engineers  
 Mike Fraser, Director of Public Works  
 Dan Stack, PE, City Engineer  
 Neil Cable, PE, County Engineer, Saline County  
 Steve Snyder, Director of Parks and Recreation  
 Gary Hobbie, Director, Development Services  
 Mike Schrage, Deputy City Manager  
 Barbara Johnson, PE, Kansas State University

Throughout the public engagement process and preparation of the master plan there were public and private organizations and individuals that contributed funding, technical support, in-kind services, food, supplies, meeting space, audio visual equipment, entertainment, financial contributions and many other contributions and donations that without this assistance the entire process would have suffered and failed. To those individuals, organizations and entities we owe our sincere appreciation.

**MASTER PLAN CONSULTANTS**

The preparation of the master plan was a combined effort between many public agencies and consultant groups. Once again, this collaborative spirit produced a comprehensive and meaningful framework that can guide public and private improvements for many generations. Below are the technical consultants and public professionals that significantly contributed to this document.

**DESIGN STUDIOS WEST, INC.**  
**PRIME CONSULTANT, PLANNING & LANDSCAPE ARCHITECTURE**



Donald H. Brandes, Jr., ASLA, Principal in Charge  
 Robert C. Eck, ASLA, Managing Principal  
 Ian Anderson, Senior Associate  
 Alison Cotey, Project Landscape Architect  
 Teresa Roberson, Project Landscape Architect  
 Stuart Shockley, Project Planner  
 David Gregory, Staff Landscape Architect  
 Todd Rutherford, Staff Landscape Architect  
 Doris Bishop, Administration  
 Kelly McWatters, Administrative Assistant

**WRIGHT WATER ENGINEERS**  
**WATER RESOURCES ENGINEERING, AQUATIC AND WETLAND SCIENCES AND REGULATORY PERMITTING**



Jonathon Jones, PE, Senior Engineer  
 Patricia Flood, PE, Senior Engineer  
 Kenneth Wright, PE, Senior Engineer  
 Samantha Clark, Senior Wetland and Aquatic Scientist  
 Noah Greenburg, Wetland and Aquatic Scientist  
 Suzanne McNamara, Report Production and Senior Editor  
 Sally Kribs, Senior Editor

**OLSSON ASSOCIATES, INC.**  
 Western Star Mill Dam Assessment

**HDR ENGINEERING**  
 Water Rights Application  
 Luca DeAngelis, PE

**SEAGULL ENVIRONMENTAL TECHNOLOGIES, INC.**  
 Brownfields Inventory

**TEMPTED BRANDING**  
 Project & FOR Logo Design

**CONTINENTAL ANALYTICAL SERVICES**  
 Sediment Lab Analysis

**ALLIGATOR DESIGN + COMMUNICATIONS**  
 Graphic Design -  
 Master Plan Document

**KAW VALLEY ENGINEERING**  
 Channel Sediment Sampling & Lab Analysis



# RESOLUTION OF APPROVAL

## RESOLUTION OF AUTHORIZATION PHASE 1 - PUBLIC AWARENESS AND OUTREACH NOVEMBER 24, 2008

### RESOLUTION NUMBER 08-6576

A RESOLUTION EXPRESSING THE INTENT TO ALLOW THE "FRIENDS OF THE RIVER" TO IDENTIFY POTENTIAL OPPORTUNITIES AND CONSTRAINTS ASSOCIATED WITH THE RESTORATION OF THE SMOKY HILL RIVER.

WHEREAS, the Smoky Hill River is a significant natural resource and asset to the Salina community and the region; and

WHEREAS, it is suggested that the City Commission authorize the "Friends of the River" to hold several public information meetings and to solicit input regarding the study the appropriateness and potential of restoring the Old River Channel or the Smoky Hill River; and

WHEREAS, the City agrees that the City Comprehensive Plan recognize in its goals and objectives the need to study and evaluate the potential restoration of the Old River Channel so that its planning effort is in compliance and support of the City Comprehensive Plan; and

WHEREAS, it is beneficial to engage the public in a number of community-wide meetings to identify potential opportunities and constraints associated with the potential restoration of the river (known as Project Phase One); and

WHEREAS, the intent of Phase One - Public Awareness and Outreach is to inform the greater community of Salina of the relative benefits and opportunities associated with the restoration of riverfronts, in general, and specifically with the potential opportunities associated with Smoky Hill River; and

WHEREAS, in addition, the intent is to provide open community meetings that encourage the public to offer their opinions and ideas on how Smoky Hill may be better utilized for a variety of public and private improvements. **SO NOW THEREFORE,**

**BE IT RESOLVED** by the Governing Body of the city of Salina, Kansas:

**Section 1.** That it is the intent of the City Commission to allow and authorize the "Friends of the River" to engage the public in a number of community-wide meetings to identify potential opportunities and constraints associated with the potential restoration of the river.

**Section 2.** That upon the completion of the public outreach process representatives of the "Friends of the River" shall make a formal presentation to the City Commission offering their observations and recommendations.

**Section 3.** That this resolution shall be in full force and effect from and after its adoption.

Adopted by the Board of Commissioners and signed by the Mayor this 24<sup>th</sup> day of November, 2008.

John K. Vanier II, Mayor

[SEAL]  
ATTEST:

Lieu Ann Elsey, CMC, City Clerk

## RESOLUTION OF APPROVAL PHASE 2 - MASTER PLAN, AUGUST 16, 2010

Commission  
Action #

CITY OF SALINA, KANSAS  
REGULAR MEETING OF THE BOARD OF COMMISSIONERS  
August 16, 2010  
4:00 p.m.

The City Commission convened at 3:45 p.m. in a Study Session for a Citizens Open Forum. The Regular Meeting of the Board of Commissioners was called to order at 4:00 p.m. in Room 107, City-County Building. A roll call was taken followed by the Pledge of Allegiance and a moment of silence.

There were present:

Mayor Aaron G. Peck, Chairman presiding  
Commissioner Samantha Angell  
Commissioner Tom Arpke  
Commissioner Norman Jennings  
Commissioner M. Luci Larson

comprising a quorum of the Board, also present:

Jason A. Gage, City Manager  
Greg Bengtson, City Attorney  
Shandi Wicks, Deputy City Clerk

Absent: None.

### ADMINISTRATION

(8.4) Acceptance of the Smoky Hill River Master Plan.

Martha Tasker, Director of Utilities, explained the master plan and the funding options.

Jason Gage, City Manager, noted where the public could view the slide show, the project timeline and community identity from the river project.

Page 2

Mr. Gage then responded to Commissioner Larson's question regarding the tax increase. Commissioner Larson expressed the importance of community education of the project.

A discussion followed between Commissioner Jennings, Mayor Peck, and Ms. Tasker regarding the preliminary phase of the project, chimney removal, and the efforts involved by City Staff and the Friends of the River.

Dennis Lauver, Salina Area Chamber of Commerce, commented on the master plan and the Chamber's board support of the project.

Andy Martin, Salina Area United Way, noted his involvement in MAC and commented about the importance of the project to the community and the importance of the health and safety to the community.

Moved by Commissioner Angell, seconded by Commissioner Jennings, to accept the Smoky Hill River Master Plan. Aye: (5). Nay: (0). Motion carried.

### OTHER BUSINESS

None.

### ADJOURNMENT

Moved by Commissioner Jennings, seconded by Commissioner Larson, that the regular meeting be adjourned. Aye: (5). Nay: (0). Motion carried. The meeting adjourned at 4:40 p.m.

[SEAL]  
ATTEST:

Aaron G. Peck, Mayor

# SECTION 1.0

## OVERVIEW AND CONTEXT

### INVENTORY AND ANALYSIS

#### PUBLIC OUTREACH AND COMMUNITY PREFERENCES



A stylized graphic of a sun with rays rising over wavy lines representing water, rendered in a lighter shade of blue against the dark blue background.

*"To accomplish great things, we must not  
only act, but also dream; not only plan,  
but also believe."*

Anatole France



## WHAT DOES A RESTORED SMOKY HILL RIVER MEAN FOR SALINA?

When the river was diverted in the early 1960's, as part of the flood protection of the city, Salina's identity with its historic river faded. This loss of identity took with it a loss of memories, stories, experiences, habitat and educational opportunities. A restored river means a renewed community identity, a community-changing quality of life, an enlivened downtown, tourism opportunities, recreation and transportation alternatives, entertainment and educational opportunities. In short, this master plan means to a new rejuvenated Salina with national acclaim as one of Kansas' premier destinations for residents, business and tourism.

On December 14, 2009, The Salina City Commission authorized the preparation of a master plan to guide restoration and renewal of the Old Channel of the Smoky Hill River through Salina, Kansas.

**The intent of the Smoky Hill River Master Plan is to identify appropriate planning, design, and preliminary engineering responses to the specific opportunities associated with the restoration and redevelopment of the Old River Channel area and the Smoky Hill River.**

The Master Plan builds upon input, goals and interests expressed by over 3,500 participants in the Phase One Public Outreach conducted by the Friends of the River Foundation in the Spring and Summer of 2009.

The Phase Two - Master Plan presented in this document, was conducted by the City of Salina, with the organizational support and mobilization of enthusiastic volunteers of the Friends of the River Foundation. The high standard of community participation established in Phase One Outreach has been continued in Phase Two. Through the Spring and Summer of 2010, Advisory Committee guidance and recommendations were reviewed, amended and widely-endorsed by over 3,200 participants at Community Open House events including over 700 participants at the Master Plan Alternatives Open House, and over 2,500 participants at the Preliminary Master Plan event at the Smoky Hill River Festival.

With that base of community participation and support, the following pages summarize the planning, design and preliminary engineering responses to the community aspirations, and specific opportunities offered by the Old Channel of the Smoky Hill River in Salina.

### TOWN OF SALINA, KANSAS

Source: City of Salina, Police Department Website

Historically, the area that would later become known as Kansas was home to large numbers of nomadic Native Americans who hunted bison, elk, deer and other abundant prairie wildlife of the Great Plains region. It was first settled by European Americans in the 1830s, but the pace of settlement accelerated in the 1850s, in the midst of Pre-Civil War political wars over the slavery. When officially designated a Territory of the U.S. and opened to settlement in 1854, abolitionist Free-Staters from New England and pro-slavery settlers from neighboring Missouri rushed to the territory to determine if Kansas would become a free state or a slave state. Thus, the area was a hotbed of violence and chaos in its early days as these forces collided, and was known as “Bleeding Kansas”. The abolitionists eventually prevailed and on January 29, 1861, Kansas entered the Union as a free state. After the Civil War, the population of Kansas grew exponentially, when waves of immigrants arrived with aspirations to turn the prairie into productive farmland.

### NATIVE AMERICANS AND THE BATTLE OF INDIAN ROCK

Source: City of Salina, Police Department Website

Before European settlement the area that would become Salina was a hunting ground for western nomadic tribes – the Cheyenne, Arapaho, Kansa and Osage. In the mid-1800s, members of more peaceful eastern tribes, the Pottawatomie, Kaw and Delaware ventured west. Inevitably there was conflict.

A colony headed by Preston B. Plumb was organized at Zenia, Ohio, in 1856, and came to Kansas to locate a settlement on the Saline River near the present day site of the City of Salina. The western Indians drove the colony east. Settlers traded with the eastern tribes that were friendly; but, they abandoned their frontier outpost repeatedly, in part due to the warring between Cheyenne and Pottawatomie tribes that presented a constant threat.

In 1857 the “Battle of Indian Rock” occurred when the eastern tribes ventured too far to the west and were surprised by a western tribe hunting party. After severe fighting near Dry Creek, west of present day Salina, the eastern tribes retreated and took their final stand on a prominent hill adjacent to the Smoky Hill River and under the cover of a large rock – Indian Rock – where the tide of the battle changed. Big Chief, the Cheyenne leader, was killed in the battle and the western bands retreated, never again to make war so far east, assuring a safe location for the new town of Salina.

### SALINA'S FOUNDING

Source: City of Salina, Police Department Website

News of the Battle of Indian Rock reached settlers, including William A. Phillips, and they decided to stake out a town site in Salina. In 1858, three years before Kansas was admitted to the union, Salina was founded by Phillips, 34; Alexander Campbell, 23 and James Muir, 24, later joined by brother, David Phillips, and Alexander Spilman, both 21. The five are considered the founders of the Town of Salina. In the next two years, the territorial legislature chartered the town company, organized the surrounding area as Saline County, and named Salina the county seat. Phillips was a lawyer, journalist, historian and industrialist. He worked for Horace Greeley’s New York Tribune and in the fall of 1855 and upon venturing west, became the Tribune’s correspondent for the Kansas Territory. He reported on the burning issue of the day, with the Free State versus Slave State controversy raging in Kansas. Later Phillips would serve the infant state as a congressman-at-large in 1873, and 1875-1879. Campbell, Phillip’s brother-in-law, was the town’s first postmaster and storekeeper. His wife, Christina, was among the first white women in what became Saline County. Salina was later incorporated as a city in 1870.



Alexander Campbell and his wife, Christina Phillips Campbell ran the first trading post in Salina.

### COLORADO GOLD DISCOVERY, SMOKY HILL TRAIL AND THE SMOKY HILL RIVER FERRY

Source: Kansas Historical Quarterly, *Ferries in Kansas*, Part IV - Smoky Hill River by George A. Rat

With the onset of the Pike’s Peak Gold Rush in 1858, and the 1859 discovery of gold in Denver’s Cherry Creek, the ancient Native American trail along the Smoky Hill River provided the shortest, fastest route

west across Kansas, becoming known as the Smoky Hill Trail. As the westernmost town on the Smoky Hill Trail, Salina established itself as a trading post for prospectors bound for Pikes Peak and Denver, westbound immigrants, and area Native American tribes.

What is now the East Iron Avenue crossing of the Smoky Hill River in Salina was the location of the first non-toll ferry in the region, starting in the fall of 1858 and operating until the completion of a bridge across the river near the site of the ferry. In June of 1858, a flood had washed out the government bridge upstream near Kanopolis with its timber drifting downstream as far as Salina. The timber was salvaged by Alexander Campbell, who was operating a trading post on the river. That fall Campbell and James Muir used the timber to build a ferryboat, which they put into use late that year. The East Iron Avenue crossing location was at the end of the Phillips Road between Lawrence and Salina, which followed the ridgeline divide south of the Kansas (also known as the Kaw) River and Smoky Hill Rivers. The ferry further enhanced the Phillips Road as the preferred route, alleviating the need to ford the river upon arriving in Salina. The old Government Road had been located in the river valley, and in wet weather it was a difficult route to travel. Some of the old-timers say they used the ferry as a bridge when the water level in the river was low, and as a ferry when the river was high. This ferry was operated for about nine years.

During the time Campbell operated his ferry he also hunted and traded with the Indians. Subsequently, there were times when he was absent from the new town. In his absence, when travelers or freighters arrived on the opposite shore who wished to cross, Mrs. Campbell would untie the ferry boat, pole it across the river, and have the travelers assist in making the return trip. During the early days of Salina, it was not an uncommon sight to find the few women residents gathered at the ferry to do the usual family washings. The water of the Smoky Hill River was preferred over well water because it had less mineral content than well water and therefore required the use of less soap.

Campbell, a member of the town company, built the first house on the town site. It was a one and one-half story log structure, with a store and living quarters in the lower portion, while the upper part was used as rooming quarters when travelers stopped for the night. On the establishment of a post office he was appointed postmaster and kept it in his store, for the next forty years.

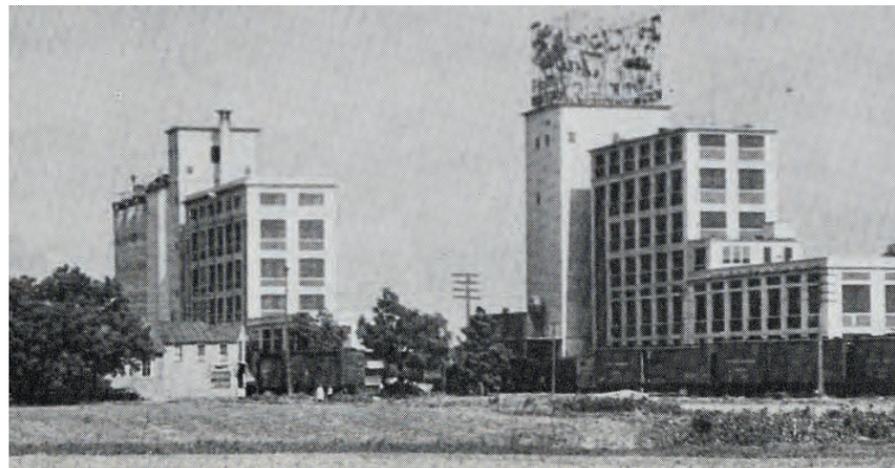
The town’s growth halted with the outbreak of the American Civil War when much of the male population left to join the U.S. Army. Beginning in 1865, the trail served as the route for the short-lived Butterfield Overland Dispatch stagecoach line. To protect travelers, the U.S. Army established

several forts along the trail, including Fort Downer, Fort Harker, Fort Hays, Fort Monument, and Fort Wallace. Before American colonization, the land along the Smoky Hill River was favored hunting ground for the Plains Indians. In 1867, the Comanche and the Kiowa, and in 1868, the Sioux and the Arapaho signed treaties withdrawing their opposition to the construction of a railroad along the Smoky Hill River.

**RAILROAD BRINGS SETTLERS**

Source: City of Salina, Police Department Website

Growth returned with the soldiers after the Civil War, and with the arrival of the Kansas Pacific Railroad in Salina in 1867, changing forever the frontier settlement. The railroad brought settlers, materials, ideas, and cowboys. Salina businessmen had expended a good deal of money to secure the trade that would be derived from the town being made a trading point for cattle, but having secured it, the people soon discovered that it was not such a desirable thing to have after all. The trade in itself was good enough, and the business of the merchants in town was greatly



Salina's Milling District

increased, but the town became infested with such a crowd of disreputable character, that whatever advantage was gained in trade was more than counterbalanced by loss in morals. When the cattle trade moved westward two years afterwards, the citizens of Salina were more than rejoiced at its departure than they were at its coming. Salina was a mill town and a trading center, and that's the way they liked it.

**AGRICULTURE AND INDUSTRY**

Sources: City of Salina, Police Department Website; Wikipedia

By 1861, W.A. Phillips had brought a steam-powered gristmill to town, establishing the early character of Salina's industry. The small Phillips mill and the larger, water-powered Grower Mill, located on the Smoky Hill River in 1867, immediately south of Indian Rock, were the first mills in Salina.

Due to its location upstream of town, the Grower Mill was commonly referred to as the Upper Mill. The Western Star Mill was started on the Smoky Hill River in 1873 by C.R. Underwood and others immediately downstream of East Iron Street. In 1875 its new dam and mill race raised the river water level, flooding the Upper Mill, which continued to stand until 1930. During the 1870s, wheat became the dominant crop in the area, more steam-powered flour mills were built, and agriculture became the engine of the local economy. In 1874, Salina resident E. R. Switzer introduced alfalfa to area farmers, and its cultivation began to spread throughout the state. By 1880, the city was an area industrial center with several mills, a carriage and wagon factory, and a farm implement works. Over the following decade, three railroads were built through the city. The success of the wholesale and milling industries drove Salina's growth into the early 1900s. By 1930, Salina was ranked fifth in the world in flour production. Milling continued as a principal industry until the 1960s when the Interstate Commerce Commission changed the rules on freight rates for milled flour as compared with rough grains. Most of the mills departed to population centers, to be closer to where the bread was actually made.

**THE H.D. LEE MERCANTILE AND LEE® JEANS IN SALINA**

Source: Salina Downtown, Inc.

On December 26, 1889 the State of Kansas granted a five year charter to establish H.D. Lee Mercantile. Lee started with 20 employees, including six salesmen, working on an initial capital of \$100,000 from H.D. Lee. The demand for a merchant supplier west of the Mississippi was so high that in only three years, the company had to double its original spacious four-story building. Coffee roasting, spice grinding, tea, cereal and fruit packing departments "elevated the institution to the level of the best that operated west of Chicago," according to an Oct. 30, 1919 review of H.D. Lee Enterprises in The Salina Daily Union. The mercantile business also paved the path for the H.D. Lee Flour Mill, which was created to make profitable use of the large amounts of grain received in trade.

Unhappy with the quality and inconsistent delivery of work wear from Eastern suppliers, Lee decided his company could do it better. H. D. Lee Mercantile Company opened a work wear manufacturing factory and began producing its first overalls, jackets and dungarees. Once again Lee, the entrepreneur, filled the market need and Lee® Jeans was launched. The early Lee companies were known for reliable, quality products, response to market needs, and innovative marketing. Within two years of the first production of Union-Alls, Lee ads suggested, there is "A suit of Union-Alls under the seat of every auto." Union-Alls quickly gained popularity with laborers, engineers, farmers and by 1914, Lee began production of Khaki Union-Alls for her. In 1917, Lee Union-Alls became the official doughboy fatigue uniform of World War I following an order from Brigadier General Leonard Wood for Lee to supply as many Union-

Alls as the company could manufacture. On March, 17, 1917, operations for both the garment and grocery divisions moved from Salina to the new 20th and Wyandotte location in Kansas City, Missouri. In Salina, the H.D. Lee Mercantile continued local operations until it's closing in 1974. H. D. Lee's business accomplishments were key ingredients in Salina's early growth. Lee was president of five Salina companies at one time: H. D. Lee Mercantile, Lee Hardware, H. D. Lee Mills, Farmers National Bank and Kansas Ice and Storage. He was also one of the first trustees of St. John's Military Academy and was the one who suggested a bond issue for the establishment of the Salina Country Club.

Lee® Jeans is a division of VF Corporation. (NYSE: VFC). Now headquartered in Merriam, Kansas, Lee manufactures and markets brand denim, casual pants, shirts, fleece and knit apparel. A brand committed to the community, Lee Jeans founded Lee National Denim Day®, one of the nation's largest single-day fundraisers for breast cancer. VF Corporation is a leader in branded lifestyle apparel including jeans wear, outdoor products, image apparel and sportswear. Its principal brands include Wrangler, Lee Riders, Rustler, The North Face, Vans, Reef, Napapijri, Kipling, Nautica, John Varvatos, JanSport, Eastpak, Eagle Creek, Lee Sport and Red Kap.

The historic H.D. Lee Mercantile building still stands two blocks northwest of the Smoky Hill River on North Santa Fe Avenue in downtown Salina. Adaptive reuse plans have been prepared for the building converting it to mixed-residential loft condominiums.

*\*Historic H. D. Lee documentation courtesy Lee® Jeans, Salina Public Library, and Smoky Hill Museum. Salina Downtown also acknowledges the contributions of Andy Anderson, Anderson Leather Shop, Al Mattson, Al Schwartz and countless other local historians.*

**MILITARY AIR BASE**

Source: Wikipedia

In 1943, the U.S. Army established Smoky Hill Army Airfield southwest of the city. The installation served as a base for strategic bomber units throughout World War II. Renamed Smoky Hill Air Force Base in 1948, the base closed the following year only to be reopened in 1951 as Schilling Air Force Base, part of Strategic Air Command. The re-opening of the base triggered an economic boom in Salina, causing the city's population to increase by nearly two-thirds during the 1950s. The U.S. Department of Defense closed the base permanently in 1965, but the city of Salina subsequently acquired it and converted it into Salina Municipal Airport and an industrial park. This led to substantial industrial development, attracting firms such as Beechcraft (later Beechcraft Hawker), Tony's Pizza (a Schwann's Food Company brand) and made manufacturing a primary driver of the local economy. In the decades since, Salina has continued to be the commercial hub of north-central Kansas, serving as a regional center for trade, transportation, and industry.



American Bison



The Grower Mill  
Image Courtesy of Smoky Hill Museum



Clafin Hall in Oakdale Park

**PRE-SETTLEMENT**

Smoky Hill River Valley serves as hunting grounds for nomadic native american tribes including the Kansas, Kiowa, Arapaho, and Osage.

**1830'S**

First European American settlement in the Kansas region

**1854**

Kansas incorporated as an official Territory of the U.S. and opened for settlement

**1857**

Battle of Indian Rock Peaceful Pottawattamie defeat warring Cheyenne, securing the Salina area for settlement

**1858**

Salina Founded by Salina Town Company led by W.A. Phillips

First Free Ferry across the Smoky Hill River established in Salina at Iron Street crossing

**1858-59**

Pikes Peak Gold Rush Gold discovery with Smoky Hill Trail serving as the fastest route to Colorado Gold Fields

**1861**

Kansas admitted to the Union as 34th State

Phillips Saw and Grist Mill established as the first small mill on the banks of the Smoky Hill River

**1865**

Butterfield Overland Dispatch stagecoach service on Smoky Hill Trail

**1867**

Comanche, Kiowa, Sioux and Arapaho sign treaty to allow western railroad along the Smoky Hill River

Kansas Pacific Railroad arrives as first rail service to Salina

Grower Mill established as the first large mill, known as the Upper Mill, on the Smoky Hill River south of Indian Rock Park

**1870**

Salina incorporated as a Town

**1872-74**

Cattle arrive in Salina as the western railhead for cattle drives from Texas and the west.

**1880-81**

Salina develops as an industrial area with flour mills, carriage and wagon factory and farm implement works

Oakdale Park (45 ac) is purchased by Saline County to serve as a public park

Union Pacific pruchases Kansas Pacific Railroad

**1889**

H.R. Lee Mercantile in Salina, later to become famous provider of Lee Jeans

**1890'S**

Three additional railroads are added to the Union Pacific including the: Santa Fe, Missouri Pacific, and Rock Island Railroads

**1940**

Construction starts on Kannopolis Lake 65 miles upstream of Salina on the Smoky Hill River

**1941**

Smoky Hill River Flood devastates Salina

Fire destroys Clafin Hall in Oakdale Park

**1942-48**

Smoky Hill Army Airfield established as a strategic bomber base in Salina during WWII era

Salina is ranked fourth in U.S. flour production

Kannopolis Lake construction is completed upstream on the Smoky Hill River to provide flood control, water supply, water quality and recreation

**1930**

Salina is ranked as the fifth largest milling center in in the world

**1938**

Smoky Hill River Flood devastates Salina

Federal Flood Control Act of 1938 authorizes Kannopolis Lake as flood control facility

**1915**

Smoky Hill River Flood devastates Salina

**1917**

Bond Election approves the purchase of 80 acres of new park land, to become Kenwood Park

**1901-06**

Clafin Hall is built in Oakdale Park to host events, most notably the Chautauqua Assembly, first held in Salina in 1906

**1903**

Smoky Hill River Flood devastates Salina

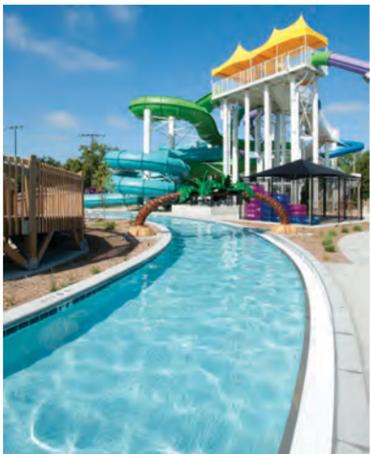




The H.D. Lee Mercantile



Salina Regional Health Center



Kenwood Cove Aquatic Park

**1951**  
Smoky Hill AFB reopens as Schilling AFB, increasing Salina's population by 2/3rds in the 1950's

Smoky Hill River Flood devastates Salina

**1957-61**  
Construction of the Smoky Hill River flood control in Salina including the Diversion By-pass Channel and levee system

**1960'S**  
Federal Interstate Commerce Commission changes freight rates for flour, in favor of rough grains, causing mills to depart Salina for population centers where bread was made

**1965**  
Schilling AFB is closed and decommissioned, to be acquired subsequently as the Salina Municipal Airport and Industrial Park

**1973**  
Salina Community Theatre Building is dedicated in 1973 adjacent to Founder's Park to provide a permanent home for the citizen theater group

Salina Family YMCA completes new facility adjacent to the Smoky Hill River and moves from Iron Street location

**1974**  
H. D. Lee Mercantile closes in Salina

**1978**  
Old Smoky Hill River Channel Study by Wilson & Company is commissioned by the City of Salina

**1986**  
"Goals for Salina" comprehensive community goal setting is conducted by City of Salina, Chamber of Commerce and several thousand citizens with unanimous consensus that the Number 1 Goal was the beautification of the Smoky Hill River that runs through downtown.

**1988**  
Smoky Hill River Development Committee explores river channel improvements under City Manager Dennis Kissinger and Mayor Sydney Soderburg

**1989**  
Salina is awarded with designation as an All-American City

Salina Municipal Water Plant extends intake piping to the Main Channel of the Smoky Hill River, no longer requiring water intake from the Old Channel

**1991**  
Smoky Hill River Development Committee explores river channel improvements under City Manager Dennis Kissinger and Mayor Steve Ryan

**2006**  
Saline County Exposition Center proposed relocation funding rejected by voters

Salina Shared Vision and Strategic Plan adopted by City Commission with 6 Goals and Actions related to the Smoky Hill River

**2007**  
Friends of the River hold first organizational meeting to discuss potential river renewal effort

**2008**  
Salina Regional Health Center expands South Santa Fe Campus in downtown with six-story hospital addition two blocks from the Smoky Hill River and acquires additional land for potential future expansion after closing the former campus on North Pennsylvania Avenue

Salina Voters approve the \$12M Kenwood Cove Municipal Water Park in Kenwood Park

Smoky Hill River Trail Master Plan routing and feasibility prepared by Bucher Willis Ratliff

Salina City Commission authorizes Friends of the River to conduct Phase 1 Public Outreach

**2009**  
Friends of the River Foundation is incorporated as a 501c3 Non-profit organization and conducts Phase 1 Community Outreach

Construction begins on the \$12M Kenwood Cove Municipal Water Park in Kenwood Park

City of Salina Draft Comprehensive Plan includes Actions addressing the Smoky Hill River

**2010**  
Phase 2 Smoky Hill River Renewal Master Plan is approved by the Salina City Commission and adopted as a component of the Comprehensive Plan.

Construction completion on the \$12M Kenwood Cove Municipal Water Park in Kenwood Park

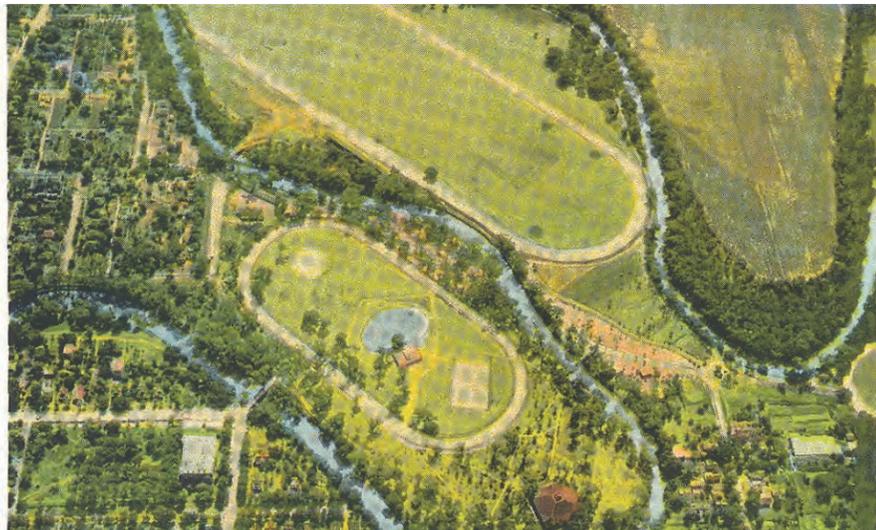
1950      1960      1970      1980      1990      2000 - 2005      2006      2007      2008      2009      2010

### PARKS AND RECREATION

Sources: *As We Were, at Work and Play, Pictorial History of Saline County, Vol. II, Saline County Historical Society, 1989; Images of America - Saline 1958 - 2008*

In 1881 Oakdale Park (45 ac) was purchased by Saline County to serve as a public park on the east side of the river. Situated on the interior of a large looping meander of the river, Oakdale Park complemented City Park, located on the west side of the river, between East Mulberry, East Walnut Street, Second and Third Streets. The two parks were connected by the Mulberry Street bridge.

Early Oakdale Park included fountains, floral gardens and a shady riverside forest canopy. It also featured a half-mile race track with spectator stands for horse racing, bicycling and later, early auto racing. In 1901 Claflin Hall was built in Oakdale Park to host events, most notably the annual Chautauqua Assembly, first held in Salina in 1906. A picture postcard of the day stated, "Years ago Nature made manifest her kindly interest in us by fondly placing her arms (the Smoky Hill River) about a quiet little nook, now known throughout the West as picturesque Oakdale Park, the home of Salina's annual Chautauqua Assembly, with its auditorium conveniently arranged to seat 3,200 spectators". The Chautauqua movement began in 1874 in New York State and soon grew to national prominence with an educational focus featuring music, lectures, populist political oration and non-denominational religious expression, in attractive semi-rural outdoor settings.



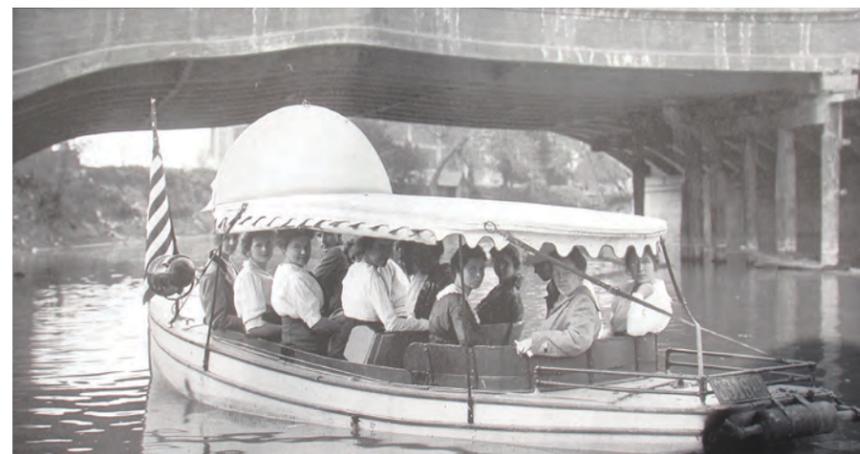
The popularity of the Chautauqua movement can be attributed in part to the social and geographic isolation of American farming and ranching communities. People in such areas would naturally be hungry for education, culture and entertainment, and the Chautauqua Movement was a timely response to that need in the late 19th century and early 20th century. However, by the turn of the century, other entertainment and

educational opportunities, such as radio and movies, began to arrive in American towns to compete with Chautauqua lectures. With the advent of television and the automobile, people could now watch or travel to cultural events previously available only in urban areas, and the Chautauqua Movement lost popularity.

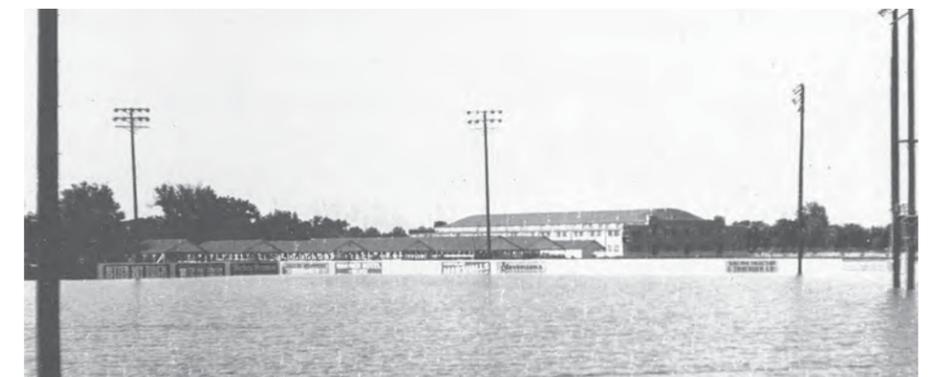


For many years, Oakdale Park was home to the municipal swimming pool built in 1925, featuring diving platforms, slippery slides, a sand beach and other amenities. Later the municipal pool was replaced by an upgraded competitive pool facility in nearby Kenwood Park, which in turn, was replaced in 2009 by the voter approved \$12 million Kenwood Cove Water Park, also located in Kenwood Park.

Since 1977, Oakdale Park has hosted the nationally acclaimed Smoky Hill River Festival, a project of the Salina Arts and Humanities Commission. This four day festival offers a wide variety of activities for visitors to enjoy and features over 150 juried artists and craftsmen, a children's area, unusual foods, and an incredible variety of musical groups and styles in a wide variety of venues. With an attendance of 75,000 each year, it is one of the largest fine arts festivals of its kind in the nation and the largest community event of the year in Salina.



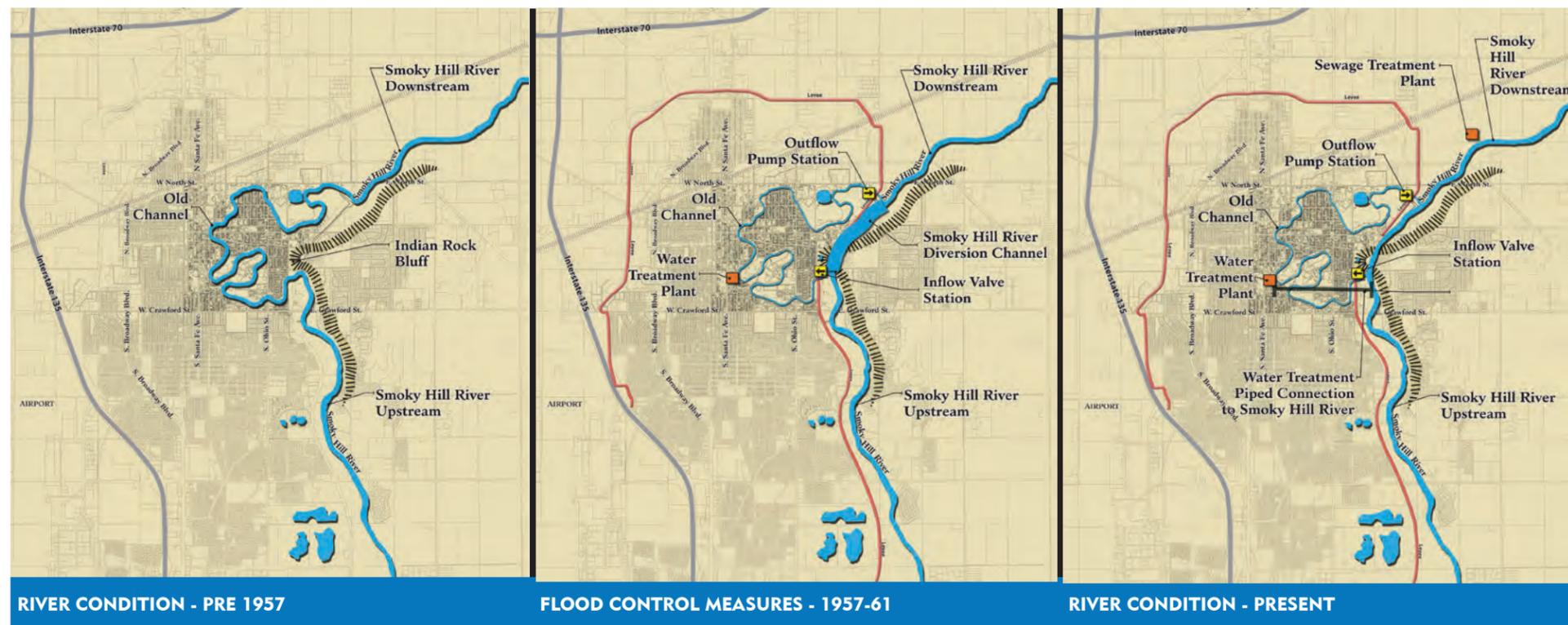
In a 1917 Bond Election voters approved the purchase of 80 acres of new park land, to become Kenwood Park. Located immediately upstream and east of Oakdale Park, in the complimentary loop of the river's S-curve through Salina, Kenwood Park would become home to the Saline County Agricultural Exposition and Tri-River Fair grounds. Tri-River Stadium, was the baseball home to the Salina Millers of the Western Association League in the 1930s and the Salina Bluejays from 1946 to 1952. In 1978, the stadium was changed to a rodeo arena when Lower Indian Rock Park (now Bill Burke Park) athletic complex was built. Agricultural Hall, a 35,000 square foot agricultural exposition and meeting facility was built in 1930 and opened hosting the Mid-Kansas Agricultural Livestock and Horse Show.



Currently, Kenwood Park is the site of the City's Bicentennial Center arena and convention facility, the Salina Municipal Pool (closed in 2009), and the Kenwood Cove Aquatic Park (opened in 2010). County operated facilities include the Tri-Rivers Stadium rodeo arena, the Saline County Expo Center, including Agricultural Hall, 4-H Building, Kenwood Hall and several livestock buildings, two (2) large picnic shelters and an antique steam locomotive in the southwest corner of the park. Kenwood Park is also the site of the Tri-Rivers Fair.



Major floods devastated Salina in 1903, 1927, 1938 and 1951



## A HISTORY OF FLOODING

### RIVER DIVERSION AND LEVEE IMPROVEMENTS

Prior to 1957, the Smoky Hill River flowed through Salina along the course of the Old Smoky Hill River Channel (Fig. 1.1), subjecting downtown and much of the City to seasonal flooding. Major floods devastated Salina in 1903, 1927, 1938 and 1951. To prevent future flooding, flood control measures consisting of a levee system and river channel diversion, bypassing the downtown area, were constructed from 1957 to 1961. The Old River Channel was the source of water for the City’s water treatment plant on S. 5th Street, so intake and outflow valves were provided through the levee to allow water to continue to flow through the Old River Channel, maintaining access to the City’s drinking water supply. Due to limited Old River Channel flows in periods of extreme drought, a piped connection from the Main Channel of the River to the Water Treatment Plant was built in the late 1980’s to improve water source reliability.

**FIGURE 1.1**

### Flood Control Improvements

Flood Control Improvements constructed from 1957-1961 by-passed the Old Channel with the construction of the Smoky Hill Diversion Channel

## RIVER DETERIORATION

Upstream river flows of the Smoky Hill River into the Old Channel are limited by the levee intake valve and other obstructions to flow, which reduces the normal seasonal flushing flows that maintain a healthy river system. Limited flow volumes through the Old Channel mean shallower, slower flow, which causes suspended sediment in the water to be deposited in the Old Channel bottom. These sediments contain nutrients that can feed algae in the water. Shallower flows are also more susceptible to warming from the sun and storm water run-off from heated pavement, which further promotes algae growth. Additionally, the Old Channel receives urban storm water run-off from approximately five (5) square miles of the City, including downtown Salina. That run-off washes City street debris, oils and other accumulated material into the Old Channel. Finally, over the past 48 years the Old Channel has slipped from the featured focus of the community, and has suffered as community resources have been shifted to other priorities.

The City and Wright Water Engineers (WWE) worked with Kaw Valley Engineering, a Salina testing laboratory, to coordinate the collection of channel sediment samples, and the follow-up testing of these samples. Testing results indicate there will be no special disposal requirements for the sediments. The Master Plan includes technical information that defines the significance of sedimentation, proposes potential methods for sediment control, including initial sketches, summaries of advantages and disadvantages of various options for sediment control and management, and conceptual cost projections.



Image Courtesy of Smoky Hill Museum



Reduced flow volumes in the Old Channel, due to the Diversion By-pass Channel, have created sediment accumulation in the Old Channel. Related increases in the nutrients, algae and urban storm run-off have contributed to Old Channel deterioration.

**REGIONAL CONTEXT**

**THE SMOKY HILL RIVER WATERSHED**

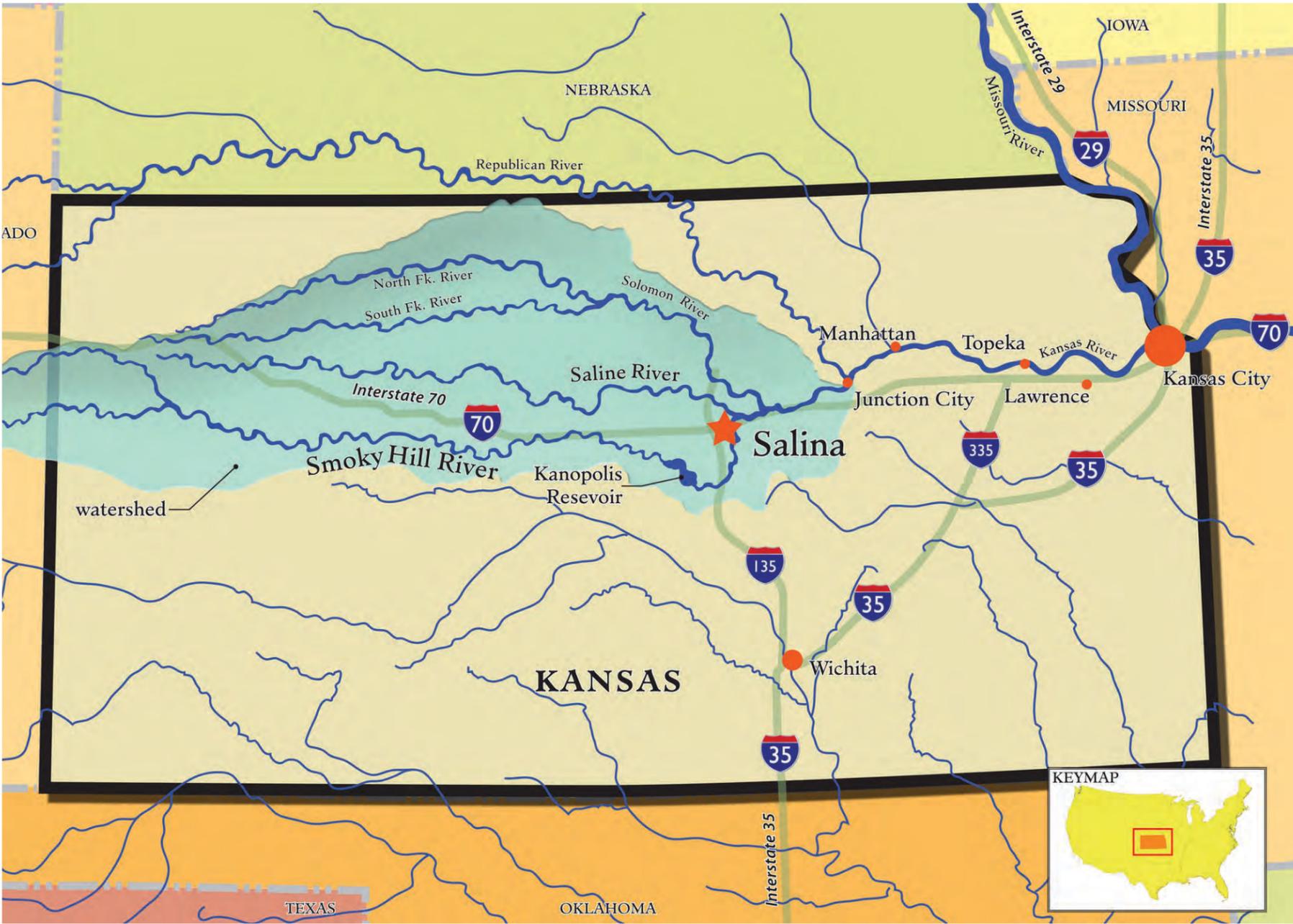
Source: Wikipedia

The Smoky Hill River is a 560-mile river in the central Great Plains of North America, running through the states of Colorado and Kansas (Fig. 1.2). The Smoky Hill River gets its name from the Smoky Hills region of north-central Kansas through which it flows. The Smoky Hill River originates in the High Plains of eastern Colorado and flows east. Both the main course of the river and its north fork rise in northern Cheyenne County, Colorado. The two streams converge roughly 5 miles west of Russell Springs in Logan County, Kansas.

From there, the river continues generally eastward through the Smoky Hills region. The Saline River, one of the Smoky Hill's two main tributaries, joins the river in eastern Saline County, approximately seven (7) miles downstream of Salina. The other major tributary, the Solomon River, joins the Smoky Hill in western Dickinson County, approximately 17 miles downstream of Salina. The Smoky Hill joins the Republican River at Junction City, Kansas to form the Kansas River.

The Smoky Hill River directly drains an area of 8,810 square miles. The combined Smoky Hill-Saline Basin drains 12,229 square miles. The entire Smoky Hill drainage basin covers approximately 20,000 square miles (52,000 km<sup>2</sup>), including most of north-central and northwestern Kansas. Via the Kansas and Missouri Rivers, the Smoky Hill is part of the Mississippi River watershed. The Smoky Hill River feeds two reservoirs: Cedar Bluff Reservoir far upstream of Salina, in Trego County and Kanopolis Lake, approximately 65 miles upstream of Salina, in Ellsworth County.

Salina is the largest city along the Smoky Hill River. Besides Junction City, other Kansas towns along the river are Ellsworth, Marquette, Lindsborg, Kansas up stream of Salina, and Abilene downstream. The earliest known reference to the river was on a 1732 map by French cartographer d'Anville who labeled it the River of the Padouca (Comanche). A 1758 map referred to it as the Padoucas River. An early reference to the river as the Smoky Hill was by American explorer Zebulon Pike during his 1806 expedition to visit the Pawnee. The Kansas Nebraska Act of 1854 established Kansas Territory, which included the entire length of the Smoky Hill River.



**FIGURE 1.2**  
**The Smoky Hill River Watershed**  
The Smoky Hill River runs for 560 miles through the Central Great Plains of Colorado and Kansas

## LOCAL CONTEXT

### THE CITY OF SALINA

Source: Wikipedia

Salina is a city in, and the county seat of, Saline County, Kansas. It had a population of 45,679 as of the 2000 United States Census. Located in one of the world’s largest wheat-producing areas, Salina is a regional trade center for north-central Kansas. Salina is located at 38°49’27”N 97°36’26”W 38.82417°N 97.60722°W at an elevation of 1,224 feet. It lies in the Smoky Hills region of the Great Plains approximately 4 miles west-southwest of the confluence of the Saline and Smoky Hill Rivers. The Smoky Hill River runs north then northeast through the eastern part of the city; the Saline River flows southeast immediately north of the city. Mulberry Creek, a tributary of the Saline, flows northeast through the far northern part of the city. Located in north-central Kansas at the intersection of Interstate 70 and Interstate 135, Salina is approximately 81 miles north of Wichita and 164 miles west of Kansas City. Salina is the largest city in the vicinity of the geographic center of the contiguous 48 States, approximately 90 miles to the northwest of Salina, near Lebanon, Kansas.

### CLIMATE

Lying in the transition zone between North America’s humid subtropical climate and humid continental climate, Salina experiences hot, humid summers and cold, dry winters (Fig. 1.3). The average temperature in Salina is 55 °F (13 °C), and the average relative humidity is 64%. Temperatures drop below 32 °F (0 °C) an average of 135 days per year. On average, Salina experiences 52 rainy days per year. Precipitation averages 32.3 inches (820 mm) per year, and snowfall averages 18.4 inches (467 mm) per year. On average, January is the coolest month, July is the warmest month, and May is the wettest month. The hottest temperature recorded in Salina was 117 °F (47 °C) in 1936; the coldest temperature recorded was –28 °F (–33 °C) in 1913. Over the course of a year, temperatures range from an average low of 19 °F (–7 °C) in January to an average high of 93 °F (34 °C) in July.

Salina is also prone to severe thunderstorms, which produce damaging winds, hail, and tornadoes. On September 25, 1973 a tornado measuring F3 passed through the southeast part of town injuring 6 people, destroying 2 houses and the Sundowner East trailer park. On June 11, 2008 another EF3 tornado passed on the south side of the town severely damaging several buildings.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
<b>Record high</b> °F (°C)	78 (25.6)	84 (28.9)	96 (35.6)	105 (40.6)	106 (41.1)	114 (45.6)	116 (46.7)	117 (47.2)	110 (43.3)	100 (37.8)	89 (31.7)	81 (27.2)	117 (47.2)
<b>Average high</b> °F (°C)	39 (3.9)	45 (7.2)	56 (13.3)	66 (18.9)	76 (24.4)	88 (31.1)	93 (33.9)	91 (32.8)	82 (27.8)	70 (21.1)	54 (12.2)	42 (5.6)	67 (19.4)
<b>Daily mean</b> °F (°C)	29 (-1.7)	35 (1.7)	45 (7.2)	55 (12.8)	65 (18.3)	76 (24.4)	81 (27.2)	79 (26.1)	70 (21.1)	58 (14.4)	43 (6.1)	33 (0.6)	56 (13.3)
<b>Average low</b> °F (°C)	19 (-7.2)	24 (-4.4)	34 (1.1)	43 (6.1)	53 (11.7)	64 (17.8)	69 (20.6)	68 (20)	58 (14.4)	46 (7.8)	33 (0.6)	23 (-5)	44 (6.7)
<b>Record low</b> °F (°C)	-28 (-33.3)	-27 (-32.8)	-11 (23.9)	5 (-15)	19 (-7.2)	38 (3.3)	46 (7.8)	42 (5.6)	28 (-2.2)	14 (-10)	-5 (20.6)	-24 (-31.1)	-28 (-33.3)
<b>Precipitation</b> inches (mm)	0.80 (20.3)	1.06 (26.9)	2.62 (66.5)	3.06 (77.7)	5.11 (129.8)	4.15 (105.4)	4.32 (109.7)	3.49 (88.6)	2.50 (63.5)	2.55 (64.8)	1.59 (40.4)	0.94 (23.9)	32.19 (817.6)
<b>Snowfall</b> inches (cm)	6.7 (17)	4.3 (10.9)	2.4 (6.1)	0.3 (0.8)		0 (0)	0 (0)	0 (0)	0 (0)	0.3 (0.8)	1.3 (3.3)	3.2 (8.1)	18.4 (46.7)

Source: The Weather Channel, National Weather Service

**FIGURE 1.3**  
Climate Data for Salina, Kansas

### POPULATION / DEMOGRAPHICS

As of the U.S. Census in 2000, there were 45,679 people, 18,523 households, and 11,873 families residing in the city. The population density was 2,009.6 people per square mile. There were 19,599 housing units at an average density of 862.2/sq mi. The racial makeup of the city was 87.76% White, 3.57% Black or African American, 0.56% Native American, 1.96% Asian, 0.05% Pacific Islander, 3.78% from other races, and 2.32% from two or more races. Hispanic or Latino of any race were 6.71% of the population. There were 18,523 households out of which 31.5% had children under the age of 18 living with them, 49.8% were married couples living together, 10.5% had a female householder with no husband present, and 35.9% were non-families. 30.1% of all households were made up of individuals and 11.3% had someone living alone who was 65 years of age or older.

The average household size was 2.39 and the average family size was 2.98. In the city the population was spread out with 25.9% under the age of 18, 10.0% from 18 to 24, 28.7% from 25 to 44, 21.1% from 45 to 64, and 14.3% who were 65 years of age or older. The median age was 35 years. For every 100 females there were 95.8 males. For every 100 females age 18 and over, there were 92.8 males. The median income for a household in the city was \$36,066, and the median income for a family was \$45,433. Males had a median income of \$31,250 versus \$21,944 for females. The per capita income for the city was \$18,593. About 6.7% of families and 9.6% of the population were below the poverty line, including 10.6% of those under age 18 and 9.2% of those age 65 or over. Salina is the principal city of the Salina Micropolitan Statistical Area, which includes all of Saline and Ottawa counties.

### ECONOMY

Manufacturing is the predominant industry in Salina. Agriculture transportation is also a major industry, and Salina’s grain elevators are visible from miles away. This agrarian emphasis is even reflected in a local Catholic Church, Sacred Heart Cathedral, which is built in white cylindrical shapes intriguingly like grain silos. Salina was ranked fifth in the world in flour production in the early to mid-20th century. Milling continued as a principal industry until the 1960s when the Interstate Commerce Commission transport regulations were changed to favor milling closer to population centers where the bread was made. However, Salina has several other important employers. The city also has a strong manufacturing base. Tony’s Pizza, a Schwan Food Company brand, has operations in Salina. Tony’s makes consumer retail frozen pizzas as well as food intended for school cafeterias and other institutions. Additionally, Philips Lighting, Exide Battery, Great Plains Manufacturing (farm equipment), and El Dorado National (commercial bus manufacturer) all have a presence in the community.

### GOVERNMENT

Since 1921, Salina has had a commission-manager form of government. The city commission consists of five members elected at large, one of whom the commission annually selects to serve as mayor. Commission candidates who receive the most and second most votes are elected for a four-year term; the candidate who receives the third most votes is elected for a two-year term. The commission sets policy and appoints the city manager. The city manager is the city’s chief executive, responsible for administering the city government and appointing all city employees.

### EDUCATION

#### Colleges and universities

- Brown Mackie College
- Kansas State University - Salina
- Kansas Wesleyan University
- Marymount College(now closed)
- Salina Area Technical College

#### Primary and secondary education

Salina Public Schools, (Unified School District 305) operates twelve schools in Salina, including eight (8) elementary, two (2) middle schools and two (2) high schools.

#### There are also four private schools in Salina:

- St. John’s Military School (6-12), male only
- St. Mary’s Grade School (Pre-K-6), Catholic school
- Salina Christian Academy (Pre-K-10)
- Sacred Heart Junior-Senior High School (7-12), Catholic school

**CULTURE**

**Religion**

56% of Salina residents are affiliated with a religious congregation. The majority are Christian, and the Roman Catholic Church, United Methodist Church, and Evangelical Lutheran Church in America are the three largest denominations in the city. Salina has 90 churches and is the seat of the Roman Catholic Diocese of Salina, Episcopal Diocese of Western Kansas, and the Presbytery of Northern Kansas.

**Sports**

- Salina formerly hosted the Kansas Cagerz and Salina Rattlers basketball teams.
- Salina hosts the National Junior College Athletic Association Division I women’s basketball national tournament each season in the Bicentennial Center.
- Salina hosted the Women’s Big 8 basketball tournament at the Bicentennial Center. When the Big 8 became the Big 12, the tournament was moved to Kansas City, Missouri.
- Salina hosts the Kansas State High School Activities Association (KSHSAA) Class 4A State Wrestling Tournament as well as the Class 3A & 4A Volleyball Tournaments and the Class 4A State Softball Tournament.



Salina hosts the National Junior College Athletic Association Division I women’s basketball national tournament each season in the Bicentennial Center.

- The Cowboy Junkies song “Townes’ Blues” (from the 1992 album Black Eyed Man) describes a trip from Boulde, CO to Houston, TX through Salina, though Canadian lead singer Margo Timmins also pronounces the city’s name like Salinas, CA.
- The invitational supergroup The Book of Knots have a song entitled “Salina” on their sophomore album Trainearer.
- Salina was largely destroyed in Ted Bell’s 2008 novel Tsar, with only a Motel Six hotel, a park, and the surrounding area surviving. It was destroyed by a Russian bomber posing as an Iranian terrorist. The mayor had been assassinated a few days before the explosion.

**Notable natives and residents**

- Mary Ann Bickerdyke, American Civil War nurse
- Joseph L. Bristow, U.S. Senator from Kansas
- Bob Cain, Major League Baseball pitcher
- John W. Carlin, 40th Governor of Kansas
- Kenneth S. Davis, historian
- Marlin Fitzwater, White House Press Secretary
- Luke French, Major League Baseball pitcher
- Steve Fritz, decathlete
- Dwight Frye, actor
- Dean M. Gillespie, U.S. Representative from Colorado
- Bill Graves, 43rd Governor of Kansas
- Herbie Harper, jazz trombonist
- Paul Harvey, radio broadcaster
- Steven Hawley, astronaut
- Guy T. Helvering, U.S. Representative from Kansas
- Terry Kirkman, singer/songwriter
- Ryan Kohlmeier, Major League Baseball pitcher
- Gene Mauch, Major League Baseball infielder, manager
- Pat Meares, Major League Baseball shortstop
- George Murdock, actor
- Terence Newman, National Football League cornerback
- William A. Phillips, city founder, U.S. Representative from Kansas
- Matthew K. Rose, railroad executive
- Brent Venables, University of Oklahoma football coach
- Gene Wojciechowski, sports journalist, author



Salina is home of Kansas Wesleyan University

**Salina in popular culture**

- Scenes in the 1955 Academy Award-winning movie Picnic, starring William Holden and Kim Novak, were filmed in Salina, featuring the Tri-River Fair, Western Star Mill and Dam, and Smoky Hill River scenes in Oakdale Park.
- The 1980 teen comedy film Up the Academy was filmed entirely in Salina, mostly on the campus of St. John’s Military School.
- Millie Dillmount, the fictional main character in the musical Thoroughly Modern Millie, is from Salina. She leaves home for New York City, determined never to return, as depicted in the opening number, “Not for the Life of Me.”
- In Alfred Hitchcock’s 1958 film Vertigo, the character of Judy Barton, played by Kim Novak, comes from Salina.
- Bluegrass band The Avett Brothers have a song titled “Salina.”
- In Shawn Colvin’s song, “Wichita Skyline” (from the 1996 album A Few Small Repairs), she sings “As far as Salina I can get that good station from LaRue / I’m searching the dial while I’m scanning the sky for a patch of blue / And I watch the black clouds roll in, chasing me back again / Back to the flat fine line, the Wichita skyline.” However, she mispronounces the city as sa-LEE-na, as in Salinas, CA. (LaRue is in Texas.)

**THE PLANNING PROCESS**  
**THE CHALLENGE**

**Recent Prior Planning Initiatives**

The desire to restore the Old Channel of the Smoky Hill River has been a long term and on-going theme in Salina. Over the past thirty years there have been significant efforts to explore the issues and efforts that would be necessary to re-establish flows in the old channel and reposition the river as the featured community resource it had once been in Salina. Despite the technical challenges that those efforts revealed, the local governmental administration, agencies and citizens of Salina remained faithful to their commitment to a river renewal by keeping it at the forefront of long-range community planning goals. Examples of those City-sponsored efforts include:

**1978** - Old Smoky Hill River Channel Study by Wilson & Company is commissioned by the City of Salina

**1986** - "Goals for Salina" comprehensive community goal setting is conducted by City of Salina, Chamber of Commerce and several thousand citizens with unanimous consensus that the Number 1 Goal was the beautification of the Smoky Hill River that runs through downtown.

**1988** - Smoky Hill River Development Committee explores river channel improvements under City Manager Dennis Kissinger and Mayor Sydney Soderberg

**1991** - Smoky Hill River Development Committee explores river channel improvements under City Manager Dennis Kissinger and Mayor Steve Ryan

**2006** - Salina Shared Vision and Strategic Plan adopted by City Commission with six (6) Goals and Actions related to the Smoky Hill River

**2008** - Smoky Hill River Trail Master Plan routing and feasibility prepared by Bucher Willis Ratliff, Inc.

**2009** - City of Salina Draft Comprehensive Plan includes six (6) recommended Implementation Actions specifically addressing the Smoky Hill River

Those on-going planning initiatives and technical studies identified several recurring challenges that for a number of reasons were insurmountable at the time. The primary challenges included:

- **Public Awareness and Support** – Public education to build public awareness and city-wide support for costly capital river improvements and on-going maintenance of improvements;
- **Physical Water Supply** – Water delivery to the old channel is controlled by flood protection facilities constructed by the Corps of Engineers, including the levee inlet gate sizing and Diversion By-pass keyway weir elevation. During recurring periods of extended drought, the flows in the entire Smoky Hill River system are diminished, and in extreme events the Old Channel is dry.
- **Legal Water Supply** – Water rights for flows in the Old Channel have been transferred to the Main Channel and Diversion By-pass since the relocation of the City water plant intake from the Old Channel to the Main Channel in 1988.
- **Sediment** - Accumulated sediment removal and disposal, construction of new facilities to prevent new sediment from entering the Old Channel, on-going maintenance responsibilities, and funding.

the deteriorating state of the old river channel.

Their objective was to discuss the current condition of the river. Significant concerns included street litter, dumped items, ice storm debris, stagnant water and silt build-up. The core group of six (6), identified a number of possible benefits of bringing back the river.

- Improve storm water control capacity
- Potential decrease of flood plain size
- Increase ground water recharge
- Aesthetic and safety enhancement to proposed trail system
- Return of recreational activities to downtown

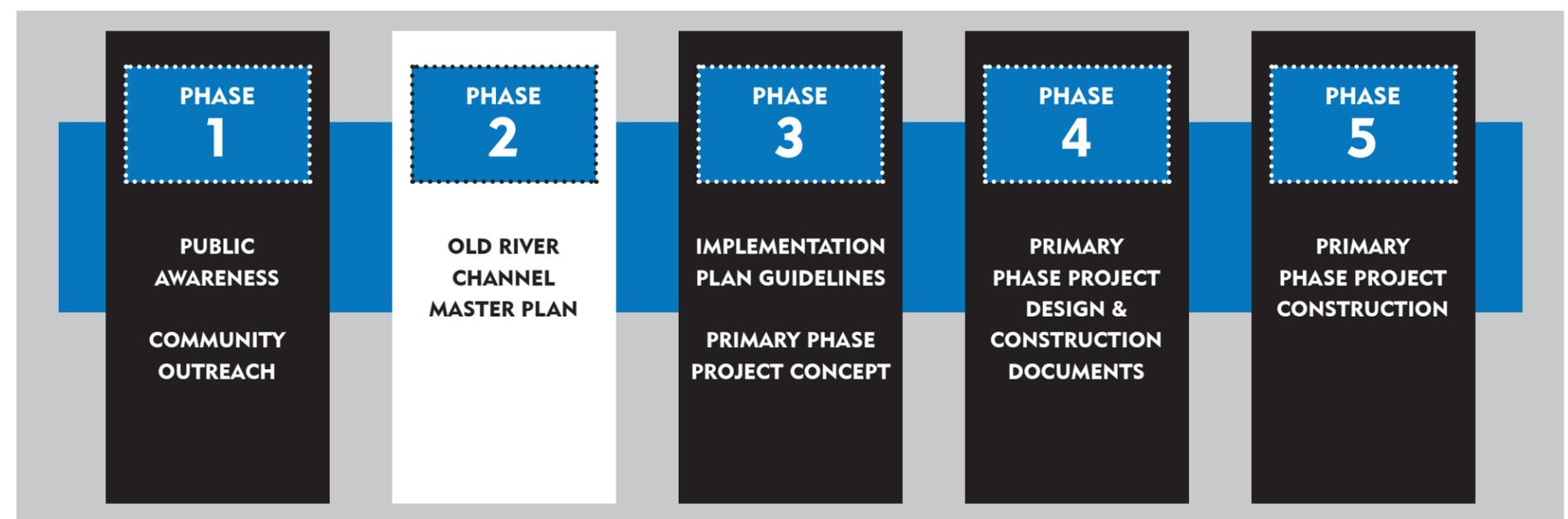
In seeking guidance and assistance to help realize those opportunities, the Friends of the River researched and visited similar river projects. They identified Design Studios West, Inc. (DSW) and Wright Water Engineers, Inc. (WWE), both of Denver, Colorado, to assist them in organizing an approach that could result in their river renewal vision becoming a reality. DSW and WWE had collaborated on similar, nationally-recognized, award-winning projects in Estes Park, Colorado; Pueblo, Colorado; Sioux Falls, South Dakota; and elsewhere.

The Friends of the River then engaged DSW and WWE, entirely with private donations, to identify and initiate a long-range process that would lead to construction of an initial phase of river improvements.

**A GRASSROOTS RESPONSE TO THE CHALLENGE**

**The Friends of the River**

On September 23, 2007, the founders of what would later become the Friends of the River Foundation met to discuss common concerns about



**FIGURE 1.4**  
**A Five (5) Phase Process** - to Construct the Primary Phase Project

A vision statement was crafted by the Friends of the River stating, “The Smoky Hill River is a site of community engagement through residential and commercial development, historical understanding, ecological awareness, educational programming, recreational activities, and public art”. Through this vision, the Friends of the River identified future opportunities including:

- Commercial and residential development around the river
- Historical and educational programming
- Ecological awareness
- Recreational activities
- Public art
- Community involvement

**A FIVE (5) PHASE PROCESS**



In response to the challenges identified in previous Smoky Hill River efforts, and considering the grassroots interest and vision that had initiated the river renewal effort, a five (5) phase planning and design process was developed (Fig. 1.4) that is:

- Participatory and community-driven rather than city or consultant-driven. The process will be based on sincere community engagement that embraced participant input, reflecting community values in its goals, objectives and proposed improvements priorities.
- Demonstrative of the community support and commitment to proposed planning, design and implementation priorities, to reassure public administration and elected officials that the project is well-supported by constituents;
- Incremental in its approach to allow the consultant team to thoroughly identify and address issues in each phase, and the community to develop a comfortable understanding of the directions defined in each step of the process;
- Educational in explaining the diverse, far reaching, long range considerations and potential benefits offered by the process and investment in the river as a community recreational, ecological, educational and economic resource.
- Economically sound in proposing public / private partnerships in funding of planning and design efforts, and intent for improvements to include public infrastructure investment, in order to attract private development investment.

**PHASE 1**

**Phase 1 - Public Outreach and Discovery**

**Intent:** The intent of Phase One – Public Awareness and Outreach is to inform the greater community of Salina of the relative benefits and opportunities associated with the restoration of riverfronts, in general, and specifically with the potential opportunities and constraints associated with the Smoky Hill River. In addition, the intent is for the Salina City Commission to authorize the Friends of the River Foundation to organize and provide open community meetings that encourage the public to offer their opinions and ideas on how the Smoky Hill River may be better utilized for a variety of public and private improvements.

The intent is not to prepare an official “Master Plan” or other document that obligates the City or other governmental jurisdictions to a defined plan. Rather, the intent is to encourage the public to think about Smoky Hill River as a community asset and to offer their thoughts, ideas, and suggestions on how it may be used and improved in the future.

It is the intent of Phase One to inventory and compile existing and available information regarding the physical, regulatory and planning context of the Old Channel of the Smoky Hill River in order to identify issues, opportunities and constraints associated with the river restoration.

The final intent is to provide, through private contributions, the City Commissioners with a public process that is open and encourages community discussion. Based on these community meetings representatives from the “Friends of the River” shall make a presentation to the City Commissioners for their review and consideration.

**Funding:** The funding for Phase One shall be provided entirely by private donations. The City will provide “in-kind” contributions by dedicating staff time to assist Friends of the River consultants with mapping and technical assistance. The “Friends of the River” is a not for profit, private organization that is dedicated to the conservation of open lands and the restoration of the Old River channel.

**Schedule:** Phase One shall begin in January, 2009 and conclude in August, 2009.

**PHASE 2**

**Phase 2 – Master Plan**

**Intent:** The intent of Phase Two – Old River Channel Master Plan is to identify appropriate planning and design responses to the specific opportunities associated with the restoration and redevelopment of the Old River Channel area of the Smoky Hill River. In addition, the intent is to provide open community meetings that encourage the public to offer their opinions and ideas on how the Master Plan should best address the variety of public and private improvements.

It is intended that a Technical Advisory Committee (TAC), consisting of designated City departmental and other related agency representatives, be established to assist the Consultant as technical advisors to the master planning process. The TAC would meet with the Consultant at critical junctures of the project to provide advisory oversight related to the technical regulations and policies that relate to the Master Planning project area.

It is also intended that a Master Plan Advisory Committee (MAC) be established consisting of representatives of ownership and other stakeholders, the business community and other community leaders. The MAC would provide advisory oversight to the Consultant and TAC, by meeting with the Consultant at critical junctures of the project, to ensure consistency in direction with the community desires expressed in Phase One.

The intent is not to prepare a “Final Construction Design” for the Old River Channel. Rather, the intent is to identify specific improvements and their location, general costs and potential funding sources, recommended phasing, and operations and maintenance policies for future improvements. Those specific improvements would be the subject of future design efforts, not included in Phase Two.

**Funding:** The funding for Phase Two shall be provided by public funds. It is anticipated that sources of public funding could potentially include one or more City agencies, regional, state and federal agencies or grant programs. The City will provide funding for Consultant fees as well as “in-kind” contributions by dedicating staff time to participate in the technical advisory aspect of the Master Plan.

**Schedule:** Phase Two shall begin after completion of Phase One and is anticipated to take approximately eight (8) to ten (10) months.

PHASE  
3

**Phase 3 – Implementation Planning**

**Intent:** The Phase One – Public Awareness and Outreach and Phase Two – Master Plan have both been highly public and open processes that engaged the community and were funded by public and private donations. This remarkable effort reflects the importance of this community-wide project and underlines the necessity to proceed with physical improvements in a thoughtful and purposeful manner that is clear, fair, economically sound, and reflects the goals and objectives of the City Comprehensive Plan and the Smoky Hill River Renewal Master Plan.

While the Master Plan is intended to guide future public and private improvements, specific compliance and regulatory requirements criterion need to be prepared to implement the Master Plan. In general terms, the intent of Phase Three – Implementation Planning is to prepare an “Implementation Strategy” addressing:

- The short-term and long-term legal entity managing and controlling the Riverfront (project) for future public and private improvements,
- The funding and financing entity that administers and manages Riverfront projects,
- Based on information contained in the Master Plan prepare a “Three year Plan of Action” that clearly details an appropriate first-phase of development.
- Additional aspects of Phase Three are intended to include:
  - Creation of special improvement districts;
  - Public and private sector development standards and guidelines;
  - Management, maintenance and operations procedures (MMO), and;
  - Economic (investment, donations, financing and funding).

Prior to entertaining any public or private investment or improvements within the Riverfront (project) Area the Phase Three work element should be completed. It is intended to serve as the legal and financial “Business Plan” used to implement the Master Plan.

**Funding:** Funding for the preparation of Phase Three could be a combination of both public and private donations. Phase Three should be viewed as “Riverfront Implementation” that clearly and cost-effectively encourages public and private investment and enterprise. Elements of Phase Three work products shall be official public documents, such as a

Riverfront Overlay District and Riverfront Planning and Design Guidelines. Other work products will need to be coordinated and determined with private investment and development entities on a case-by-case basis.

**Schedule:** Several elements of Phase Three could proceed very quickly and may, in fact, inform local public officials and Federal and state agencies that the City intends to proceed with the Riverfront Project in a timely and professional manner.

Once a detailed scope of services and schedule have been reviewed, revised and approved the consultant shall submit a detailed fee for professional services based on the final scope and schedule. Members of City Staff will be required to participate in the preparation, management and coordination of Phase Three. Phase Three could be accomplished in several incremental steps. Overall, Phase Three is anticipated to take approximately six (6) to nine (9) months to complete.

PHASE  
4

**Phase 4 – Primary Phase Design Development and Construction Design**

**Intent:** Phase Four is intended to focus on Design Development and Construction Documents for the improvements located in the Primary Project Area. Based on the identification of the location and extent of improvements in Phase Three, it is anticipated that those improvements would include well-coordinated planning and design of both public infrastructure improvements (City) and private development (private developer). Design Development and Construction documents for improvements in the Primary Phase are anticipated to include:

- Site Demolition and Sediment Removal
- Street and Bridge Improvements
- Channel Improvements
- Utilities
- Site Improvements including trails and site features
- Site Lighting and Furnishings
- Landscape and revegetation
- Construction Cost Estimating
- Technical Specifications

**Funding:** A combination of Public and Private funding is envisioned for Phase Four, to be determined based on the extent of project improvements

and project location defined in Phase Three. It is anticipated that those improvements would include both public infrastructure improvements (publicly funded and private development (privately funded)).

**Schedule:** The complexity and extent of improvements in Phase Four and the prescribed development review process will be determined in Phase Three. The design development and construction documents included in Phase Four are currently anticipated to take approximately six (6) to nine (9) months to prepare. Potential environmental and other regulatory agency review and permitting is not currently included within the scheduled time frame.

PHASE  
5

**Phase 5 – Primary Phase Construction**

**Intent:** Phase Five is intended to focus on Construction implementation of the improvements Primary Project Area. Based on the identification of the location and extent of improvements in Phase Three, it is anticipated that those improvements would include both public infrastructure improvements and private development. Construction is anticipated to include:

- Site Demolition and Sediment Removal
- Street and Bridge Improvements
- Channel Improvements
- Utilities
- Site Improvements including trails and site features
- Site Lighting and Furnishings
- Landscape and revegetation

**Funding:** A combination of Public and Private funding is envisioned for the Construction Phase, to be determined based on the extent of project improvements and project location defined in Phase Three. It is anticipated that those improvements would include both public infrastructure improvements (publicly constructed) and private development (privately constructed).

**Schedule:** The complexity and extent of improvements in the Construction Phase and the prescribed development review process will be determined in Phase Three. The construction of improvements is currently anticipated to take approximately twelve (12) months to complete. Potential environmental and other regulatory agency review and permitting is not currently included within the scheduled time frame.

**THE PROJECT TEAM**  
**PHASE 1 – PUBLIC AWARENESS AND OUTREACH**

The Friends of the River-Funded Public Awareness and Outreach was directed by Dr. Brad Stuewe, Chairman of the Friends of the River Foundation, with consultants, Design Studios West, Inc., Planning and Wright Water Engineers, Inc., Engineering (Fig. 1.5).

Gary Hobbie, City of Salina Director of Development Services served as the City Liaison and Representative on the FOR Management Committee throughout the Phase One process, coordinating City administration and professional staff involvement the implementation of Phase One. Prior studies, reports, maps, documents, and reference materials were provided to the FOR team for use as a part of the Phase One process. The FOR team coordinated with City staff through Hobbie, regarding the use and application of all base mapping materials and review of all presentation materials.

A Management Committee was organized to include the Friends of the River Foundation Board of Directors, the City Liaison and Representative the Consultant Team principals. The Management Committee served as project coordinators and primary communication contacts, meeting twice a month via teleconference to gauge project progress and assign action items.

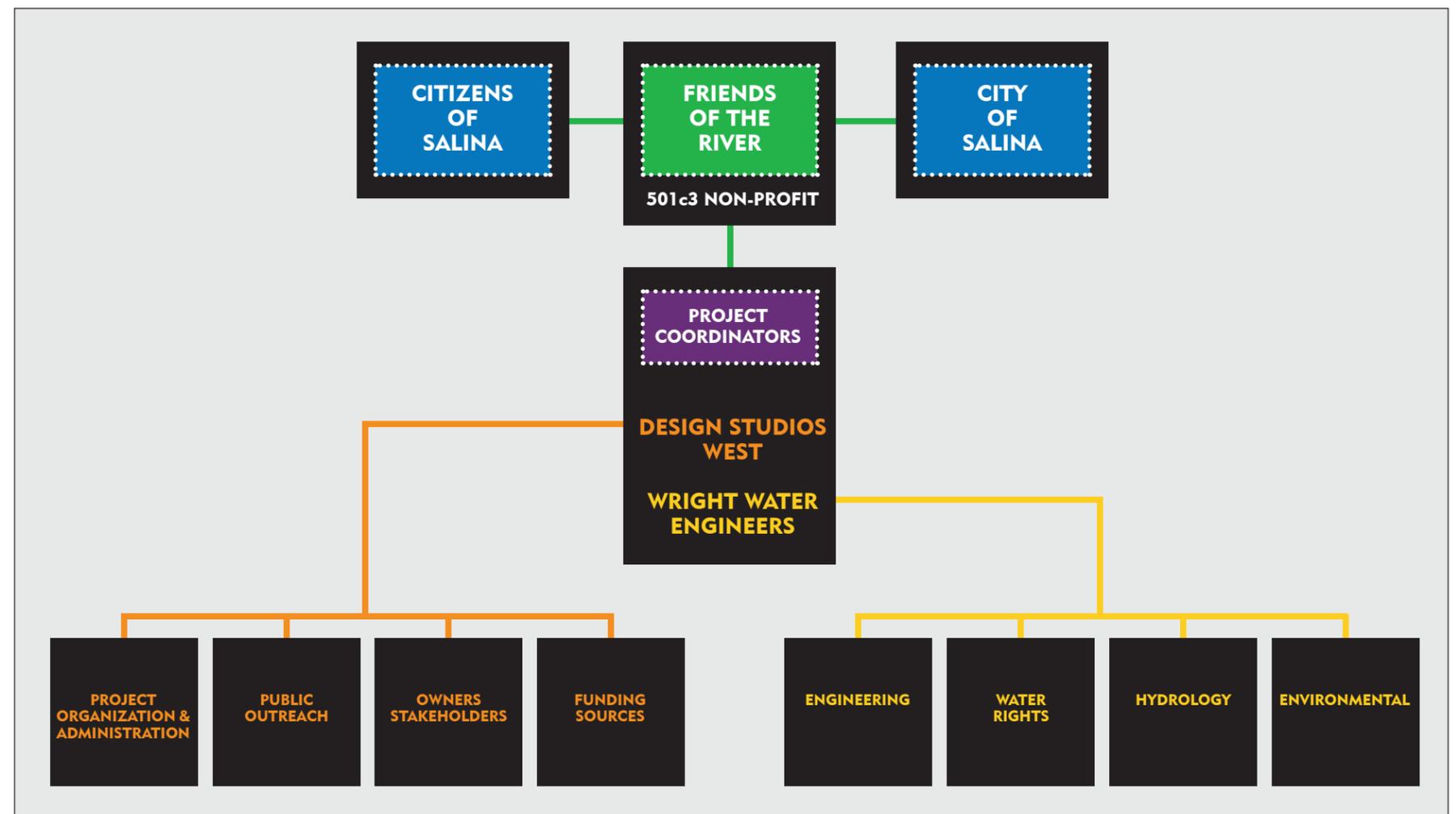


**Friends of the River Founders**  
 (Left to Right) Frank Norton, Mary Anne Weiner, Paula Fried, Brad Stuewe, and Troy Vancil. Not Pictured: Mike Soetaert

Seven (7) Citizen Committees of FOR volunteers were established to provide guidance and the advisory oversight to the DSW Team by meeting at critical milestone junctures of the project, to provide direction regarding community interests, values and desires related to the river renewal. The committees were organized based on interest focus areas and community outreach logistics. The Chairs and Committee members met weekly for over eight (8) months to develop goals and objectives for their respective focus areas, inform the community, solicit input, document comments, and expand the public awareness of the Smoky Hill River Renewal effort.

The FOR volunteer Citizen Committees Chairs included:

- Environmental:** Kristin Gunn, Former Mayor, Chemistry Teacher (retired)
- Recreation and Wellness:** Phil Guries, Salina Family YMCA; Tom Martin, Salina Regional Health Center Foundation
- Education:** Bill Pierson, Science Teacher; Vicki Koepsel, Saline County Planner
- Economic Development:** Steve Ryan, Mortician and Former Mayor; Ted Hauser, Community Housing Development Organization
- Community:** Michael Spicer, Director, Salina Community Theatre; Dr. Paula Fried
- Public Relations:** Phyllis Pickle, Sunflower Bank; Laura Skidmore
- Facilities:** Jay Smutz, Architect



**FIGURE 1.5**  
**Phase 1 Project Team Organization**

**PHASE 2 – MASTER PLAN**

The City-Funded Master Plan was managed at the direction of Martha Tasker, Salina Director of Utilities, as City Staff Coordinator and Project Manager with consultants, Design Studios West, Inc. Master Planning and Wright Water Engineers, Inc. Engineering (Fig. 1.6).

A Core Management Group was comprised of the City Project Manager, MAC and TAC Chairs and the Consultant Team principals, serving as project coordinators and primary communication contacts. The Core Management Group met twice a month via teleconference to gauge project progress and assign action items.

The Master Plan Advisory Committee (MAC) was established consisting of representatives of ownership and other stakeholders, the business community and other community leaders. The MAC provided advisory oversight to the Consultants and TAC, by meeting with the Consultant at the outset of each major phase task, to ensure consistency in direction with the community desires expressed in Phase One.

Members include:

**Master Plan Advisory Committee**

- Chair: Brad Stuewe  
*Chairman of the Board, Friends of the River Foundation*
- Sydney Soderburg  
*Former Mayor, Current Planning Commissioner*
- David Rodine  
*District Manager, Burger King*
- Daran Neuschafer  
*Chamber of Commerce, immediate past Board Chair*
- Vicki Koepsel  
*Director of Planning, Saline County*
- Lloyd Davidson  
*President, First Bank of Kansas*
- Steve Ryan  
*Former Mayor, Friends of the River Economic Development Chair*
- Andy Martin  
*Salina Area United Way*
- Dean Andrew  
*Director of Planning, Floodplain Manager, City of Salina*
- Bob Ash  
*Parks and Recreation Superintendent, City of Salina*

**Technical Advisory Committee**

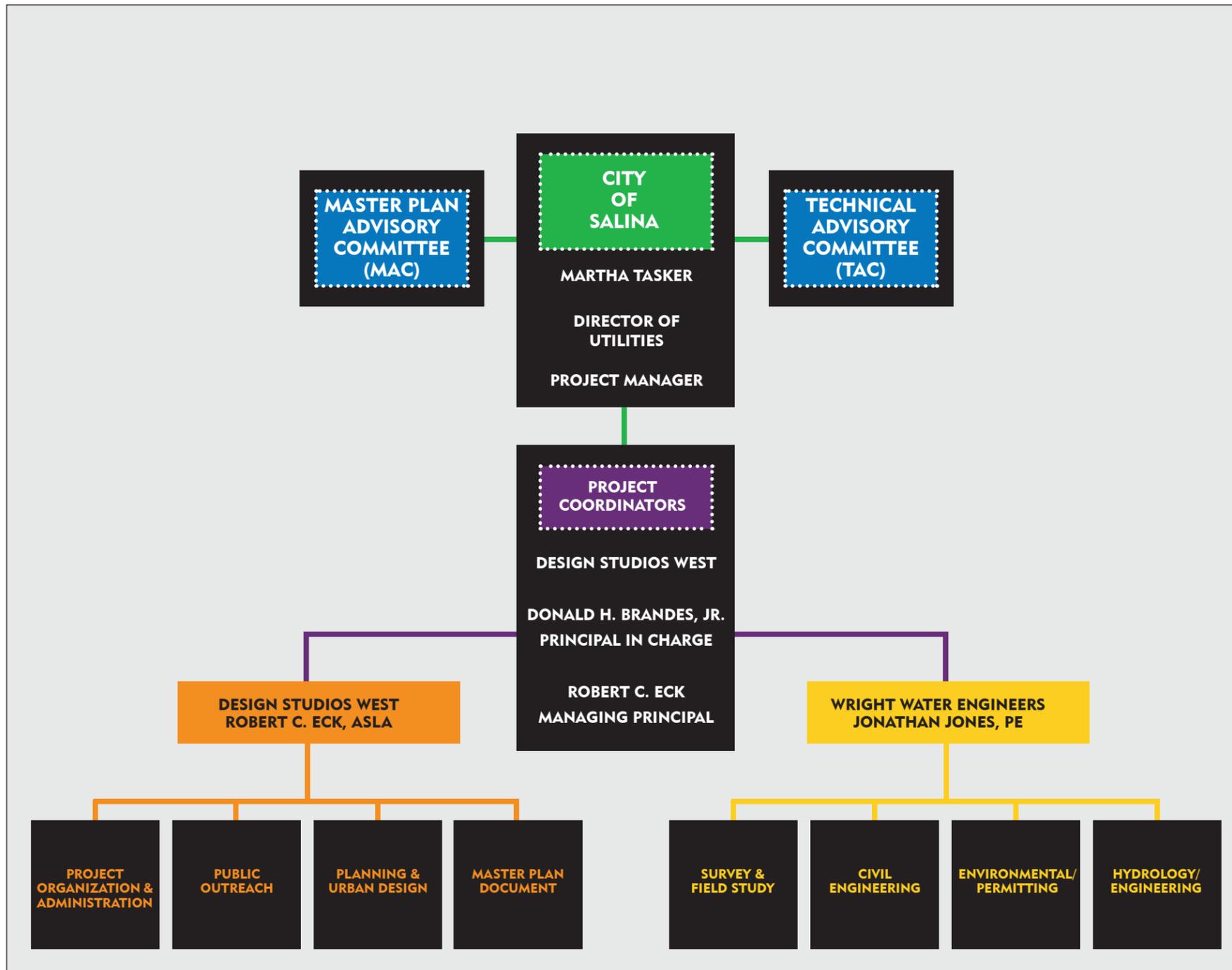
The Technical Advisory Committee (TAC), consisting of designated City departmental and other related agency representatives, was established to assist the Consultant as technical advisors to the master planning process. The TAC met with the Consultant and MAC at the outset of each major phase task, and at critical junctures of the project to provide technical review and advisory oversight related to the technical issues, regulations and policies that relate to the Master Planning project area.

Members include:

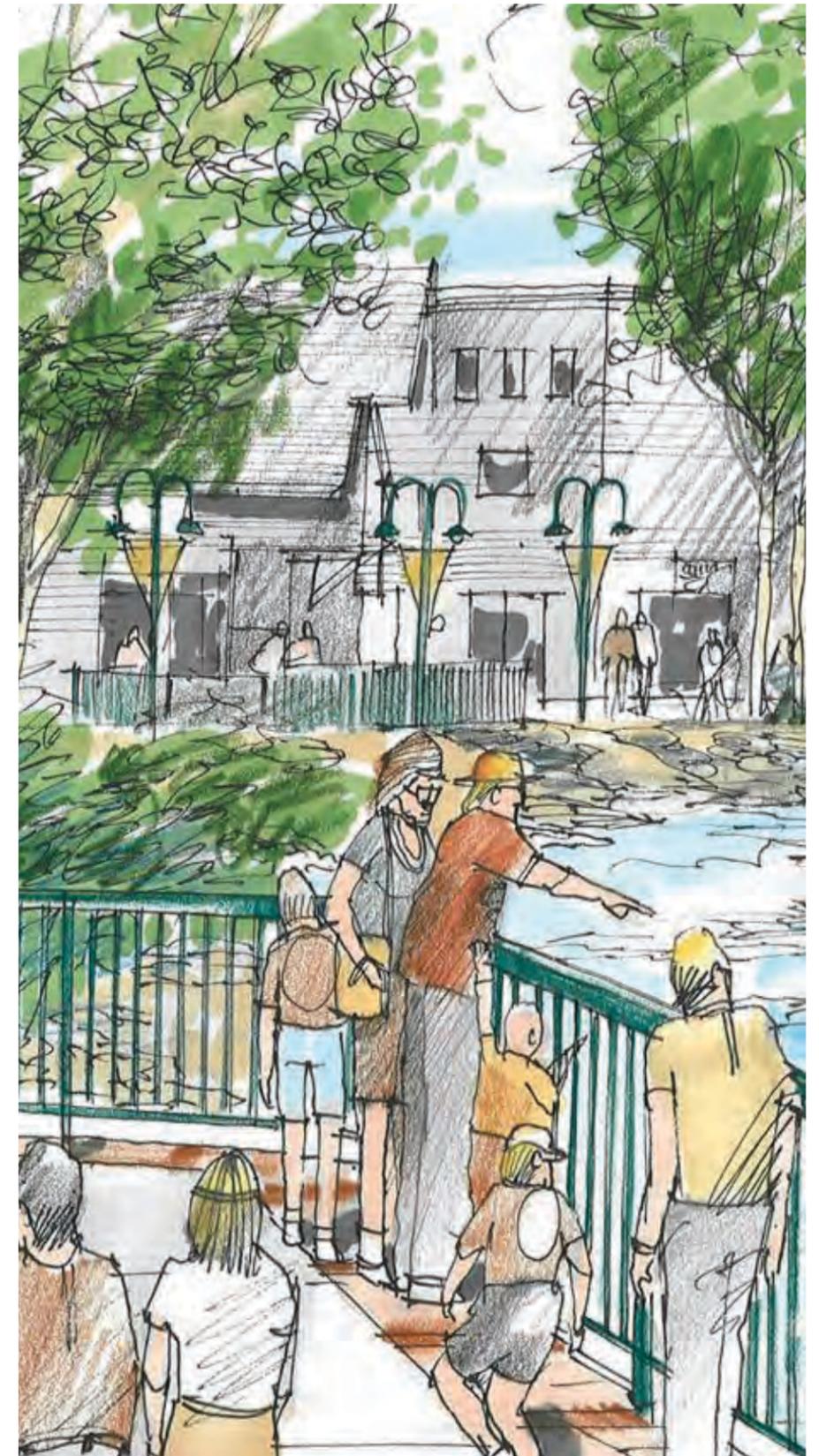
- Chair: Martha Tasker  
*Director of Utilities, City of Salina*
- Troy Vancil  
*Friends of the River, President*
- Kristin Gunn  
*Friends of the River Environmental Chair, Former Mayor*
- Ron Chandler, PE  
*Former Owner, Wilson and Company*
- Mike Fraser  
*Director of Public Works, City of Salina*
- Dan Stack, PE  
*City Engineer, City of Salina*
- Neil Cable, PE  
*County Engineer, Saline County*
- Steve Snyder  
*Director of Parks and Recreation, City of Salina*
- Gary Hobbie  
*Director of Community and Development Services, City of Salina*
- Mike Schrage  
*Deputy City Manager*
- Barbara Johnson, PE  
*Kansas State University*



Phase 2 - Master Plan was guided by the oversight of a Master Plan Advisory Committee (MAC) and Technical Advisory Committee (TAC)



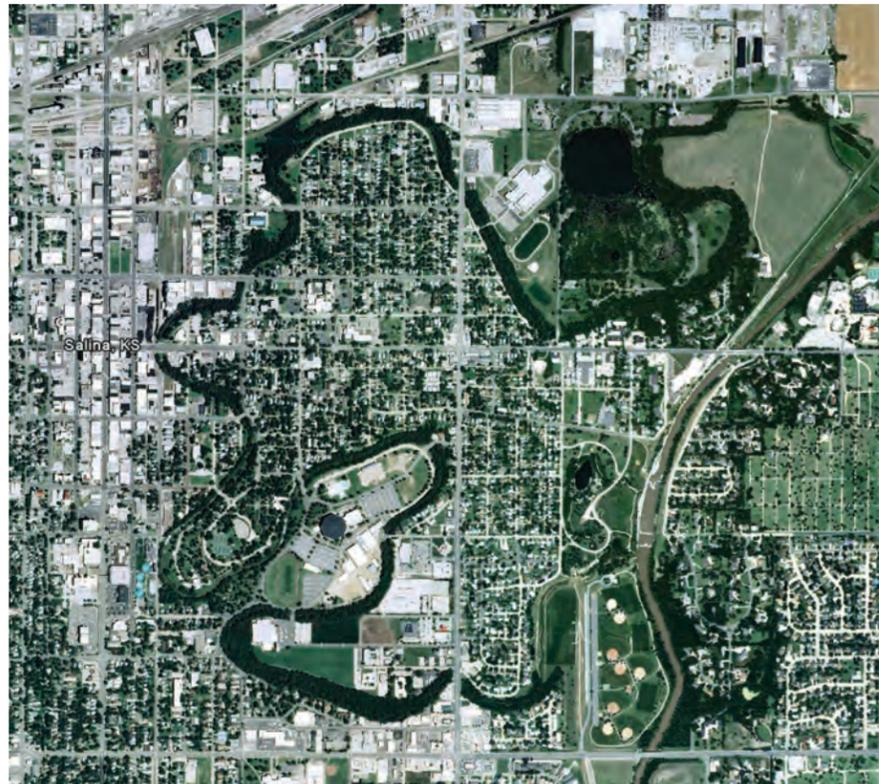
**FIGURE 1.6**  
Phase 2 - Master Plan Project Team Organization



## INVENTORY AND ANALYSIS

### INTRODUCTION

Phase One of the Smoky Hill River Renewal is primarily concerned with conducting the Public Outreach program to determine public interest and preferences for the Smoky Hill River Renewal. However, in order to develop and communicate a basic understanding of the Old Channel area, Phase One also includes a “discovery” component in the inventory of existing physical and regulatory conditions that are present along the course of the Old Channel. Conditions in areas adjacent to the Old Channel that may have an influence on proposed planning of improvements for the Old Channel also warrant review. The analysis of those conditions in relation to potential Old Channel improvements is intended to provide an evaluation of their relative importance and an initial determination whether they offer insurmountable constraints to the river renewal.



Aerial photograph of Salina, Kansas, 2008  
Source: Google Earth

Of course, the historical overview presented at the opening of this master plan represents an inventory of significant cultural events, historical sites and river modifications that explain many of the existing conditions that are present today. Those events and conditions will not be repeated in this section, but must be recognized for the influence they have exerted on Salina’s development along the river.

The purpose of the inventory and analysis conducted at this initial stage of river renewal planning is not to provide costly, exhaustive, in-depth research studies, but rather to provide an environmental and regulatory “scan” which results in identification of key issues warranting further focus in future phases of the project. In that regard, “existing and available” information compiled and provided to the consultant team by the City has been used for this inventory and analysis.

Based on that existing and available information, the objective of the inventory and analysis is to develop a sufficient understanding of the site to identify:

- Existing physical and regulatory influences that may include topographic, vegetation, soils and siltation as well as land use, zoning, long-range planning documents and Federal, State or other regulatory permitting.
- Existing hydrologic, natural and urban systems at work on the site including, understanding how the existing Old Channel works as a watercourse (volumes, capacity, inflow and outflow elevations, etc); floodways, wetlands and riparian forest; access, circulation, streets, and bridges, utilities, ownership, land use and zoning.
- Planning boundaries are anticipated to include two tiers; the channel and bank areas that will be subject to potential construction, and those adjacent influences that may determine improvements, or whose uses may be influenced by or benefit from improvements.

### PLANNING AREA BOUNDARY

The Smoky Hill River Renewal Master Plan focuses on improvements immediately adjacent to the Old River Channel and the Diversion By-pass Channel between the Old River Channel inflow and outflow. A project influence area referred to as the *Project Boundary* (Fig. 1.7) is defined by E. Crawford Street, on the south; S. 8th Street on the west; E. North Street on the north; and the east bank of the Smoky Hill River upstream and Diversion Channel on the east. Within the project influence area, consideration will be given to destinations and land use, access and circulation routes to the river, neighborhoods and other influences that are directly related to river Master Plan improvements.

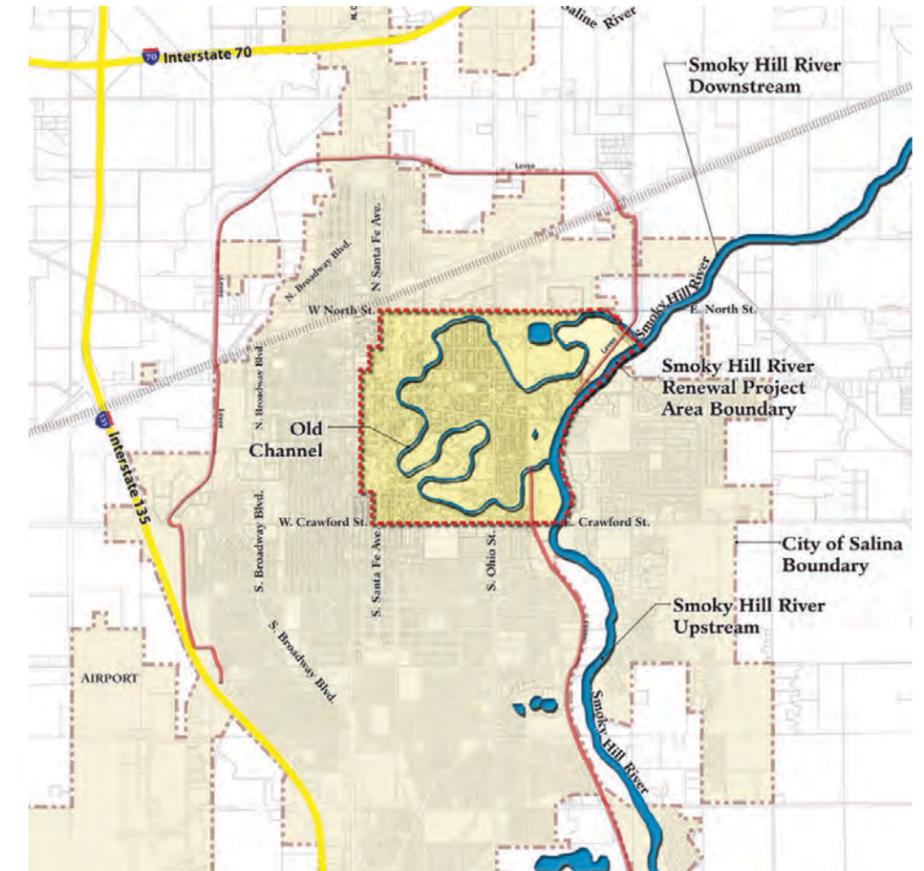


FIGURE 1.7  
Project Boundary

**PLANNING AREA CONTEXT**

Source: *The City of Salina Website*

The Old Channel links seven public parks offering a range of active and passive recreation facilities, natural and ornamental landscape settings, the central community event venues for Salina, educational and historic features. The looping course of the Old Channel through Salina, along with the Diversion By-Pass Channel that connects the Old Channel in-flow and out-flow offers a unique opportunity to provide a looped greenway and trail connection between those parks. Existing park facilities within the Planning Area Context (Fig. 1.8) along the Old Channel of the Smoky Hill River include:



The Old Channel links seven public parks offering a range of active and passive recreational facilities

**1 Bill Burke Sports Complex**

Location: Off of Crawford Street east of Ohio Street.

The complex is named after Bill Burke, the Salina Journal’s late, longtime sports editor.

Facilities include:

- Eight baseball and softball fields; five are lighted
- Concession facilities
- Two shelters and a small picnic area in a wooded area along the river at the extreme north end
- Access to fishing in the Smoky Hill River main channel
- Hiking and jogging trail along the levee
- Eleven soccer fields
- Accessible playground

**2 Indian Rock Park**

Location: Indiana and Gypsum Avenues, two blocks south of Lakewood Park.

Facilities include:

- Indian Rock Historic Site
- Large hill for sledding.
- Large shelter house atop hill with panoramic view of the city
- Small pond for fishing
- Restored prairie
- Interpretive Trail
- Nature trails

**3 Kenwood Park**

Location: Reached from Oakdale Drive, Front Street, Center Street, The Midway off Ohio Street or by foot bridges from Oakdale Park.

Facilities include:

- Salina Bicentennial Center.
- Former Salina Municipal Pool.
- Tri-Rivers Stadium arena.
- Saline County Expo Center, including Agricultural Hall, 4-H Building, Kenwood Hall and several livestock buildings.
- Site of the Tri-Rivers Fair.
- Two large shelters
- Antique steam locomotive in the southwest corner.

**4 Oakdale Park**

Location: Reached from Oakdale Drive, Front Street or Walnut Street, or via three footbridges over the Smoky Hill River connecting it to Kenwood Park at the intersection of Fourth and South streets.

Facilities include:

- Eric Stein Stage for performances
- Three shelters, one gazebo
- Formal gardens
- Salina’s largest tennis complex — eight lighted courts plus a practice wall
- Two (2) playground areas.
- Site of Smoky Hill River Festival

**5 Founders Park**

Location: East Iron Avenue next to the Salina Community Theatre.

Facilities include:

- Commemorative Mill Stone and historical marker
- Picnic areas
- Riverside and mill dam overlook

**6 Riverside Park**

Location: Oakdale Drive between Elm and Riverside streets.

Facilities include:

- Playground
- Picnic tables

**7 Lakewood Park**

Location: At Iron and Indiana Avenues or off North Street.

Facilities include:

- Lakewood Discovery Center, where live animals, fur, bones and other interpretive environmental education displays are kept
- Interpretive Environmental Education Nature trails
- Playground
- Stocked fishing lake with boat ramp
- Several picnic shelters and small shelters on the north and south side of the lake.
- Two nine-hole flying disc golf courses.



FIGURE 1.8  
Planning Area Context Map

In addition to the Public Parks along the course of the river, other prominent employment, community activity centers and features are also located along the course of the Old Channel of the Smoky Hill River.



**8 Bicentennial Center**  
Located in Kenwood Park and nicknamed “Mid-America’s Meeting Place,” the Bicentennial Center is an arena and convention facility providing a regional events center, owned and operated by the City of Salina. Since the facility opened in 1979, the mission of the Bicentennial Center has been to provide a regional hospitality center for events that will stimulate the Salina economy and enhance the quality of life for the community and region.

With an Arena that can hold up to 7,500, plus the newly renovated Heritage Hall and meeting rooms, the Center has hosted events including concerts, ice shows, circuses, and entertainment stars such as the Bob Dylan Show, Harlem Globetrotters, Professional Bull Riding, Championship Bull Riders, and the Royal Lipizzaner Stallions. The Bicentennial Center also hosts numerous sporting events including the 4-A Kansas State High School Activities Association championships in basketball and wrestling, plus the 3A and 4A State volleyball, and the NJCAA Women’s Basketball National Championship. As well, basketball games between Salina South and Central High Schools are hosted at the Center.

With more than 40,000 square feet of exhibit space the Bicentennial Center annually hosts such events as the Mid-America Farm Expo, the Salina Homebuilders Association Home & Garden Show, Kansas State Square Dance Annual Convention, the AMBUCS Family Leisure Living

Sports Show, and No-Till on the Plains Conference. The Bicentennial Center offers in-house catering for conferences, trade shows, wedding receptions, and company holiday parties.

**9 Salina Regional Health Center (SRHC)** is a general medical and surgical hospital located on South Santa Fe Avenue, at the south end of the Downtown Lee District. The facility manages 199 beds. It is a community owned, not for profit facility, accredited by the American Osteopathic Association. According to the most recent annual survey data, 27,086 patients visit the hospital’s emergency room; a total of 9,296 patients are admitted. Its physicians perform 2,560 inpatient and 2,740 outpatient surgeries. The SRHC ranks as one of Salina’s top employers with over 1,000 employees. It is a single location hospital with current estimates showing an annual revenue of over \$100 million. The SRHC campus is located within the City of Salina designated Medical District which comprises approximately six (6) blocks of downtown Salina, immediately east of the Smoky Hill River and Oakdale Park. The SRHC was founded October 1, 1995, when Salina’s two former hospitals, Asbury -Salina Regional Medical Center and St. John’s Regional Health Center - Penn Campus, consolidated. The old St. John’s Penn Campus, located east of the Smoky Hill River between N. Penn Avenue and N. Front Street along E. Ash Avenue, remains predominantly vacant and under-utilized.



**10 Downtown Salina**, historically the central business district and governmental center for Salina and Saline County, is located in the blocks west of the Old Channel of the river with South Santa Fe Avenue serving as Downtown Salina’s “main street”. Salina Downtown, Inc. (SDI), a non-profit organization and partner to the City of Salina, manages the Lee

District, a 31 block business improvement district in Salina’s city center. The Lee District is named in recognition of the Salina business legacy of the H.D. Lee Mercantile Company, creators of Lee® Jeans, founded in Salina in 1889. SDI is governed by a 13-member board elected by Lee District members. The board also serves, as appointed by the Mayor, as the Lee District Advisory Board. Past SDI projects include the preparation of Design Review Board Guidelines, a Downtown Parking Master Plan, as well as downtown market and lighting studies. SDI also offers Development Incentive Programs, and “Project Open” grants for start-up business owners.

**11 The Salina Family YMCA** has been serving Salina and the surrounding area since 1887. From a single gym and pool in a building at 9th & Iron Streets the YMCA has grown to a 40-acre sports, fitness, aquatics and child care complex at 570 YMCA Drive. Nestled within the S-curve of the Smoky Hill River, the Y is adjacent to the Old Channel on three sides of its property.

The Salina Family YMCA is a membership organization governed by a board of directors that monitors the policies and services of all programs. Over 9,200 members participate in activities offered by the Y, such as aerobics, aquatics, gymnastics, personal fitness, racquetball, handball, basketball and child care. The YMCA provides a comprehensive, professional, family oriented center in the community with programs geared for all ages. Parents throughout the Salina area look to the Y for a variety of activities for their children as well as their own fitness.



**Salina Community Theatre**  
Image Courtesy of JGR Architects

**12 The Salina Community Theatre** is a community-based, educational and theatrical production organization located in Founders Park adjacent to the Smoky Hill River, immediately downstream of the E. Iron Avenue

crossing. The Theatre grounds and the park are adjacent to and overlook the scenic Western Star Mill dam.

The Salina Community Theatre Association was organized in 1960 as a 501(c) (3) not-for-profit corporation. Plays were produced in the auditorium of the Washington Building, a former high school, from 1960 through the spring of 1971, when that building was torn down. By 1968 the Theatre board had realized that it must provide its own building and set about raising funds for building construction and equipment at the Founders Park site. The building was completed and opened in 1973. Through the years, the Community Theatre program has grown and expanded, as evidenced by current construction of a \$4.5 million black box theater, lobby and site improvements, scheduled for dedication in the Spring of 2011.

The vision of the Salina Community Theatre is to become the preeminent provider of live theatre and theatre education between Topeka and Denver. To embrace the role of “the regional theatre for western Kansas: by making quality theatre available to as many adults and children as possible”.

Now celebrating its 50th season, the Salina Community Theatre is a non-profit educational organization whose mission is to enrich the lives of people in Salina and the surrounding region by creating a broad range of quality theatrical programs for their entertainment and education, and to provide people of all ages and backgrounds the opportunity to participate in play production and other theatre activities.

**13 The Lakewood Middle School** campus is comprised of approximately 35 acres, located adjacent to and on the north bank of the Smoky Hill River. The Lakewood campus is bounded on the east by Indiana Avenue which also serves as the boundary of Salina’s Lakewood Park, featuring the Lakewood Discovery Center, the City’s premier environmental education facility. Pedestrian access across the river is enhanced by the relocation of the former N. Ohio Street Bridge, built in 1887 by the Missouri Valley Bridge and Iron Works, for use as a historic feature leading to Lakewood’s main entry.

Lakewood Middle School is a state of the art facility dedicated in 2002 as part of a voter-approved, \$98.8 million bond issue to update and expand schools in the Salina School District (Unified School District 305) Lakewood is one of two middle schools in Salina, serving 754 students, in grades 6-8. The large staff includes seventy-five full-time “equivalent” teachers that instruct the student body.

## FLOODPLAIN

### CITY WIDE FLOODPLAIN

Mapping authorized by the Federal Emergency Management Agency (FEMA) designates flood hazards in the City of Salina. City-wide, the FEMA 100-year floodplain hazards illustrate that the levee system protects most of Salina from floodwaters of the Smoky Hill River. However, 100-year flood hazards exist within the area protected by the levee, primarily due to stormwater run-off that drains from within the city (Fig. 1.9). The Old River Channel receives those drainage flows from over five (5) square miles of urban area. 2009 FEMA mapping has been completed to a Draft level, and is currently under review (Fig. 1.10). It is anticipated that 2009 mapping will require significant revision prior to approval and adoption. Until updated mapping is approved, 1987 mapping remains the regulatory standard (Fig. 1.11).

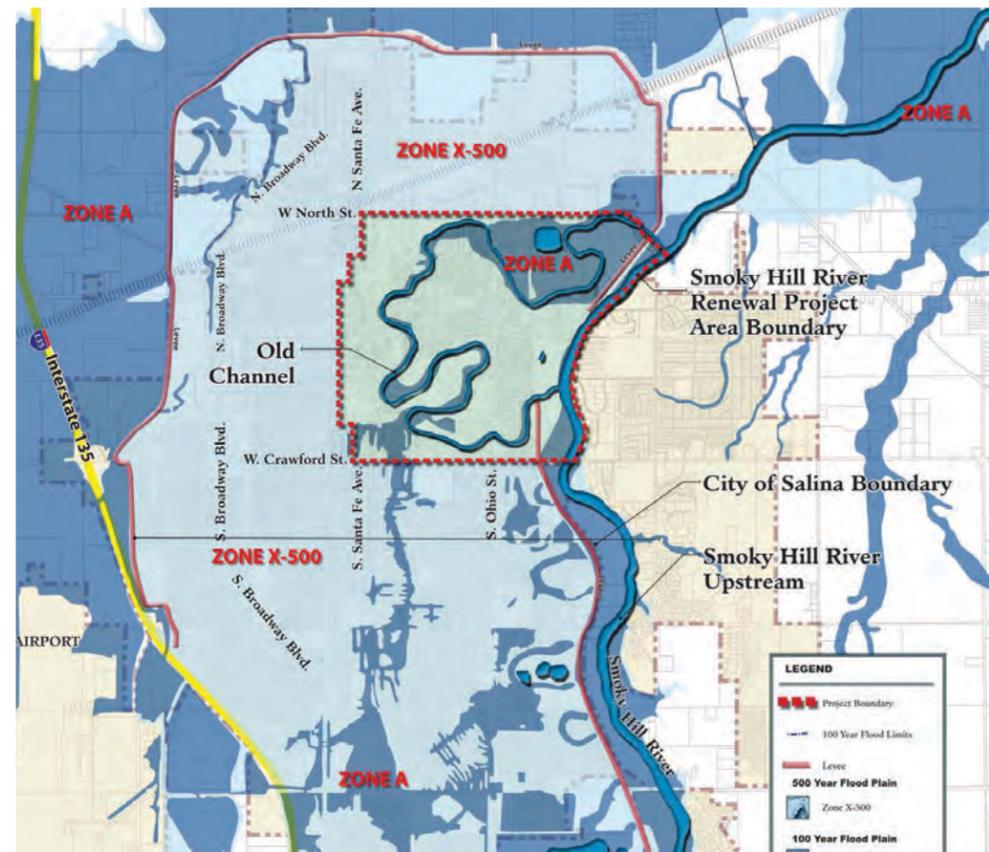


FIGURE 1.9  
City Wide Floodplain



FIGURE 1.10  
Draft Project Area Floodplain (URS, 2009)

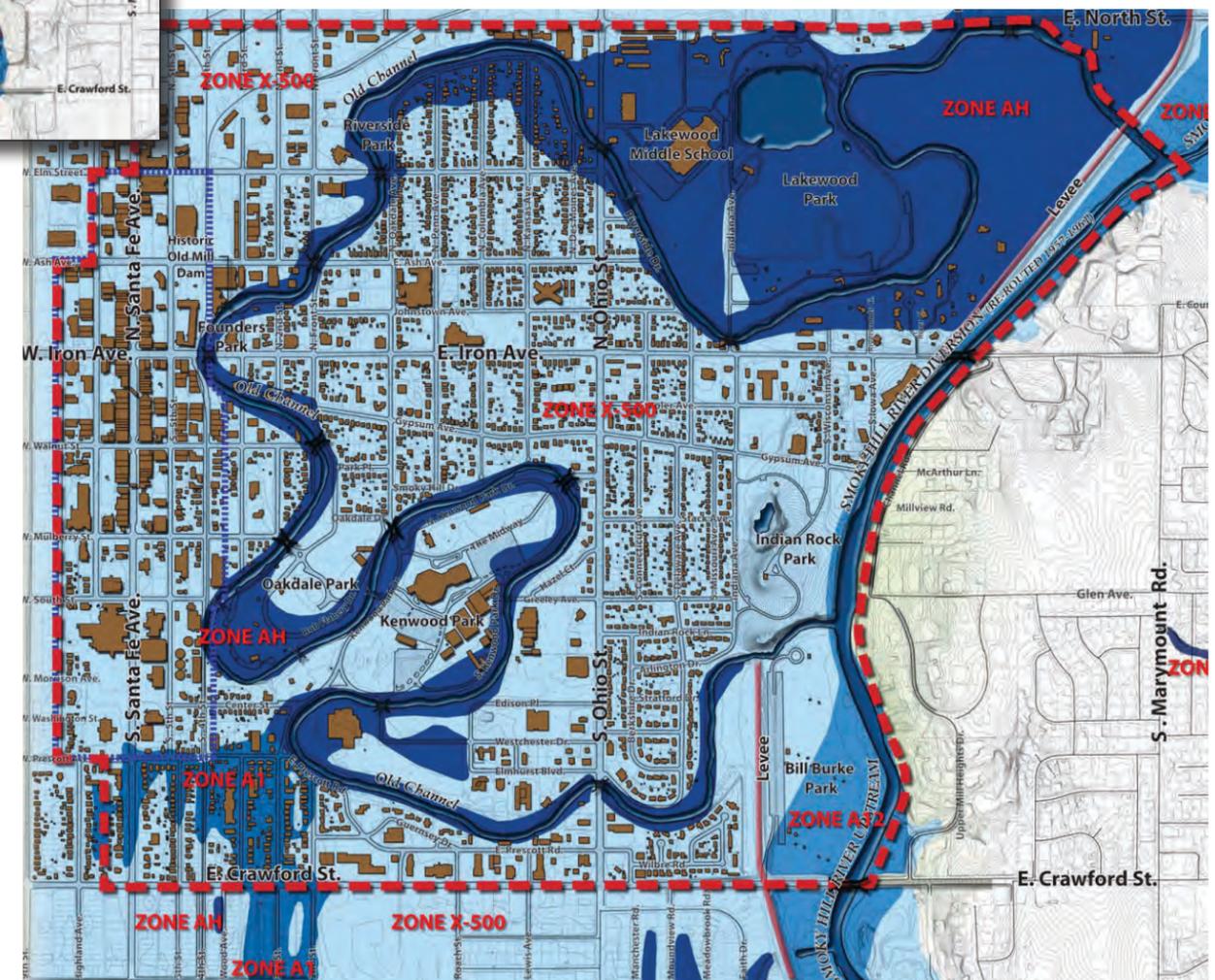


FIGURE 1.11  
Approved Project Area Floodplain (FEMA, 1987)

### PROJECT AREA FLOODPLAIN

The Old Channel of the Smoky Hill River is within the Federal Emergency Management Agency (FEMA) 100-year floodplain. Portions of adjacent neighborhood properties are also within the floodplain and must pay for flood insurance that can range from \$400 to \$1,200 annually. Clearing of debris and accumulated silt, along with removal of current impediments to flow in the Old Channel will not adversely affect the regulatory floodplain, and as the project progresses opportunities will be sought to improve floodplain conditions.

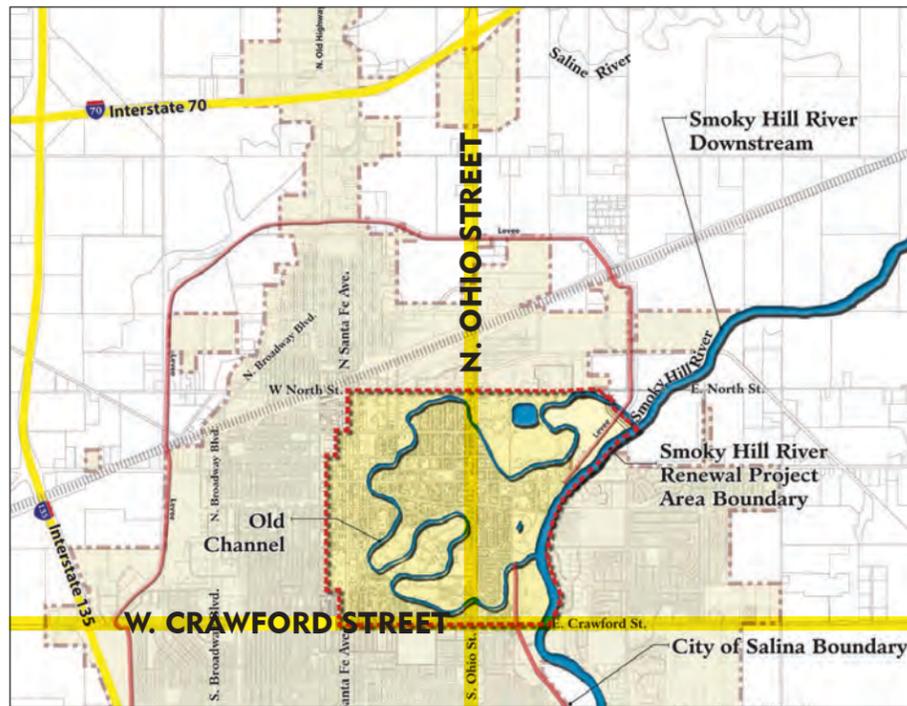
## ACCESS AND CIRCULATION

Source Wikipedia

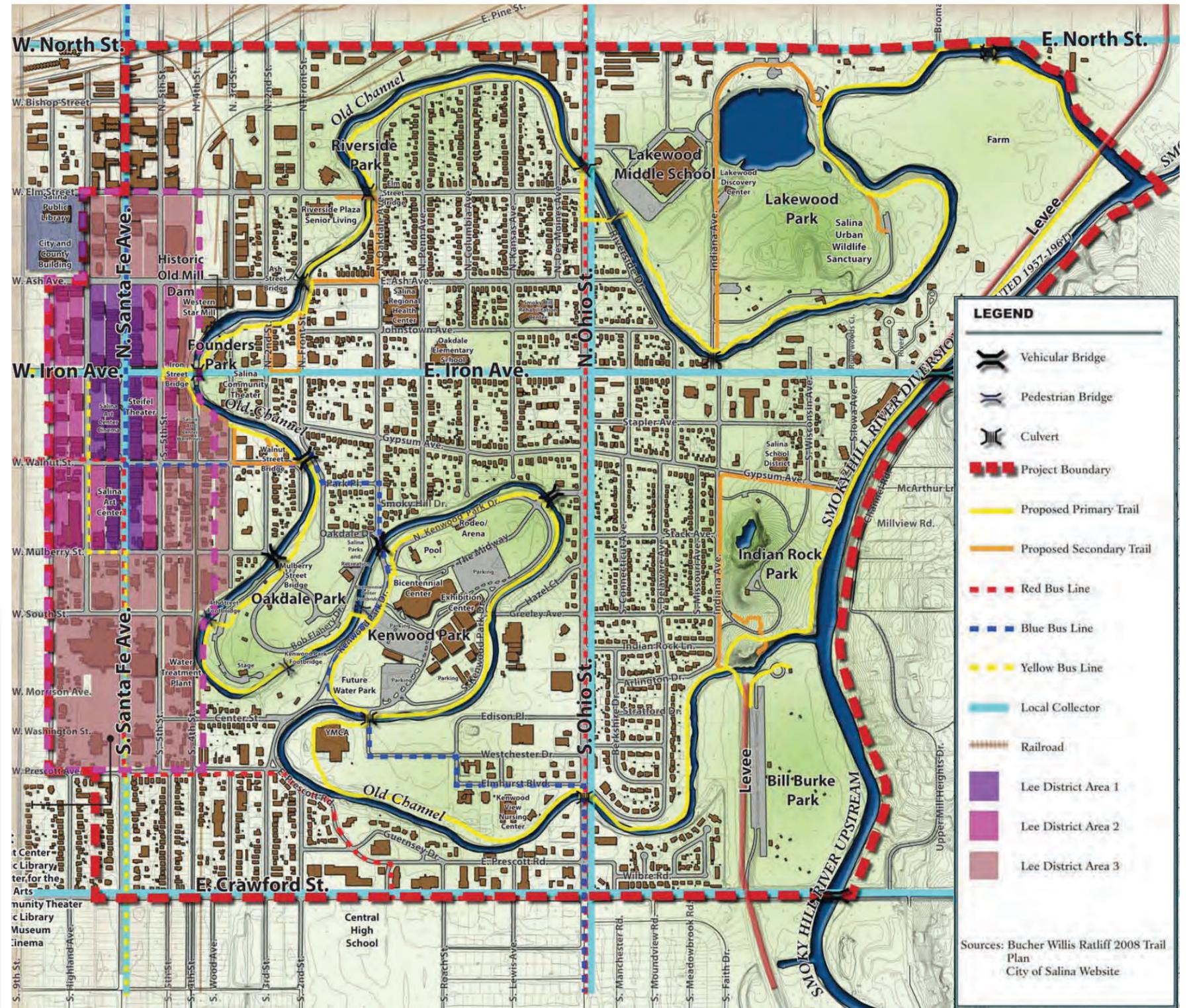
Interstate highways provide the primary regional access to Salina. Interstate 70 and U.S. Route 40 run concurrently east-west north of Salina. Salina is 175 miles west of Kansas City, MO and 433 miles east of Denver, CO via Interstate 70.

Interstate 135 and U.S. Route 81 run concurrently north-south along the west side of the city. Salina is 250 miles north of Oklahoma City, OK and 90 miles north of Wichita, KS on I-135. The I-70/I-135 interchange northwest of the city is the northern terminus of I-135. K-140, which approaches Salina from the southwest, formally ends at its interchange with I-135 before entering the city as State Street. North of Salina, the city's main north-south thoroughfare, Ninth Street, becomes K-143 at its interchange with I-70.

From Interstate highways, collector street access to the Project Area is provided from Interstate 70 via N. Ohio Street (Fig. 1.12). S. Ohio Street is the primary north-south collector street through the center of the project area. Its interchange located approximately 2 1/2 miles north of the project area. Collector street access from Interstate 135 is provided via E. Crawford Avenue that serves as the project area south boundary. The W. Crawford Avenue interchange is approximately 1 1/2 miles west of the Project Area.



**FIGURE 1.12**  
Regional Access Plan



**FIGURE 1.13**  
Existing Access and Circulation

Primary access to and circulation within the project area is provided by the Salina street grid which is interrupted by the circuitous route of the river through central Salina (Fig. 1.13). East-west circulation through the site is provided by E. Iron Avenue, near the center of the planning area, and E. North Street at the north edge and E. Crawford Avenue at the south edge of the planning area. North-south circulation is provided primarily by N. Ohio Street and S. Ohio Street through the center of the planning area. E. Iron Avenue delineates Salina street addressing and designation of streets as “north” or “south”, and Santa Fe Avenue delineates, addressing as “east” or “west”.

Circulation on local streets within the site is largely determined by bridge crossings of the river. From Downtown Salina and neighborhoods west of the planning area, bridges on Mulberry Street, Walnut Street, Iron Avenue, Ash Avenue and Elm Avenue provide east-west access. A footbridge from the terminus of S. Fourth Street and E. South Street also provides pedestrian access from the Downtown area into Oakdale Park. From Ohio Street, bridge crossings that provide westerly access to the project area include Westchester Drive (via the YMCA Drive bridge), Greeley Avenue, The Midway, Iron Avenue, Ash Avenue and Elm Avenue. To the east from Ohio Street, planning area local access is provided through residential neighborhoods on Elmhurst Blvd., Greeley Avenue, Gypsum Avenue and Riverside Drive. E. Iron Avenue and E. Crawford Avenue are the only east-west connections across the Main Channel/ Diversion By-pass Channel of the Smoky Hill River in the vicinity of the planning area.

North-south local street access and circulation choices through the project area are limited. As mentioned previously, Ohio Street provides the primary north-south access through the center of the planning area. In Downtown, at the western edge of the planning area, S. Santa Fe Avenue provides north-south circulation as Salina’s “main street”, with good access to east-west links to the planning area. Front Street extends north from the Mulberry and Walnut Street bridges, but is interrupted at Ash Avenue by a “jog” created by the river and Ash Avenue bridge. At its south end, Front Street becomes the access drive into Oakdale Park at Oakdale Drive before connecting to the Mulberry Street bridge. That leaves Oakdale Avenue / Kenwood Park Drive as the ‘central’ north-south circulation route through the planning area in the vicinity of the Oakdale Park / Kenwood Park activity center. Oakdale Avenue extends north from its bridge over the Old Channel, across E. Iron Avenue into residential neighborhoods to become Riverside Drive, looping back to the east. Extending south from the bridge as Kenwood Park Drive, it diverges into residential neighborhoods as S. Third Street, S. Second Street and E. Prescott Road before intersecting with E. Crawford Avenue.

A looped, multi-use pedestrian trail system has been planned by the Salina Department of Parks and Recreation to link parks and features along the course of the Old Channel. Prepared by Bucher Willis Ratliff (BWR) of Salina in 2008, the proposed trail route follows a 1978 trail alignment proposed by Wilson and Company for much of its length. Since the BWR plans pre-date more comprehensive river improvements that envision bridge underpasses for trails, the proposed alignment is limited by at-grade street-level crossings (crosswalks) and existing street and other city-owned right-of-way for its alignment in many locations. Despite those limitations, the BWR plan provides a strong baseline for multi-use trail development for much of the Old Channel length as well as detailed preliminary implementation and cost information.

**EXISTING BRIDGE BOX CULVERT REPLACEMENT**

Since construction of the Diversion Channel By-pass reducing river flows from the Old Channel in 1957-61, six (6) bridges have been removed and replaced by box culverts along the course of the Old Channel. The effect of the culverts has been to restrict flow capacity through the Old Channel, slowing flows and increasing sedimentation. Additionally, the earthen fill at those crossings that the culverts flow through has created a series of barriers that divide the river corridor into disconnected segments. A central theme in river restoration is to reconnect those segments of the river by removing barriers and reestablish the Old Channel as an uninterrupted, continuous greenway corridor. Existing box culvert locations that may be considered for replacement by bridges or enlarged box culverts include:

- S. Ohio Street
- YMCA Drive
- The Midway
- E. Iron Avenue
- E. Ash Avenue
- E. Elm Avenue

The existing Walnut Street bridge, with structural pre-stressed concrete beams, presents a clearance obstruction for boating and as a potential trail underpass. In order to provide necessary clearance for those functions at that central location, the Walnut Street bridge warrants consideration for future, phased replacement with a structure that provides greater river clearance.

Additionally, reconstruction design for the aging Greeley Avenue bridge is currently under consideration. As that design proceeds, it is recommended that the design incorporate sufficient flow sizing and clearance for a potential trail underpass and to promote an open, continuous greenway corridor.

**OTHER TRANSPORTATION MODES**

CityGo is the local public transport bus service, operating four routes in the city (yellow, blue, red). CityGo also provides intercity bus service to surrounding communities as NCK Express. Greyhound Lines provides long-distance bus service.

Salina Municipal Airport was created with the closure of the former Schilling Air Force Base, located immediately southwest of the city. Used primarily for general aviation, it hosts one commercial airline under the Essential Air Service program. Former military base infrastructure has made the airport an attractive site for the Kansas State University – Salina aeronautics program and corporate industrial park uses.

Rail service to Salina is currently limited to freight lines, with no passenger rail service. The Kansas Pacific (KP) Line of the Union Pacific Railroad runs northeast-southwest through the northern part of the city. Salina is also the southeastern terminus of the Salina Subdivision of the Kansas and Oklahoma Railroad. The primary northeast-southwest rail corridor is located at the northern edge of the planning area. There is a north-south rail spur that follows the alignment of Fourth Street through the project area, providing freight service to industries in southern Salina twice daily. Tracks are located in the center of Fourth Street for six (6) blocks from E. Iron Avenue, south to Crawford Street. From Crawford south to Kansas Wesleyan University, tracks are located in a boulevard center median that separates the Fourth Street travel lanes.



The Salina “CityGo” Service

## OWNERSHIP

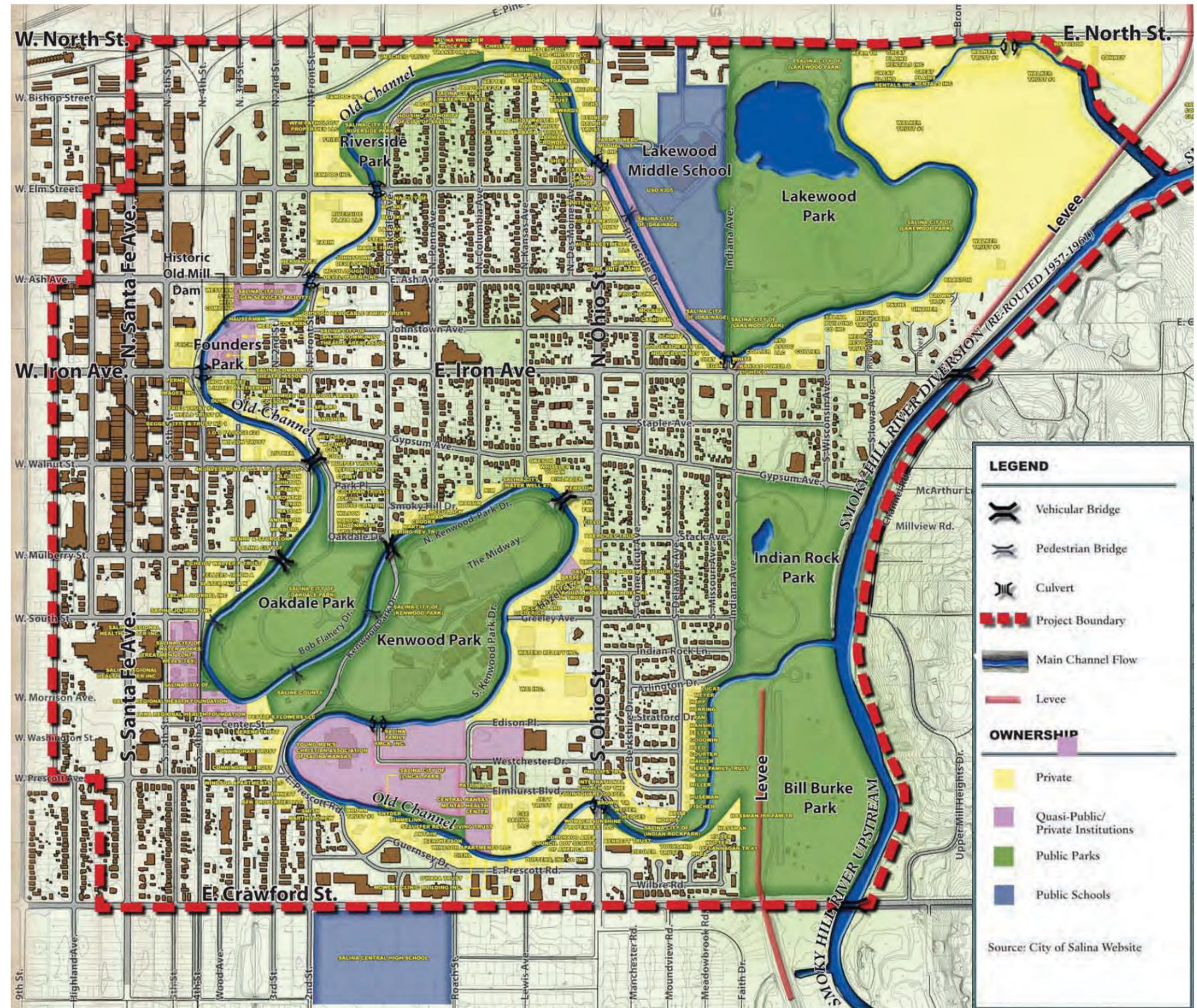
### RIVER CHANNEL AND ADJACENT OWNERSHIP

The ownership of the Old Channel is inconsistent throughout the planning area (Fig. 1.14). There are portions of the channel that are specifically designated as parcels owned by the City, such as the channel along Riverside Drive adjacent to Lakewood Middle School. In other areas, ownership of adjacent properties extends to the center of the river channel. There are publicly-owned parks and other municipal properties adjacent to at least one side of the Old Channel for 80 percent of its length so when possible, improvements have been located to minimize private property conflicts.

Construction of improvements, access across private property with trails or even in boats on the water may require some form of easement, acquisition of public river right-of-way, or in limited, extreme cases, outright property acquisition. Most frequently, public right-of-way dedications and easements are made at the time of property redevelopment or in a public private partnership agreement. The Master Plan will identify these conditions, but acquisition, right of way and easements will be the subject of Phase 3-Implementation.

### KENWOOD PARK/OAKDALE PARK DISPOSITION

The current City/County Ownership/Management Agreement is the subject of on-going discussion between the City of Salina and Saline County at this time. Master Planning activity will proceed presuming proposed uses, activities and improvements will be accommodated in future agreements.



**FIGURE 1.14**  
Existing River Channel and Adjacent Ownership

## UTILITIES

The need to relocate buried and above-ground utilities can significantly affect channel restoration costs. Consequently, as part of the Master Planning, WWE worked with City staff on a preliminary identification of utilities in the vicinity of the channel (Fig. 1.15). During the design phase, locations of the channel facilities can be optimized to minimize utility conflicts. Allowances totaling \$700,000 are included in the opinions of probable cost for the relocation of utilities. Utilities in proximity to the channel are described and anticipated conflicts requiring relocation are identified below:

### NATURAL GAS

The gas pipelines and facilities of Kansas Gas Service have been identified. Many of the roadways that cross the Old Channel have gas pipeline crossings of the channel. There are seven (7) roadway crossings that include 2-4" lines, including the potentially costly relocation of the 2" District Pressure regulator at the South Ohio Street crossing. Two pipelines paralleling the channel have also been identified, including a 4" line and district pressure regulator at Front Street and an 8" high pressure line and District Pressure Regulator in the vicinity of Fourth Street. There is also 12" high pressure line in 4th Street in the vicinity of E. Iron Avenue, west of the railroad tracks, that will be cost prohibitive to relocate, therefore will require special design consideration. The specific street locations and the sizes of gas pipelines are listed in the Engineering Issues report included as the final portion of Section 2 of this Master Plan.

### POWER

The Westar Energy mapping of primary overhead power lines includes approximately 20 crossings or segments paralleling the Old Channel. Kenwood Park and much of Oakdale Park have primary overhead lines along the perimeter. There is a segment of primary underground power crossing the channel twice in the vicinity of Kenwood Park between Edison and Greeley Avenue. There is also the transmission line running east and west that crosses the North Reach of the channel in several locations. Secondary overhead and underground lines are also in the vicinity of the channel.

### FIBER OPTIC

The fiber optic loop serving the Salina Regional Health Center area follows Oakdale Avenue and loops around Oakdale Park with a crossing of the Old Smoky Hill channel at Mulberry. The line is on the east side of the channel along Oakdale Drive south of the Walnut Street Bridge.

### COX INTERNET/CABLE

The Cox internet and cable lines that cross or are adjacent to the Old Smoky Hill channel are on power poles. Locations that are in proximity to the channel have been identified. Power poles are located close to the channel in a reach west of South Ohio in the vicinity of Lewis and Waverly Street. Power poles and lines parallel the Old Channel at the rear of lots fronting Hazel Court. Overhead lines cross the channel to Oakdale Park as an extension of Third Street.

### STORM SEWER

The Old Smoky Hill Channel serves as the outlet for more than 70 storm sewers, most of them 24-inch diameter or smaller. Major storm sewers that discharge into the Old Channel include the 8' x 8' box culvert from the South Slough area, a 66" diameter pipe that discharges near the Oakdale Park pedestrian bridge adjacent to the water treatment plant, a 60" diameter storm sewer that outlets approximately 200 feet downstream of the Western Star Mill Dam, and a 48" storm sewer in the North Reach Riverside Park area near the power transmission line. The outlet area of the storm sewers will be designed to protect the channel bank from erosion.

### WATER

The City municipal water intake is located south of the inlet channel to the Old Smoky Hill Channel. Two 20-inch diameter pipelines cross under the inlet channel where the concrete-lined sedimentation basin is proposed. The top of the pipelines where the inlet channel crosses is approximately elevation 1207.5 feet. The sedimentation basin will have two cells one on each side of the existing water line crossing. A complete listing of waterline crossings with specific street locations and the sizes of water pipelines are listed in the Engineering Issues report included in Section 2 of this Master Plan. Water line crossings that appear to or potentially conflict with the proposed channel restoration include the South Ohio Street—8" cast iron pipe (CIP), recommended for relocation with new bridge construction, East Iron Avenue—12" CIP, also recommended for relocation with new bridge construction.

### SANITARY SEWER

Sanitary sewer crossings of the channel include the Midway Drive—8" VCP encased in concrete, proposed to be handled with the new Midway Drive entrance construction. The South Ohio Street 8" VCP located in the channel flow area, and 16" force main below the channel at the center, may be a conflict at channel banks. South Ohio Street lines are proposed to be handled with South Ohio Bridge construction.

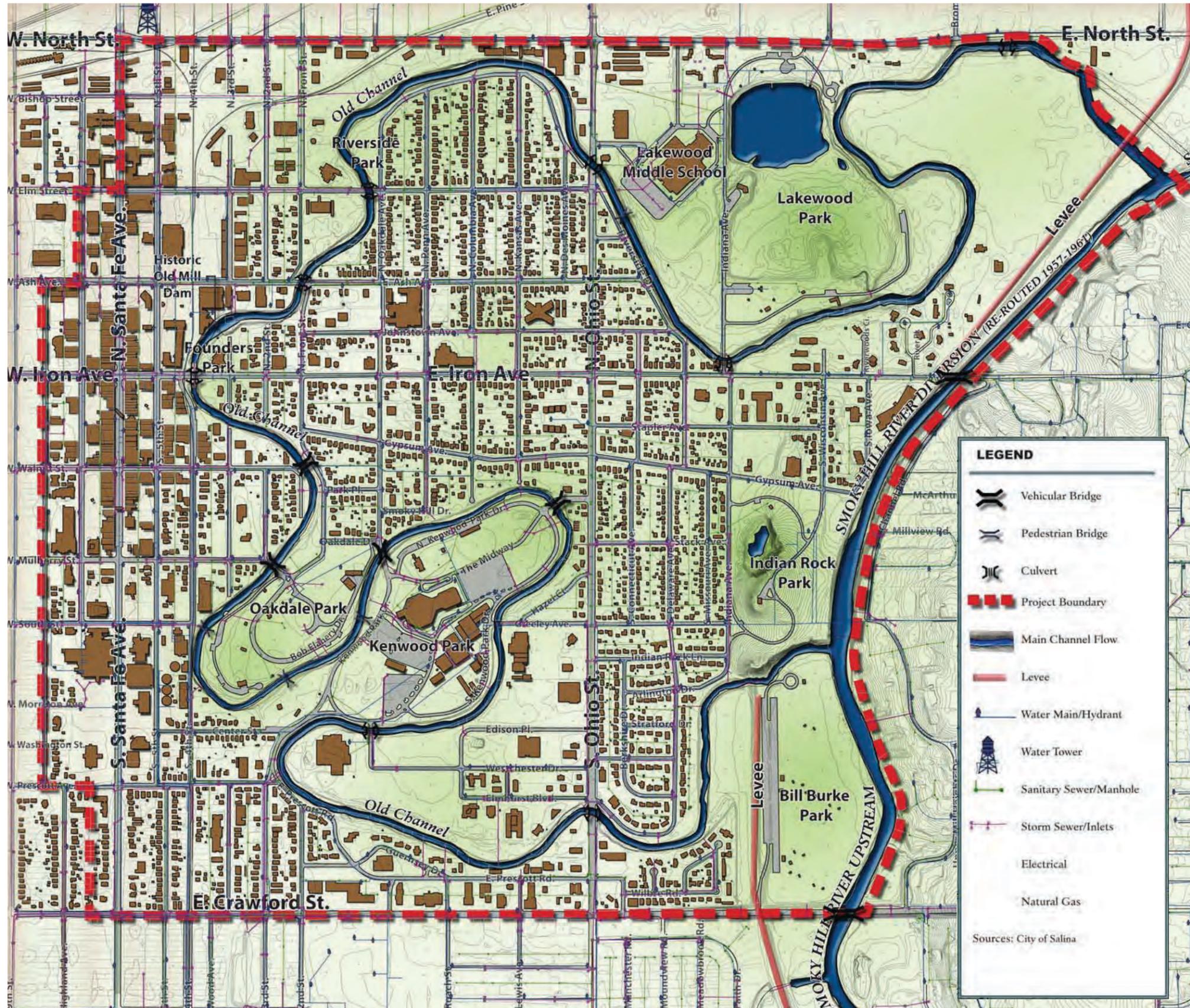


FIGURE 1.15  
Existing Utilities

## LONG RANGE PLANNING, LAND USE AND ZONING

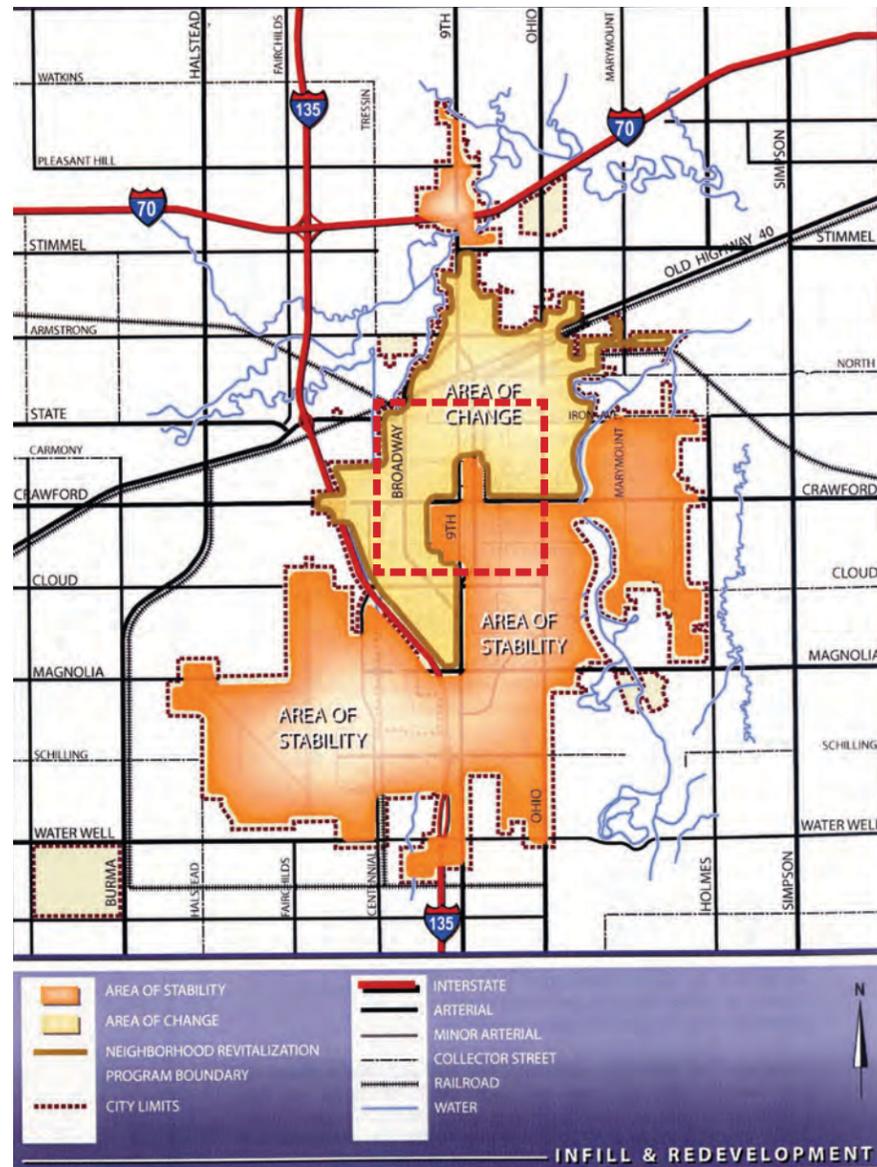
### SALINA COMPREHENSIVE PLAN

The preparation of the Master Plan has been found to be consistent with the goals, policies and strategies recommended in the 2009 draft of the Salina Comprehensive Plan which is currently under review. The Salina Comprehensive Plan is the City-wide long-range planning document that is intended to guide future physical development through recommended policies, strategies and actions to achieve Salina’s desired community of the future. The elements of the plan are:

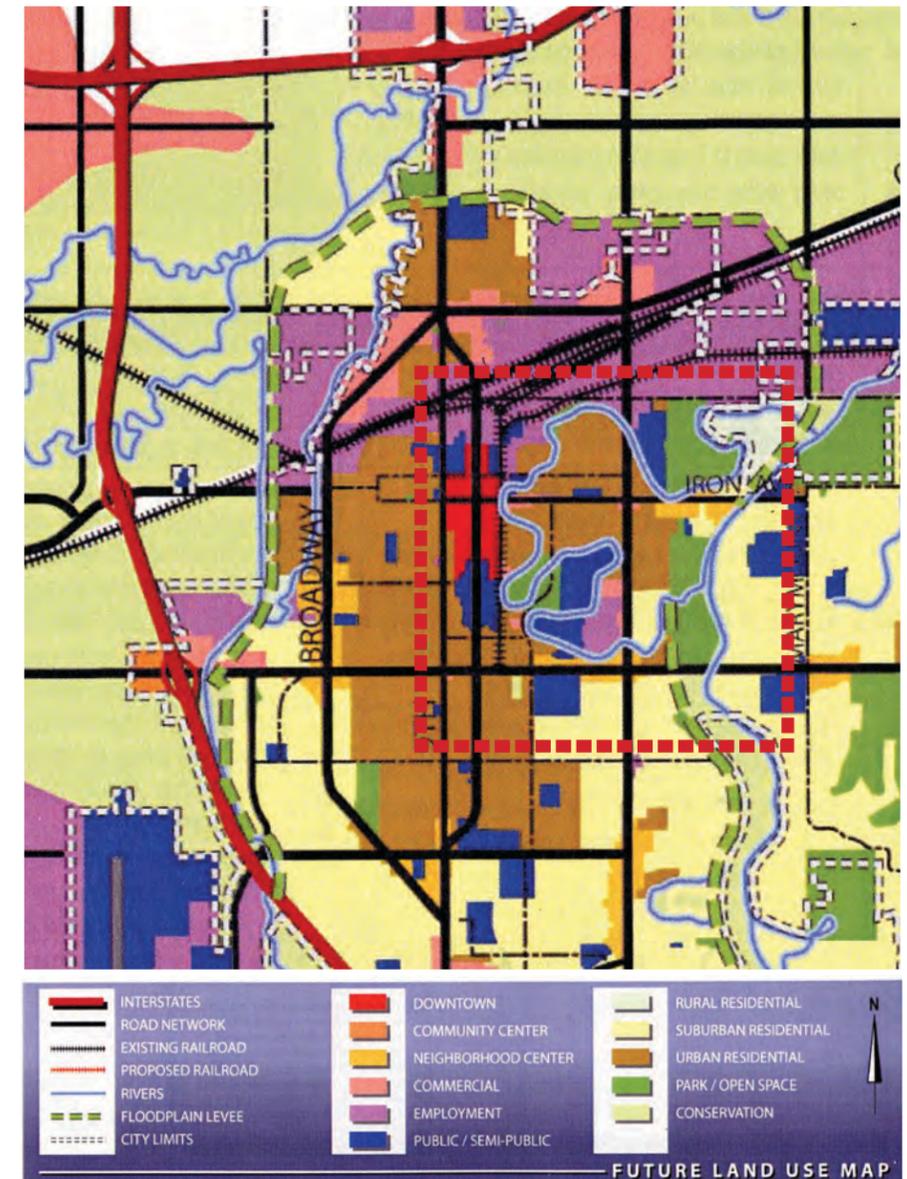
- Physical Development, including,
  - Future Land Use
  - Growth and Development
- Connectivity
- Parks
- Downtown
- Community
- Economic Development

It is intended for the Master Plan to comply with specific recommended actions of the Comprehensive Plan. Upon adoption, key aspects of the Master Plan should be incorporated as an integral part of the Comprehensive Plan to guide future redevelopment and restoration of the Old River Channel.

The Comprehensive Plan-Infill and Redevelopment Section (Fig. 1.16) designates all but a very small portion of the planning area as an “Area of Change”, indicating the Smoky Hill River Renewal planning area is an area where redevelopment should be encouraged. Similarly, the Future Land Use Plan (Fig. 1.17) presented in the Comprehensive Plan identifies Urban Residential and Mixed-Use Infill as predominant future land uses in the planning area. Half of the Parks Goals in the Comprehensive Plan are directly related to the river renewal planning area. Specifically, the river renewal is a key element in meeting goals to incorporate the linear parks network into the overall connectivity network, and invest in parks and facilities in areas of change to encourage development and redevelopment.



**FIGURE 1.16**  
Salina Comprehensive Plan Infill & Redevelopment



**FIGURE 1.17**  
Salina Comprehensive Plan Future Land Use

## LONG RANGE PLANNING, LAND USE AND ZONING

### SALINA VISION STATEMENT AND STRATEGIC PLAN

In December of 2009, the Salina City Commission adopted the City of Salina Vision Statement and Strategic Plan, which the Commission has annually reviewed and updated since 2006, to guide policy decision making. The river renewal process and Smoky Hill River Renewal Master Plan are key elements in achieving four (4) of seven (7) goals and seven (7) specific Action Items of the Strategic Plan (Fig. 1.18).

### 2009 STRATEGIC PLAN GOALS RELATED TO THE SMOKY HILL RIVER RENEWAL PROCESS AND MASTER PLAN

Goal Number	Goal	Action Item
Goal #2	The City will create a uniformly managed and master-planned Kenwood Park / Oakdale Park Destination area featuring recreation, tourism, entertainment, hotel lodging, surrounding mixed-use development, green space and a direct linkage to Downtown.	<ul style="list-style-type: none"> <li>• Develop and area-wide master plan</li> <li>• Identify and overcome river channel challenges</li> </ul>
Goal #5	The City will maintain a commitment to making Downtown Salina a thriving and vibrant center of the community.	<ul style="list-style-type: none"> <li>• Explore economic development strategies to: stabilize commercial office occupancy rates, create an incentive for downtown development/redevelopment to compliment assets and future river development in Kenwood/Oakdale Parks</li> </ul>
Goal #6	The City will work to make Salina a city that has connectivity physically and socially.	<ul style="list-style-type: none"> <li>• Update the transportation master plan to include bicycle lanes and trails that are integrated with other parts of the transportation system.</li> <li>• Plan for the physical connection of the Smoky Hill River with adjacent linear parks, through the development of a riverway trail plan, working in coordination with the Friends of the River.</li> <li>• Promote public and private partnerships for community projects and service endeavors.</li> </ul>
Goal #7	The City will recognize the importance of a healthy community and its natural resources, and will make practical efforts to preserve them.	<ul style="list-style-type: none"> <li>• Work with the Friends of the River to review options for Smoky Hill River water quality restoration in coordination with the community trail project.</li> </ul>

**FIGURE 1.18**  
**Strategic Plan Goals and Actions Table**

LAND USE AND ZONING

Existing land use along the Old Channel is predominantly residential, with commercial use clusters along S. Ohio Street, Kenwood Park, and E. Iron Avenue (Fig. 1.19). Central Business District commercial and medical center uses occur at the west edge of the planning area, with industrial uses generally to the northwest of the planning area associated with rail lines and mill properties. At a broad planning scale, land uses generally conform with existing zoning designations. Zoning designation for city parks (Residential, R-1) and Kenwood Park (Commercial, C-3) are consistent with the permitted use provisions of those designations. Potential future uses along portions of the Old River Channel are anticipated to require rezoning at some time in the future, when those new uses are proposed by owners of property.

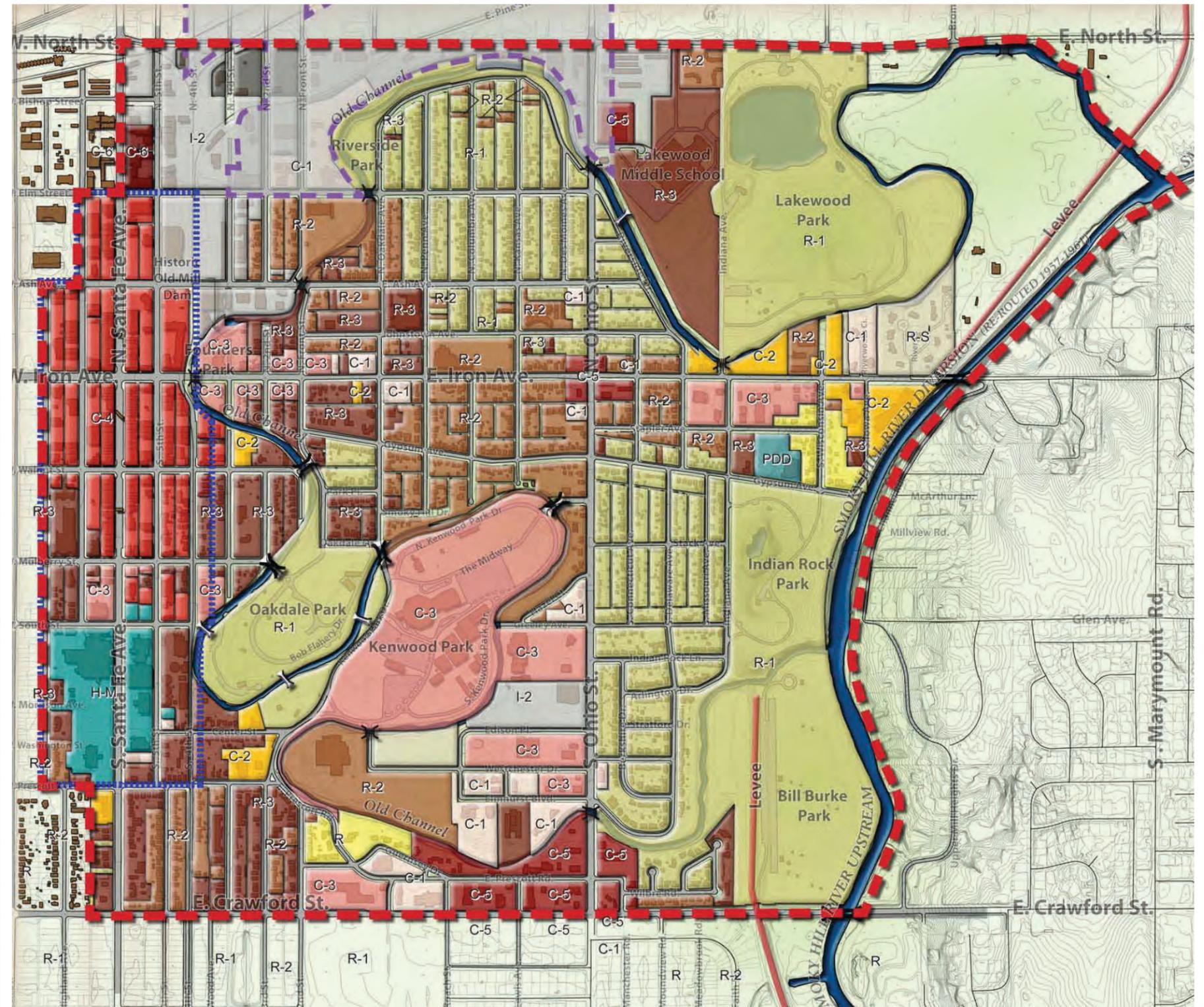
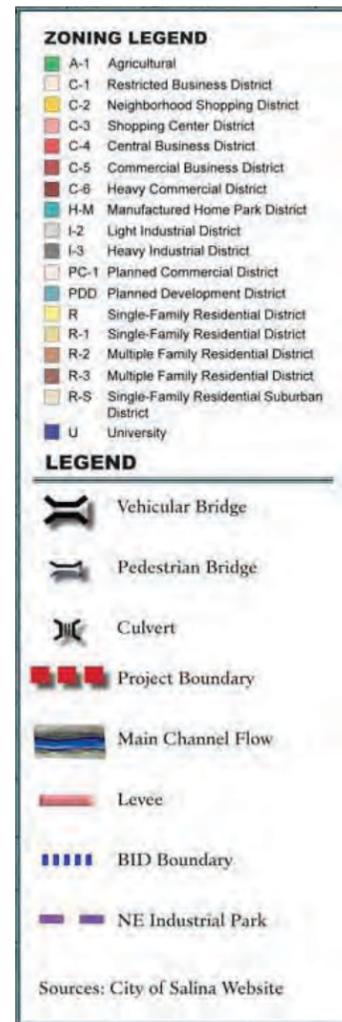


FIGURE 1.19 Existing Zoning

## TECHNICAL ISSUES

### INTRODUCTION

Based on the outcome of previous river renewal efforts, Wright Water Engineers (WWE) was able to focus Phase One – Discovery efforts on the inventory and analysis of technical issues associated with restoring flows to the Old River Channel. By reviewing past technical reports, interviewing key participants of those prior efforts and discussing issues with current staff, WWE used past efforts as a starting point to clarify issues and consider conceptual techniques to mitigate potential impacts resulting from those issues. The following bulleted summary identifies key issues and findings of those, predominantly non-mapped, topics.

#### 1. Physical Water Supply

- Physical water supply in the Smoky Hill River has historically been subject to periods of extended drought
- Historically, extended drought cycle recurs (approximately) on a ten year interval.
- During periods of extended drought, the Old Channel will experience periods of low-flow, or no flow.
- Techniques to mitigate periods of low-flow or no flow will need to be developed in later phases of the project.

#### 2. Legal Water Supply

- Water rights are administered by the Kansas Division of Water Resources (DWR).
- Initial discussions with DWR were conducted by the City, Friends of the River and WWE.
- DWR would be receptive to a recreational water right application by the City.
- Incremental water depletions are anticipated to be relatively small.



#### 3. Initial Approaches for Addressing Low-Flow and No-Flow Periods

- Dams that raise and lower to impound water in periods of low/no flow
- Line selected channel reaches to reduce seepage losses of water
- Design narrow, low-flow channels and other channel design techniques to maximize low-flows
- Pump back/ re-circulating alternatives (e.g., pumped re-circulation of channel water with supplements from the Lakewood Park lake)
- Other

#### 4. Anticipated Beneficial Uses of Restored River and Public Safety may include:

- Multi-purpose trails
- Bank stabilization
- Boating and kayaking
- Enhanced management of flows

#### 5. Sedimentation

- Sediment management is an important design issue—noted in various prior evaluations
- Limited historic sediment data is available
- Assessment of the amount of sediment to be cleaned out
- Determine if special disposal requirements for sediment, if contaminated
- Mitigation techniques to reduce sedimentation in the future

#### 6. Water Quality and Aquatic Life

- Aquatic life is present, but degraded
- Existing water quality is sediment laden
- Increased flows can contribute positively to reductions in algae and aquatic plant growth

## 7. Stormwater Quality Management and Permitting

- Currently, the required Stormwater Discharge permitting is in place with the approved stormwater management plan administered by the City.
- Existing storm drain outfalls into the Old Channel collect run-off from approximately five (5) square miles of urban watershed
- BMP opportunities may exist upstream, before outfall into the Old Channel, to demonstrate new techniques

## 8. Channel Improvements and 100-Year Floodplain Regulation

- Channel Improvements could effect the 100-Year Floodplain
- Removal of sediment and other impediments to flow
- Channel improvements can be designed to present no adverse effect

## 9. Environmental Regulatory Requirements include:

- Clean Water Act
- Federal Endangered Species Act
- National Historic Preservation Act
- National Environmental Protection Act
- Environmental Audit

### With Ecological Restoration Opportunities in the areas of:

- Riparian Forest Restoration
- Wetland Restoration
- Aquatic and Terrestrial Invasive Species
- They threaten open water and wetland habitats and pose a threat to the success of restoration projects
  - Eurasian Watermillfoil
  - Zebra Mussel
  - Purple Loosestrife

## 10. Channel Access and Maintenance

- Channel maintenance will be required for maintenance of proposed improvements, on-going sediment removal and other maintenance activities;
- Access routes for maintenance equipment will need to be provided at regular intervals along the channel

## 11. Existing Buried and Aboveground Utilities

- Existing utility relocations are anticipated with improvements
- More detailed information is necessary, in future phases of the project.
- Based on existing information, utility issues appear manageable

## 12. Existing Property Ownership

- Channel ownership is inconsistent throughout the length of the Old Channel
- The City currently owns property on at least one side of the Old Channel for 80% of its length.
- Private ownership and improvements that encroach in the channel will need to be addressed in future phases

## 13. Capital and Operations/Maintenance/ Replacement (OMR) Costs

- Capital and Operations/Maintenance/ Replacement (OMR) Costs should be estimated for proposed improvements in later phases of the project.
- The structural integrity of the Western Star Mill dam should be further evaluated in future phases of the project.

## 14. Phased Implementation

- It is anticipated that improvements will be implemented in a phased construction over time.
- A phased implementation plan should be developed, with channel flow restoration as a priority, in future phases of the project.



**INVENTORY AND ANALYSIS SUMMARY / OPPORTUNITIES AND CONSTRAINTS**

Evaluation of the Planning Area Context illustrates that there are a significant number of existing community facilities and public resources within the planning area that could benefit from, and be cultivated as partners in the river renewal.

- Existing public parks, recreation and educational facilities are already present along much of the course of the Old Channel, and could be creatively linked to create a looped community greenway system.
- Existing community activity centers and event venues are present along the Old Channel that could benefit from the river renewal.
- Major employers, The Downtown Salina Lee District, residential neighborhoods and redevelopment properties could all experience improved property value and business opportunities with investment in the river to create a community amenity.

The planning area is well-served by the existing access and circulation system. The river renewal offers the opportunity to further enhance community mobility with street linkages and a multi-use trail system.

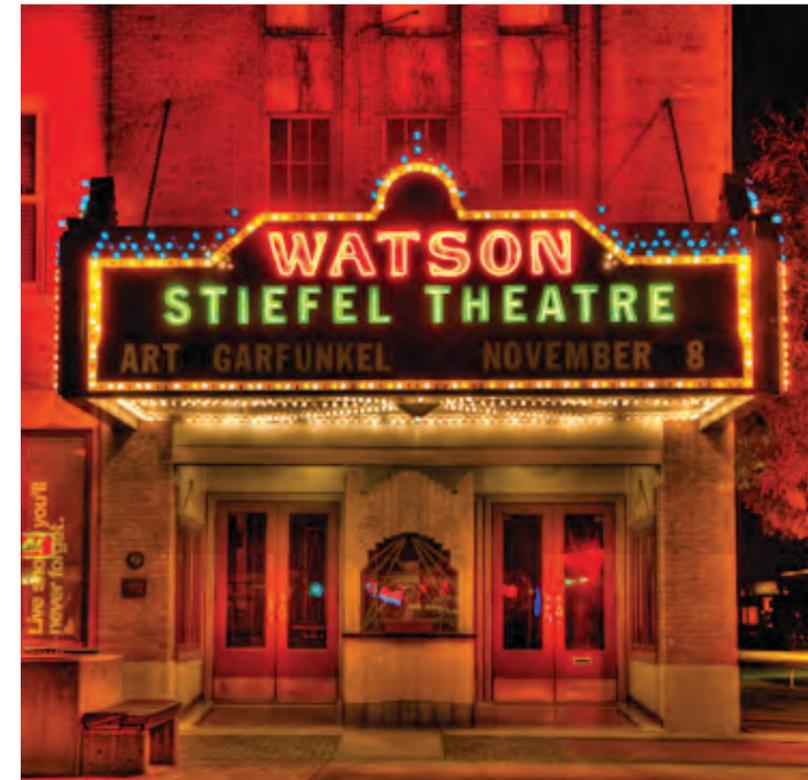
The City and other public entities currently own property on at least one side of the Old Channel for 80% of its length. Based on the planning and design that occurs in future phases, public and private ownership and their relationship to channel improvements will need to be addressed in future phases.

Long Range Planning documents that express future community growth and redevelopment aspirations repeatedly support the river renewal as a strategy to strengthen Salina’s core residential neighborhoods, business districts and community recreational opportunities.

Technical Issues associated with the river renewal are complex and require additional work in future phases to overcome the potential constraints they could represent. However, there is good reason to be optimistic that these issues can be overcome based on solutions that have been implemented in similar river renewal projects.



**Salina Regional Health Center**



**Downtown Salina - The Historic Stiefel Theatre**



**The Bicentennial Center**



**Salina Family YMCA**  
Image Courtesy of JGR Architects

## INTRODUCTION

The Salina community has established a tradition in its more successful community projects as being public-private partnerships that actively involve community input from interest groups, and solicitation of donations from private funding sources. Public resources and funding have regularly been integral to the success of those campaigns. Recent examples of public-private partnerships include:

- The historic Stiefel Theatre renovation
- Salina Community Theatre
- Soccer Fields
- Salina Central Tennis Courts
- The First Tee Program

The notion of public-private partnership is at the core of values expressed in the five-step planning process proposed at the project outset. The Friends of the River proposed that they would conduct a Phase One - Public Outreach process that was community-based and funded entirely by private donations.

Embracing the principles of public-private partnership, and community-based, grassroots participation, DSW proposed a Public Outreach and Community Engagement process that was specifically tailored to the needs of the Salina Community, Friends of the River resources and the specific issues associated with the Smoky Hill River Renewal. That process would include:

- Active outreach to and engagement of grassroots citizens
- Identification of improvement preferences
- Characterization of types of improvements
- Location of improvements
- Confirmation of existing use patterns
- Confirmation of attitudes and community values toward the river,
- Confirmation of the desire to make the River Renewal as a Community priority
- Confirmation that the community is satisfied with information presented to proceed forward to the next step in the process

At the core of the process is the DesignStudiosOutreach community outreach process.

## PUBLIC OUTREACH PROCESS OVERVIEW

DesignStudiosOutreach (DSO©) is a proprietary planning and design public engagement method that has been used by Design Studios West, Inc. for a variety of public and private planning and design projects throughout North American and overseas. The process is intended to actively engage participants and clients in better understanding user preferences and desires for future improvements.

Very often, the public participants of a planning or design process are not allowed, or are very limited in their opportunities to provide usable input and ideas that actually advance or inform the planning and design professionals about a future project. In most cases, the planner or designer develops a “program” of improvements that may or may not capture what the public truly desires as a desired outcome of the planning and design process or, is readily desired by the end-user or community. DSO is intended to promote tremendous input and direction very early in the planning process in a manner that is open, transparent, fun, convenient and cost effective.

The results generated from DSO are inspirational, specific, qualitative and quantitative. DSO produces relevant information for public officials that are reflective of the community they serve, in a public forum that is defensible and non-controversial. DSO produces “targeted” results for the ownership group that reflect specific improvements that are demographically-oriented and end-user group highly desires by type and location.



The Friends of the River organized five (5) Citizen Focus Committees to develop Goals and Objectives for the River Renewal and to select Uses and Activities images for preference boards

**THE DSO PROCESS**

DSO is an information-gathering method that provides choice for the end-user participants and direction for the public or private owner (client). There are three elements to DSO that make the process predictive, cost-effective and functional.

**1. Choice**

Very often, at the beginning of a public or private planning and design process the client will offer the participants the opportunity to provide “input” on what they would like to see, or have designed, or to discuss project related issues that need to be resolved as a result of the “public engagement process”. The fact is, rarely does this “public engagement” or “user survey” reflect what the end-users or participants really want, desire or would be willing to support emotionally, financially or politically. The majority of these “public and private” engagement methods fail simply because they do not provide the participants choice.



DSO provides participants the opportunity to select potential uses, activities, services, facilities and technologies for a specific project. A variety of images are labeled and numbered that the participant selects and places within the project area. The selection process is open and not supervised by consultants or the client. The process is intended to allow the participants to examine the “physical area” of the proposed improvements and to simply select various images that they feel would be appropriate and desirable for the area. The participants are provided a large scale map of the “project area” – which may be, for example; a specific site, city, river corridor, subdivision, downtown business district, neighborhood or un-developed open space. The ‘site’ is enlarged on a map to allow the participants to recognize the area, noting specific landmarks and features that are commonly known and understood. The participant is then provided with an array of labeled images that illustrate

uses, activities, services, facilities and technologies that they then place on the selected site area.

The participants place “data inputs” on the site area that correspond to the numbered and labeled image. They can place as many or as few data inputs as they feel appropriate. The participants are not lectured to, instructed or “manipulated” by the client or their consultants in any way. Participants can spend 30 minutes placing data inputs or the entire day. There is no time restriction. Most often, the participants informally discuss their thoughts and ideas while placing their data inputs with their friends or associates. It is an open meeting often starting at 7 am in the morning and ending at 9 pm in the evening. It is not a public presentation, inquisition, or trial. There is no right or wrong answers. There is no microphone. The intent is to provide participants with choice.



**2. Location**

Based on the placement of the “data inputs” the client can begin to determine the intensity of inputs. It becomes very obvious that the participants not only have specific preferences of uses and activities but that they also have preferences on where these are located. This resulting “density” of data inputs begins to define areas of relative importance and potential phasing opportunities. The client can clearly see that for a given project site, city area, river corridor or open space that the participants desire certain improvements in a specific area or location.

**3. Analysis**

The analysis generated from the DSO process is highly participatory and engages a high number and diversity of people. Specifically, it does not favor or deny special interest groups or individuals that are highly favorable

to the project or those that are highly against the project. Anyone can place a data input on the selected project area that will register as a “data input” and be assured that it will not be artificially “calibrated” or “weighted” because of political, economic or social standing. The intent is to use “photographic images” that all age groups, nationalities, income groups, education, and related demographics recognize and are “prejudice free”. The data input is a numbered dot on the map placed by a child, senior citizen, married, executive or un-employed individual. Each data input is then analyzed to determine several attributes.

- The first order of analysis determines the “qualitative characteristics” of their data inputs for use, activity, service, facility or technology. This is the “type” of improvements desired. At a very early stage this analysis will determine active from passive uses, site improvements from architectural improvements, and other activities that require utilities and infrastructure.
- Based on the sorting of the “type and character” of improvements the data inputs are quantified or calibrated. This is the second level of analysis. Each data input is registered to see the relative “popularity” of a particular use or activity. This analysis clearly “describes and defines” the qualitative type of improvements that the participants desire and the relative “intensity” of the combined uses and activities.
- The third level of analysis defines the “locational” attributes. Some areas will be highly desirable for certain types of improvements while other areas will exhibit fewer types of improvements. This will inform the client of both the “type” of improvements, the “intensity” of potential improvements and the “location” of these improvements within the project area. The data inputs will statistically calibrate the type, number and location of improvements. Hence, DesignBase 3.

**PUBLIC OUTREACH PROCESS SUMMARY**

DSO is a planning and design method that encourages and rewards active participation in a fun and transparent manner while providing the client with usable information that is non-biased, non-confrontational, qualitative and quantitative. It is an efficient, cost-effective method that reflects our very busy, stressed and well-informed public - that is also often well-traveled, increasingly concerned with cost, and is technologically-oriented. DSO was conceived and designed by Design Studios West, Inc. based on their professional planning and design practice. Design Studios West has utilized and refined the DSO process on a range of public and private projects that have been very successful.

## TAILORING DSO PROCESS TO THE SMOKY HILL RIVER RENEWAL

In order to tailor the DSO process to the specific needs of the Smoky Hill River Renewal, DSW enlisted Friends of the River volunteers to assist in organizing Community Outreach material to be presented in a series of Public Outreach events, to engage and obtain the community’s input. DSW asked Friends of the River volunteers to identify focus topics, to be addressed by FOR Citizen Focus Committees. The citizen focus committees provided the first level of citizen input in guiding the consultant team in what information, topics and choices should be presented to the greater Salina Community for their input. Based on FOR volunteer input, committees were organized to address the following five (5) focus topics:

- Environmental;
- Recreation and Wellness
- Education
- Community
- Economic Development

### COMMUNITY VALUES, GOALS AND OBJECTIVES

The Friends of the River Citizen Focus Committees met with the consultant team to discuss committee responsibilities and specific tasks required for each focus committee. The purpose of the committees was to discuss, organize and present goals and opportunities that represent Salina community values and interests in the five respective focus topics (Fig. 1.20). Furthermore, committees were asked to select images of uses activities for the DSO preference exercises. The goals, objectives and images would then be presented in public outreach process for the community to confirm or amend. Specific instructions to focus committees included:

1. Give examples of goals and opportunities; brainstorm, research, and discover, the attributes of your focus topic developed by other riverfront communities.
2. For your focus topic, determine ideas and programs, projects and events, potential partnerships, and uses and activities that could occur as the result of the river renewal.
3. Help the Salina Community better understand and appreciate how the attributes of your focus topic can improve and benefit the community in the river renewal,
4. Be an avid advocate for your focus topic; seek out community groups, organizations, individuals and others;
5. Select images that demonstrate the benefits of your focus topic in the river renewal, including policies and programs, uses and activities, and elements and installations

Friends of the River Foundation  
**Recreation and Wellness Committee**  
Goals and Objectives

**Goal #1: Provide a variety of Recreational and Wellness opportunities for people of all ages, abilities, economic, social, and ethnic backgrounds;**  
*Objective A:* Provide Recreation and Wellness opportunities along the river that promote socially diverse community activity as well as a range of age group and interest-oriented activity areas/ facilities;  
*Objective B:* Work cooperatively with existing Recreation and Wellness providers to support and strengthen the mission-focus of those providers while promoting new facilities and providers to offer expanded recreation and wellness opportunities;

**Goal #2: Connect people, parks, and other Recreation and Wellness venues of the city;**  
*Objective A:* Provide a continuous Open Space and trail corridor along the river with direct access from adjacent parks, neighborhoods and other facilities;  
*Objective B:* Strengthen the physical and program connections between the river and the Salina Regional Health Center;

**Goal #3: Promote expanded Recreation and Wellness opportunities for the citizens of Salina.**  
*Objective A:* Reintroduce water-based Recreation to the river, such as fishing, paddleboats and canoes;  
*Objective B:* Develop linear Recreation and Wellness facilities, such as multiple use and dedicated trails for walking, running, biking, skating and exercise station fitness courses;  
*Objective C:* Develop Recreation and Wellness facility nodes, such as rehabilitation therapy courses, playgrounds, skate parks, horse shoe/shuffleboard courts and other active recreation complexes.

*Are there other Goals and Objectives that are important to you?  
Please share your ideas:*

- with Volunteers
- using our Comment Sheet, or
- by completing our Questionnaire



Friends of the River Foundation  
**Environmental Committee**  
Goals and Objectives

**Goal 1: Eliminate pollutants introduced through storm water runoff.**  
*Objective 1:* Establish a baseline study of water quality and initiate a continuous monitoring program.  
*Objective 2:* Educate citizens regarding methods to reduce nonpoint source water pollution.  
*Objective 3:* Demonstrate the ability of riparian areas and wetlands to filter pollutants from storm water and river water

**Goal 2: Partner with the City of Salina to promote public awareness of water supply and use.**  
*Objective 1:* Establish a means of communicating to citizens both past and current flows through the Old Channel of the Smoky Hill River and its relationship to public water supply.  
*Objective 2:* Provide educational materials and instruction regarding water conservation practices.  
*Objective 3:* Develop sites along the riverbank to demonstrate water conservation practices.

**Goal 3: Eliminate the erosion of the Old Channel of the Smoky Hill River.**  
*Objective 1:* Reconstruct the physical channel to better represent the Old Channel prior to diversion.  
*Objective 2:* Restore self-sustaining native riparian and wetland plant communities lost to erosion.  
*Objective 3:* Provide hands on opportunities for citizens who want to be involved in the restoration project.

**Goal 4: Increase the capacity of the Old Channel of the Smoky Hill River to improve its ability to mitigate a 100-year flood event.**  
*Objective 1:* Increase the Old Channel flood capacity by redirecting flow, removing silt, clearing invasive vegetation, and increasing velocity.

*Are there other Goals and Objectives that are important to you?  
Please share your ideas:*

- with Volunteers
- using our Comment Sheet, or
- by completing our Questionnaire



**FIGURE 1.20**  
Friends of the River Citizen Focus Committees developed Goals and Objectives for the River Renewal that were strongly endorsed by Open House participants

The Goals and Objectives prepared by each Focus Committee were then formatted on boards for public presentation by the consultant team, for citizen input.

**Friends of the River Foundation**  
**Economic Development Committee**  
 Goals and Objectives

**Goal:** To encourage public and private renewal and new development that will create an amenity migration to places where people want to work, to live and to visit.

**Objective 1:** To improve the Old Channel of the Smoky Hill River as an Economic catalyst for public and private development that will benefit the entire community.

- A. Decrease the size of the flood plain to reduce flood insurance requirements.
- B. Increase the legal and physical supply of water in the Old Channel.
- C. Improve storm water quality and capacity.

**Objective 2:** To enhance our quality of life with revitalization of the seven miles of Old Channel of the Smoky Hill River in the project area.

- A. Bring back the vitality and restore the legacy of the Old Channel area for future generations.
- B. Reestablish the Old Channel as a means of building community character.
- C. Stabilize and enhance the property tax base of the area with added value for the long term economic benefit of the entire community.

**Objective 3:** To use the Smoky Hill River Renewal as a stimulus for revitalization and new development.

- A. Create retail business areas fronting the Old Channel including restaurants and cafes.
- B. Plan for adjoining riverside residential zones from single family through apartments and condominiums.
- C. Develop a north side Business Office Park to include light industrial enterprises.
- D. Construct by segments the entire Smoky Hill River Trail project with access to the water and boating opportunities.
- E. Build a riverside stage, in either Oakdale Park or Founders Park.
- F. Consider the development of a riverside convention hotel in Kenwood Park.
- G. Develop a riverside Smoky Hill Museum annex that could include a flour milling institute, an aricultural tourism center or a Kansas Culinary Institute.
- H. Establish an open air Festival Market that could be used for farmers market and other entertainment.

*Are there other Goals and Objectives that are important to you?  
 Please share your ideas:*

- with Volunteers
- using our Comment Sheet, or
- by completing our Questionnaire

**Friends of the River Foundation**  
**Educational Committee**  
 Goals and Objectives

**Goal #1:** Include an education component in every aspect of the Smoky Hill River Renewal project;

**Objective A:** Provide Educational opportunities along the river that accommodate youth instruction, family group learning experiences and continuing education/life-long learning;

**Objective B:** Provide Educational opportunity areas along the river, including outdoor classrooms, learning laboratories, and primitive trails/observation areas for individual exploration;

**Objective C:** Incorporate and communicate specific techniques that are environmentally beneficial to the river renewal in the design and construction of river improvements;

**Goal #2:** Encourage identification of river-related issues and creating programs to raise awareness of and appreciation for the river;

**Objective A:** Identify environmental issues and Educational programs for topics such as water quality, aquatic/wildlife habitat, native wetland/terrestrial plants, erosion and siltation;

**Objective B:** Identify community issues and Educational programs for topics such as community water supply and treatment, sanitary sewage treatment, storm water quality, flooding and floodplain;

**Objective C:** Work with allied Educational organizations/ institutions to integrate river renewal activities and facilities with standard curricula.

**Goal #3:** Inform and educate local citizens and visitors about the many ways the river affects our community.

**Objective A:** Develop self-guided interpretive installations along the river to describe notable physical, biological, cultural and historic site conditions along the river;

**Objective B:** Develop Educational brochures/ newsletters/ website articles that communicate cause/effect relationships of river conditions and the purpose of river improvement installations.

*Are there other Goals and Objectives that are important to you?  
 Please share your ideas:*

- with Volunteers
- using our Comment Sheet, or
- by completing our Questionnaire

**Friends of the River Foundation**  
**Community Committee**  
 Goals and Objectives

**Goal 1:** Reinvigorate our relationship with the river to create a:

- A. Better understanding of our roots
- B. Affordable source of recreation and culture
- C. Accessible resource that belongs to all Salinans

**Goal 2:** Revitalize the historic heart of the Community to help:

- A. Create a shared sense of place - "This is who we are and where we live"
- B. Reconnect with our heritage - "This is where we come from"
- C. Strengthen community pride and identity

**Goal 3:** Reconnect diverse neighborhoods to help:

- A. Build a sense of unity in the Community while celebrating our diversity
- B. Create economically stable neighborhoods
- C. Stimulate stronger neighborhood identities

**Goal 4:** Realize social, cultural and recreational activities enhanced by the River's revitalization to help:

- A. Connect resources along the river such as our parks, arts organizations and other facilities with each other and with the community
- B. Create opportunities:
  - for exercise and recreation
  - for gathering together
  - to experience joy and pleasure through features and facilities such as jogging trails, boat docks, amphitheaters, fountains and waterfalls
- C. Create a beautiful space for the entire community through attention to the:
  - natural aesthetic of the river and the flora and fauna around it;
  - aesthetic of the built environment along and near the river;
  - entire river channel loop

*Are there other Goals and Objectives that are important to you?  
 Please share your ideas:*

- with Volunteers
- using our Comment Sheet, or
- by completing our Questionnaire



**USES AND ACTIVITIES**

Each of the Focus Committees were provided images illustrating potential riverfront Uses and Activities, and were asked to select images that reflected their perception of the improvements that were appropriate for the Salina community’s interests, needs, wants and desires. The Focus Committees were invited to identify additional images that should be added and any that were clearly inappropriate for a community of Salina’s size and character.

Uses and Activities images were selected from a digital data base assembled by DSW from examples of other riverfront and community projects across the Nation. Images included specific design elements and installations, suggestions of policies and programs, and were not strictly limited to the categories of uses and activities.

Images were arranged randomly for display on nine (9) presentation boards with 20 images on each sheet (Fig. 1.21). Each of the 180 total images was presented with a key numeral and descriptive title. The descriptive title is provided to more clearly focus viewer attention to the primary element being represented by the image.

**IMPROVEMENTS TYPE AND CHARACTER**

Uses and Activities presented to the Focus Committees were categorized by improvement type and character. By organizing uses and activities to corresponding focus topic area, an indication of the relative priority of the types and character could be provided for the improvements and the overall River Renewal effort.



**FIGURE 1.21**

**Uses and Activities Boards** - Uses and Activities were selected from numbered image boards featuring images recommended by Focus Committees

**Site Locations**

In order to allow outreach participants to identify locations for improvements without bias or limitation to consultant perceived project boundaries, a current, high resolution aerial photo of the entire project influence area was formatted to illustrate the entire influence area (Fig. 1.22). A River Reaches key plan, designating the river channel into three (3) subareas; South, Central and North, was prepared to provide participants additional reference and orientation. River Reaches were designated based on existing physical characteristics of adjacent properties, land use and channel character.

**Current Use Patterns**

In recent decades, the growth of the City of Salina has been predominantly to the south, with a resulting shift of residential neighborhoods away from the Old River channel area. To ascertain the familiarity of level of citizens with the Old River Channel and current use patterns, a questionnaire was developed to determine the user profile, frequency of use and current use patterns of potential outreach participants.

**Community Values and Attitudes**

To identify the importance of the Old River Channel and community values and attitudes toward the Old River Channel, additional questionnaire topics were developed regarding perceptions about safety, the importance of the river to the community identity of Salina, as well as memories associated with the Old River Channel. Finally, the questionnaire asked if the River renewal was a good idea for the community to pursue.



Open House participants placed numbered data input stickers corresponding to preferred Uses and Activities at locations on an aerial photo



**FIGURE 1.22**  
**Community Preferences by Data Input** - Data input sticker density and uses illustrate most intense and less intense areas of interest in the project area

## PUBLIC OUTREACH AND ENGAGEMENT CIVIC OUTREACH AND INFORMATIONAL PRESENTATIONS

In the weeks leading up to the Public Engagement events, Outreach Committees hosted monthly meetings and met with local civic groups and service organizations to introduce the project and make informational presentations. Meetings, presentations and outreach included 14 civic group presentations with over 635 attendees, 15 open Friends of the River monthly meetings and outreach to 80 active Friends of the River committee members and numerous financial donors while preparing Goals and Objectives tailored to the specific uses Salina needs.

### PUBLIC OUTREACH ADVERTISING AND PUBLICITY

Public outreach advertising and publicity of events was conducted through a wide range of sources and media, coordinated by the Friends of the River Publicity Committee. Television and radio news and community talk shows featured Friends of the River spokespersons, while the local newspaper and newsletters were also engaged through interview opportunities. Street Banners and handbills were designed and produced to hang over S. Santa Fe Avenue and for display in local store windows. On the day of events, lawn signs were posted as reminders to attend.

### PUBLIC ENGAGEMENT EVENTS

The Public Engagement outreach was conceived to provide a range of convenient times and locations for the public to participate and provide input. A series of three (3) events were planned that would include the same material at geographically dispersed locations throughout Salina. Working with the Friends of the River Facilities Committee, DSW prepared detailed event layout and presentation set-up plans that were then executed by Friends of the River volunteers. Events were scheduled on different dates spanning five (5) days, extending from early in the morning, into the evening. By making the events convenient for participants, the widest range of participation was sought.

#### Outreach events included:

**The Stiefel Theatre,** The downtown location of the Stiefel Theatre event was selected to provide a central Salina location to serve residents of northern neighborhoods and employees of downtown businesses. The Stiefel Theater is a past public-private partnership. The event was scheduled on a Friday, to provide a weekday opportunity to capture participants before and after business hours, as well as noon-hour lunch participants. In the morning, breakfast refreshments were served. At

lunch time, the local Burger King franchise provided a free lunch menu, accompanied by street-side music provided by a local bluegrass band led by former Mayor and U.S. Congressional candidate, Alan Jilka. Cookies and beverages were served in the evening. Hours of Operation were 7:00 a.m. to 7:00 p.m., with Friends of the River volunteers and consultant team members serving as event hosts and docents.

**The Central Mall Shopping Center:** The south suburban location of the Central Mall event was selected to provide a South Salina location to serve residents of southern neighborhoods and shoppers from the greater Salina area. The Central Mall is the only indoor shopping mall in Salina and serves as a suburban activity center for residents who do not frequent the downtown area. The event display was prominently located in the central court of the mall, for ease of reference and to capture interested passers-by. The event was scheduled on a Saturday, to provide a weekend opportunity for participants throughout the day. Refreshments were limited throughout the day to avoid conflicts with mall merchants. Hours of Operation were 7:00 a.m. to 9:00 p.m., with Friends of the River volunteers and consultant team members serving as event hosts and docents.

**The Smoky Hill River Festival:** The central location in Oakdale Park for the Smoky Hill River Festival event was selected to provide an on-site presence along the Old Channel at the premier Salina event of the year. The Smoky Hill River Festival, with an attendance of 75,000 each year, it is one of the largest fine arts festivals of its kind in the nation and the largest community event of the year in Salina. The event display tent was prominently located at the intersection of primary circulation routes serving the performance stage and food vendors. The event was scheduled on Friday, Saturday, and Sunday to provide a weekend opportunity for participants throughout each day. Refreshments were limited throughout the day to avoid conflicts with festival merchants. Hours of operation were 9:00 a.m. to 9:00 p.m., with Friends of the River volunteers and consultant team members serving as event hosts and docents.

### PUBLIC ENGAGEMENT EVENT PRESENTATIONS

The Public Engagement presentation materials included;

- Project Introduction
- Historic Imagery of the Old River Channel
- "A River Runs Through It" river history PowerPoint
- Inventory and Analysis
  - Regional and City Context
  - Planning Area Context
  - City-wide and Project Floodplain

- Access and Circulation
- Land Use and Zoning
- Utilities
- Proposed Project Goals and Objectives – Five (5) sheets of Goal and Objectives were prepared by Focus Committees for review, input and confirmation.
- Uses and Activities - 180 images were presented with descriptions and data input numerical key designations
- Site Aerial Photo – A high-resolution aerial photo of the entire Project Area was printed at 1' = 100 scale (8'x8') to receive the data inputs,
- Public Outreach Questionnaire – A two (2) page, 8 ½ x 11 Questionnaire with 20 Multiple choice questions and 4 fill-in the blank questions for additional comments.



## RESULTS

Outreach consisted of five (5) days of events at the 2009 Smoky Hill River Festival, The Stiefel Theater and the Central Mall. During these events participants reviewed inventory maps, filled out questionnaires, and participated in community preferencing about the Goals and Objectives, Uses and Activities, and noted locations on the large aerial photo map of Salina.

Over 3,500 attended the outreach events and mapped 2,753 data inputs and completed 330 questionnaires. This information was recorded and organized to create a Character Statement and note the Top Ten uses for each of the Smoky Hill River reaches.

## RIVER REACHES

The Old River Channel was pre-designated into North, Central and South reach areas based on geographic and physical characteristics. Interest in improvements along the Main Channel of the Smoky Hill River (in Bill Burke Park) and the Diversion By-pass Channel led to the designation of it as a fourth reach area (Fig. 1.23).

## GOALS AND OBJECTIVES

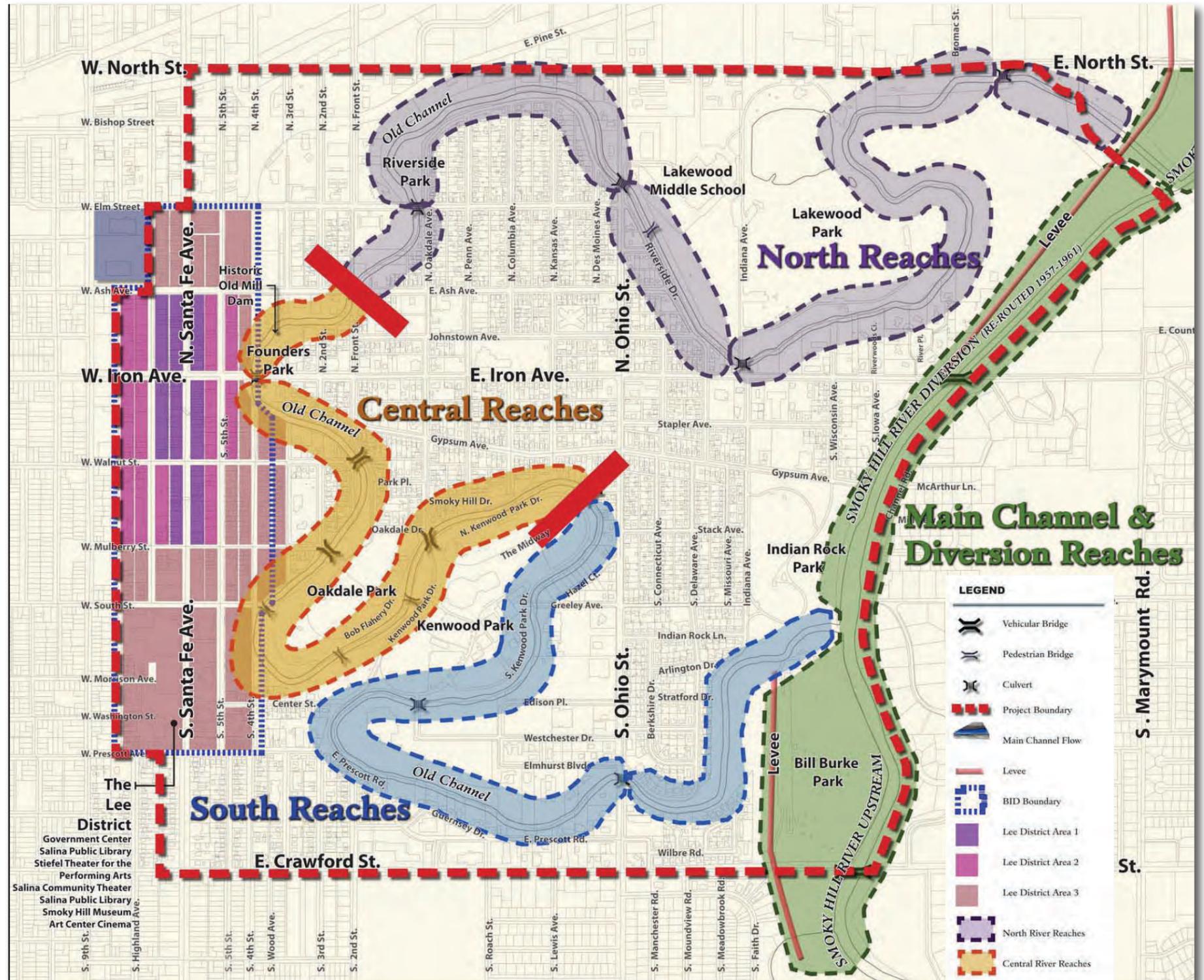
The goals and objectives crafted by the Friends of the River, Citizen Focus Committees for citizen review and comment were overwhelmingly endorsed by participants. Overall, 90% of respondents Agree or Strongly Agree with the Committee Goals and Objectives. The results for each respective focus topic were tabulated separately with the following percentages of participants indicating that they agree or strongly agree with the proposed goals and objectives: Recreation and Wellness (93%), Environmental (92%), Community (88%), Economic Development (88%), Education (84%).

## USES AND ACTIVITIES PREFERENCES

Citizens participating in the public Outreach Events were asked to indicate their preferences for uses, activities and improvements by reviewing 160 numbered images of riverfront improvements and locating adhesive data inputs stickers on the large aerial map of the project area.

Data input responses for each reach indicated great interest in the Central reach and relative interest in the other reaches. Tabulation of uses and activity preferences resulted in a general character statement for each reach and their respective top ten uses and activities. Those general character statements, uses and activities preferences, along with proposed project goals will guide the Master Plan. A complete tabulation of all preference input is included in the Appendix.

**Character statements and the Top Ten preferences for uses and activities in each reach included is shown on the following pages.**



**FIGURE 1.23**  
**Four River Reaches**

**THE CENTRAL REACH IS CHARACTERIZED AS A PLACE OF:**

**Urban uses**

On, and around an active, urban Riverfront with channel-side improvements and multi-level buildings

**Downtown extension**

Urban uses clustered between Downtown and the River from Center Street to Ash Street

**Festive Activity**

Evening and Night time use, as well as daytime activity

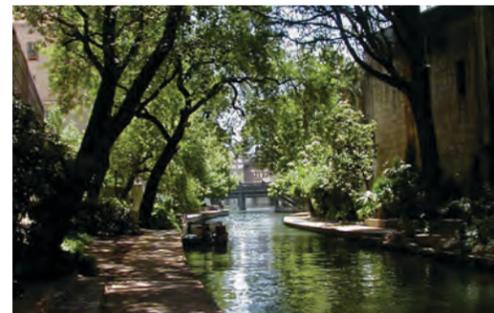
**Economic Activity**

With restaurants, cafes, and other waterside dining, as well as multi-level shops, riverside hotel and retail uses

Water-related Activities - With excursion boats, paddleboats and canoes on the water



**CENTRAL REACH TOP TEN USES AND ACTIVITIES**



**1. RIVERWALK**



**5. RIVERSIDE CAFE**



**8. COMMUTER BIKE TRAIL**



**2. RIVERSIDE RESTAURANT**



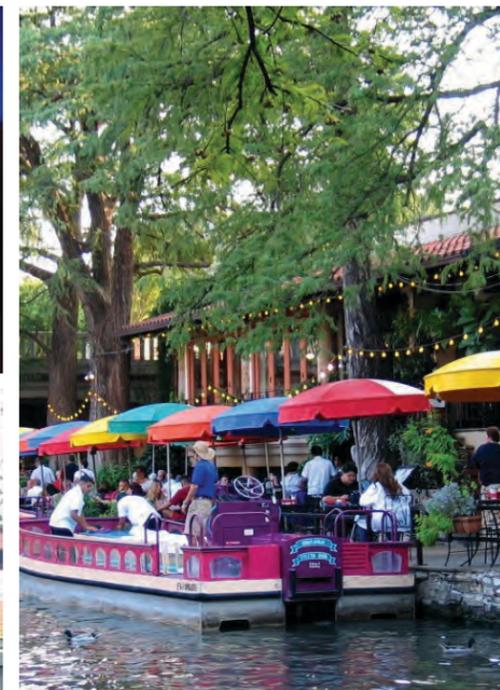
**6. RIVERSIDE ENTERTAINMENT**



**3. WATERSIDE DINING**



**7. MULTI-LEVEL RETAIL**



**9. EXCURSION BOATS**



**4. FESTIVE NIGHT LIFE**



**7. MULTI-LEVEL RETAIL**



**10. MONUMENTAL WATER FEATURE**

**THE SOUTH REACH IS CHARACTERIZED AS A PLACE OF:**

**Recreation Use**

On, and around the river with a range of bicycling, boating and fitness activities

**Park Connections**

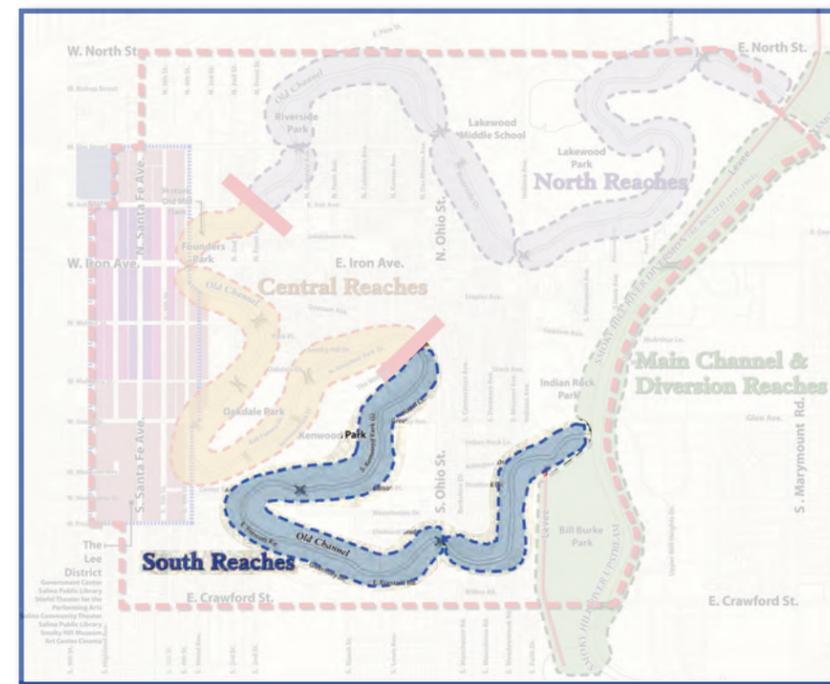
Recreational and fitness trail, bicycling and activity linking Kenwood Park, Indian Rock and Bill Burk Parks

**Rec & Fitness Activity**

In addition to bicycling, courses devoted to fitness, ropes and disc golf, as well as 5k, 10k and other race events

**Water-Related Activity**

With excursion boats, paddleboats and canoes on the water and fishing along the river



**SOUTH REACH TOP TEN USES AND ACTIVITIES**



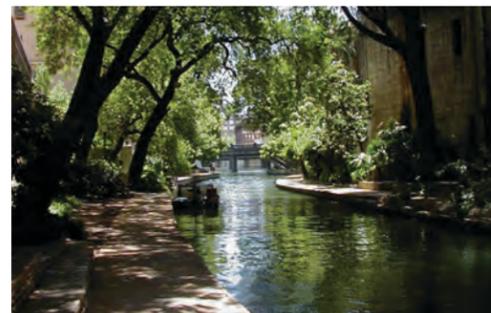
**1. COMMUTER BIKE TRAIL**



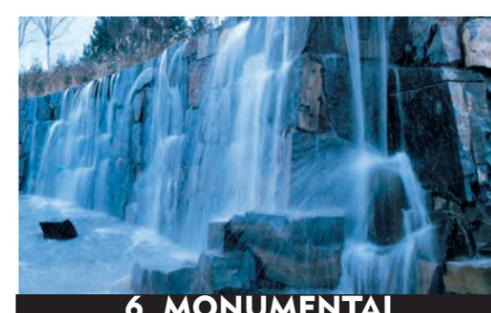
**5. RECYCLING CENTER STATION**



**8. EXCURSION BOATS**



**2. RIVERWALK**



**6. MONUMENTAL WATER FEATURE**



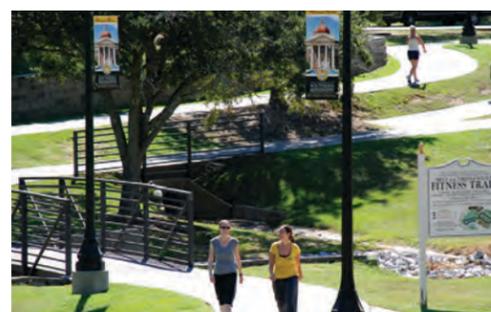
**9. PADDLE BOATS**



**3. OFF-ROAD BIKING**



**7. ENHANCED CREEK AREAS**



**4. FITNESS TRAIL**



**10. DISC GOLF COURSE**

**THE NORTH REACH IS CHARACTERIZED AS A PLACE OF:**

**Education**

On, and around an active, urban Riverfront with multiple-levels & features

**Lakewood Park & Middle School extension**

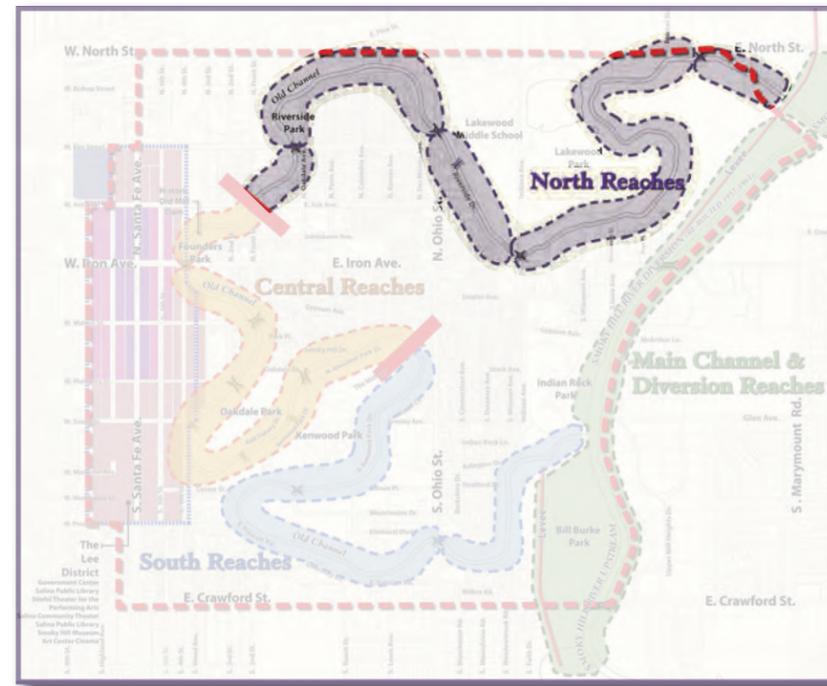
Natural area clustered in Lakewood Park, linked to the Lakewood Middle School site and downtown by trails

**Nature Activity**

Constructed wetlands, wetland areas with trails and formal amphitheater

**Water-related Activity**

In Lakewood Park with paddleboats and canoes on the water



**NORTH REACH TOP TEN USES AND ACTIVITIES**



**1. COMMUTER BIKE TRAIL**



**5. ROPES COURSE**



**8. GROUP CANOE TRIPS**



**2. WETLAND AREA WITH TRAIL**



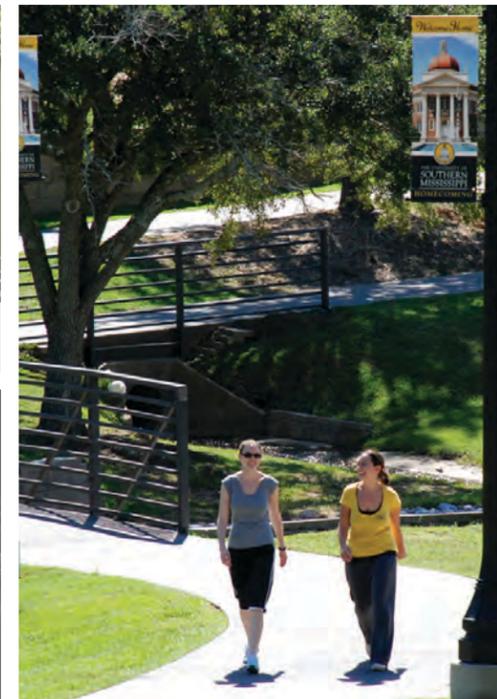
**6. OFF-ROAD BIKING**



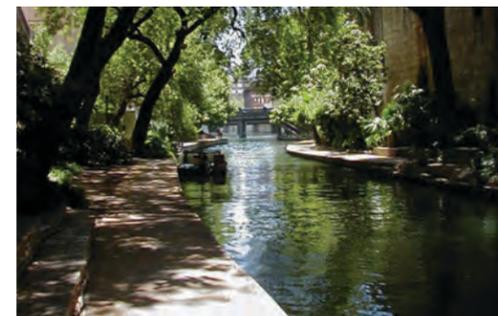
**9. CONSTRUCTED WETLAND**



**3. PADDLE BOATS (LAKEWOOD LAKE)**



**7. FITNESS TRAIL**



**4. RIVERWALK**



**10. FORMAL AMPHITHEATER**

**THE MAIN CHANNEL / DIVERSION BY-PASS REACH IS CHARACTERIZED AS A PLACE OF:**

**Regional Trail Connection**

Regional connection and extension links downtown to major parks & regional open space by trails

**Athletic Activity**

Bill Burke Park athletics complex activities with added ropes course, off-road biking

**Water-related Activity**

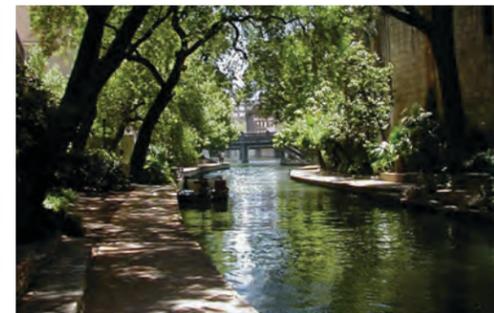
Fishing access, kayak course and excursion boats on and along the riverfront



**MAIN CHANNEL / DIVERSION BY-PASS REACH TOP TEN USES AND ACTIVITIES**



**1. COMMUTER BIKE TRAIL**



**5. RIVERWALK**



**8. ROPES COURSE**



**2. MONUMENTAL WATER FEATURE**



**6. WATER SKIING**



**9. FISHING AREAS**



**3. KAYAK COURSE**



**7. WATERSIDE DINING**



**4. OFF-ROAD BIKING**



**10. EXCURSION BOATS**

## QUESTIONNAIRE RESPONSES

Results provided in the 330 Citizen Questionnaires received at Community Outreach events characterized participant responses to questions focusing on:

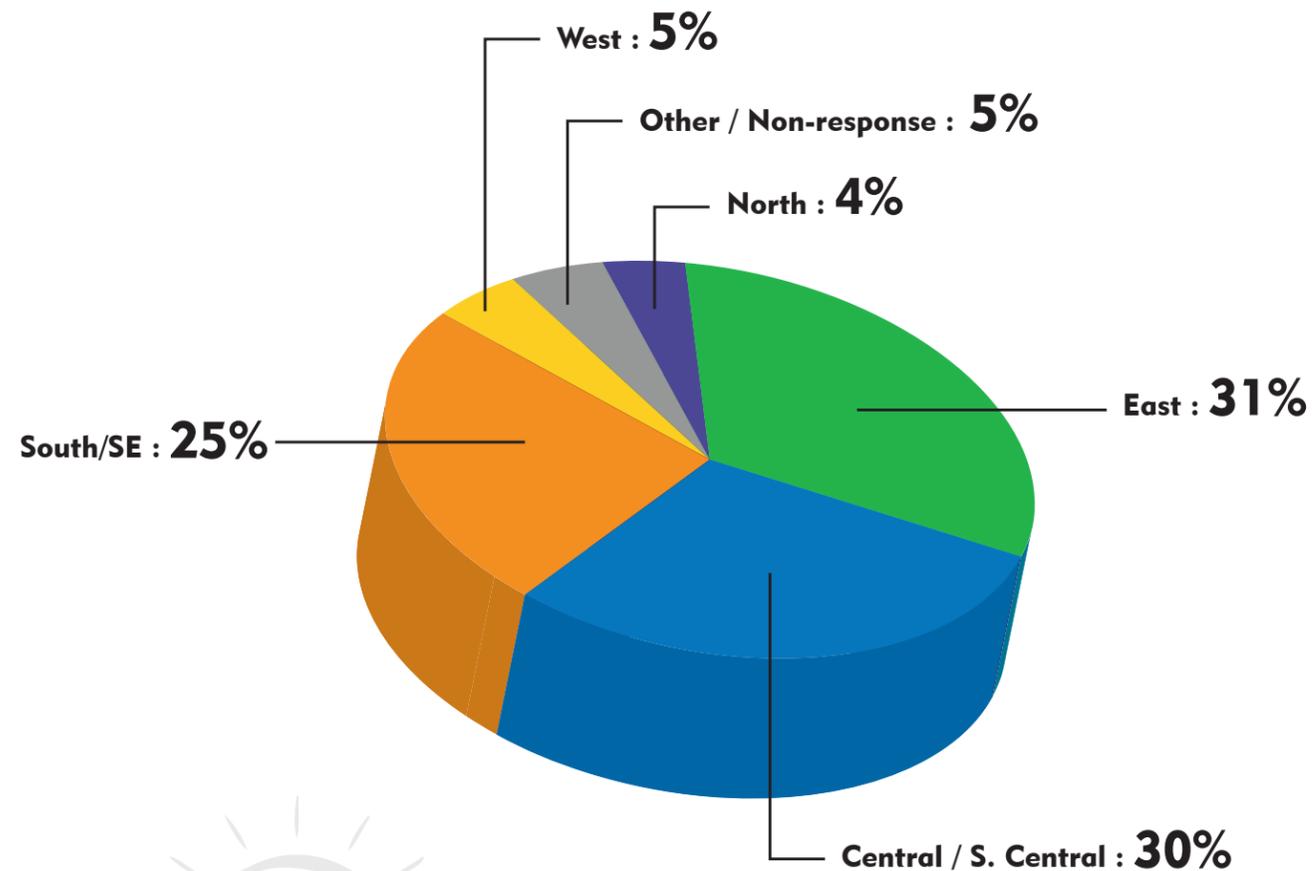
- Current Use Patterns
- Opinions and Attitudes
- Comments and Phrases

The 20 multiple choice questions were tabulated to provide statistical information on current use patterns, opinions and attitudes, while responses to the four (4) fill-in-the-blank questions provided responses that allowed participants to respond "in their own words".

### RESPONDENT RESIDENCY:

OF ALL RESPONDENTS, **82%** WERE SALINA RESIDENTS...

Only 5% of respondents live within 1 block of the Old Channel



### VISITOR PREFERENCES:

#### VISITORS AND NON-SALINA RESIDENTS INDICATED PREFERENCE FOR:

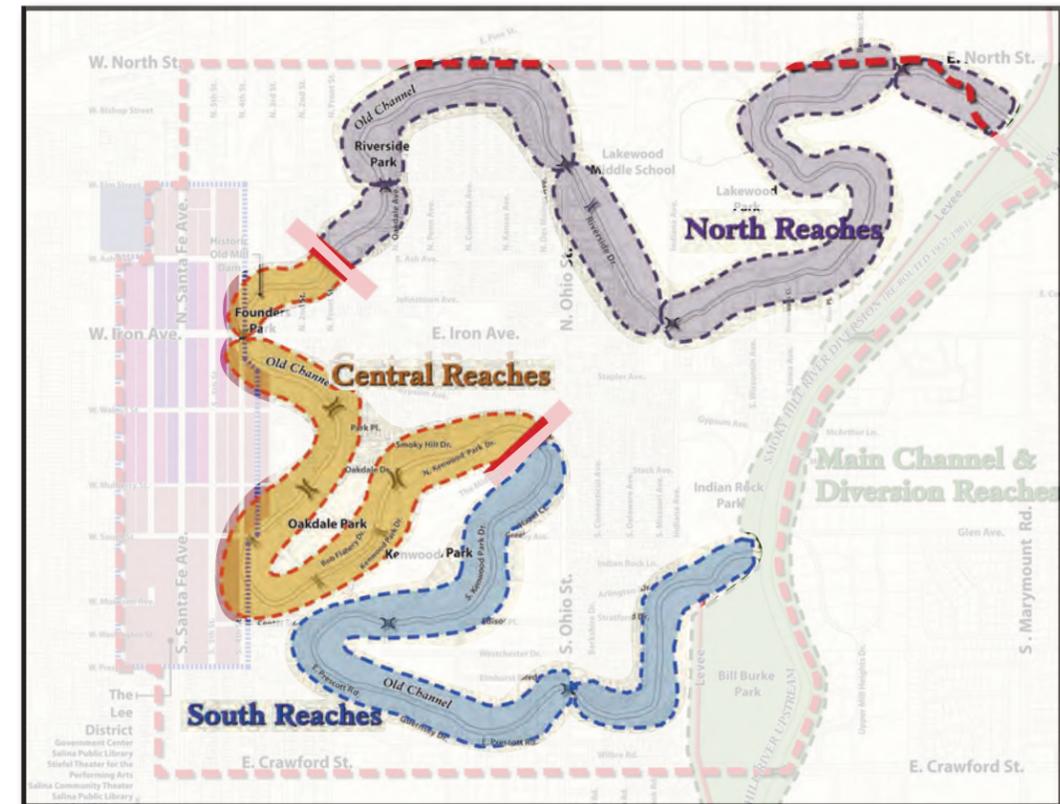
- RIVERFRONT SHOPS
- RESTAURANTS
- WATER-BASED RECREATION

to encourage them to visit again, or extend their next trip.

### MOST VISITED LOCATIONS:

#### MOST RESPONDENTS' EXPERIENCE THE OLD CHANNEL NEAR CENTRAL SALINA AND OAKDALE PARK...

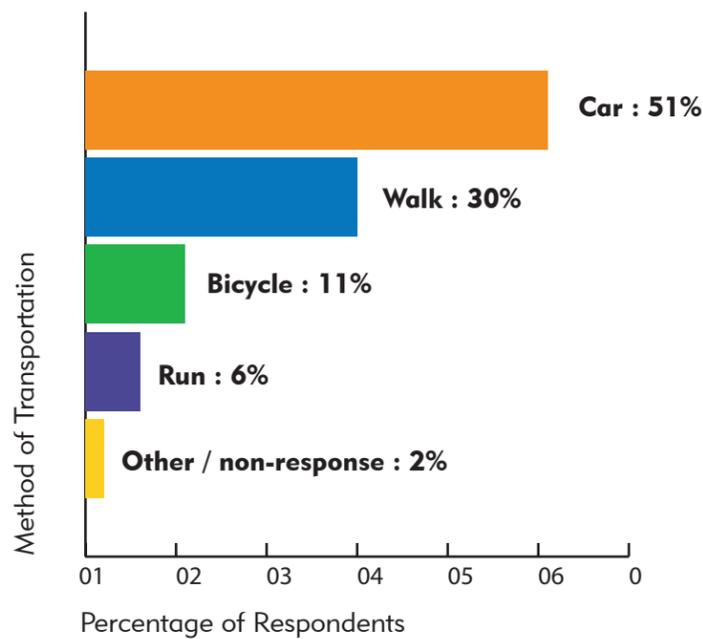
North Reach: **12%** Central Reach: **70%** South Reach: **18%**



**MODE OF TRAVEL TO THE RIVER:**

**56% OF RESPONDENTS DO NOT CURRENTLY SPEND TIME ALONG THE OLD CHANNEL.**

When they do, most travel by car...



**PERSONAL SAFETY:**

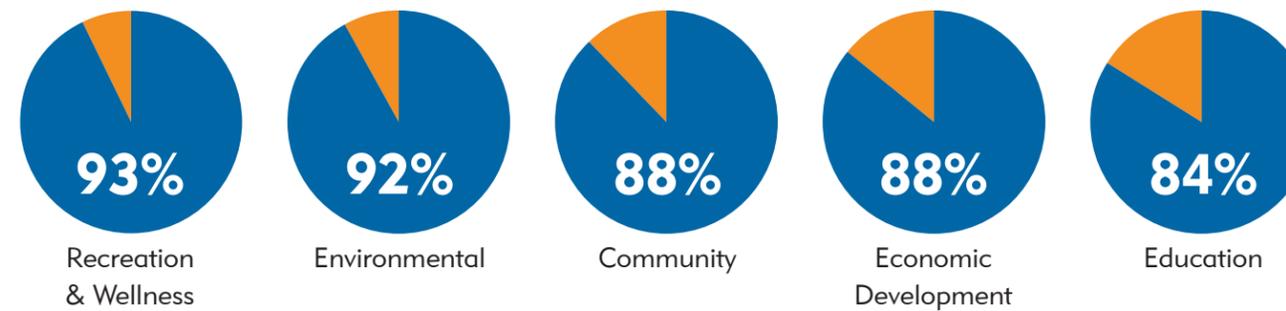
**53% OF RESPONDENTS WOULD CURRENTLY FEEL SAFE OR VERY SAFE ALONG THE OLD CHANNEL.**

- 35% WERE NEUTRAL
- 11% FELT UNSAFE
- 1% FELT VERY UNSAFE

**GOALS AND OBJECTIVES::**

**OVERALL, 90% OF RESPONDENTS AGREE OR STRONGLY AGREE WITH COMMITTEE GOALS & OBJECTIVES**

Agree or Strongly Agree responses for each focus area were:



**PRIMARY FOCUS OF RIVER RENEWAL:**

**PARTICIPANT RANKING OF IMPORTANCE OF THE FOCUS AREAS INDICATES THAT THE RIVER RENEWAL IS PREDOMINANTLY PERCEIVED AS A RECREATION AND WELLNESS ORIENTED IN ITS PURPOSE.**

1. Recreation & Wellness
2. Environmental
3. Community
4. Economic Development
5. Education



**CONTINUE WITH THE RIVER RENEWAL?**

**96% OF RESPONDENTS AGREE, OR STRONGLY AGREE THAT THE RIVER RENEWAL IS A GOOD IDEA AND SHOULD BE CONTINUED TO THE NEXT PHASE**

### MOST CHERISHED ASPECTS OF THE RIVER

The following quotes and comments were offered in response to completing the following. The things I cherish most about the Old Channel of the Smoky Hill River are:

*...proximity to downtown  
and possibilities for future  
economic development*

*...a potential touch point  
for all the community to  
come together*

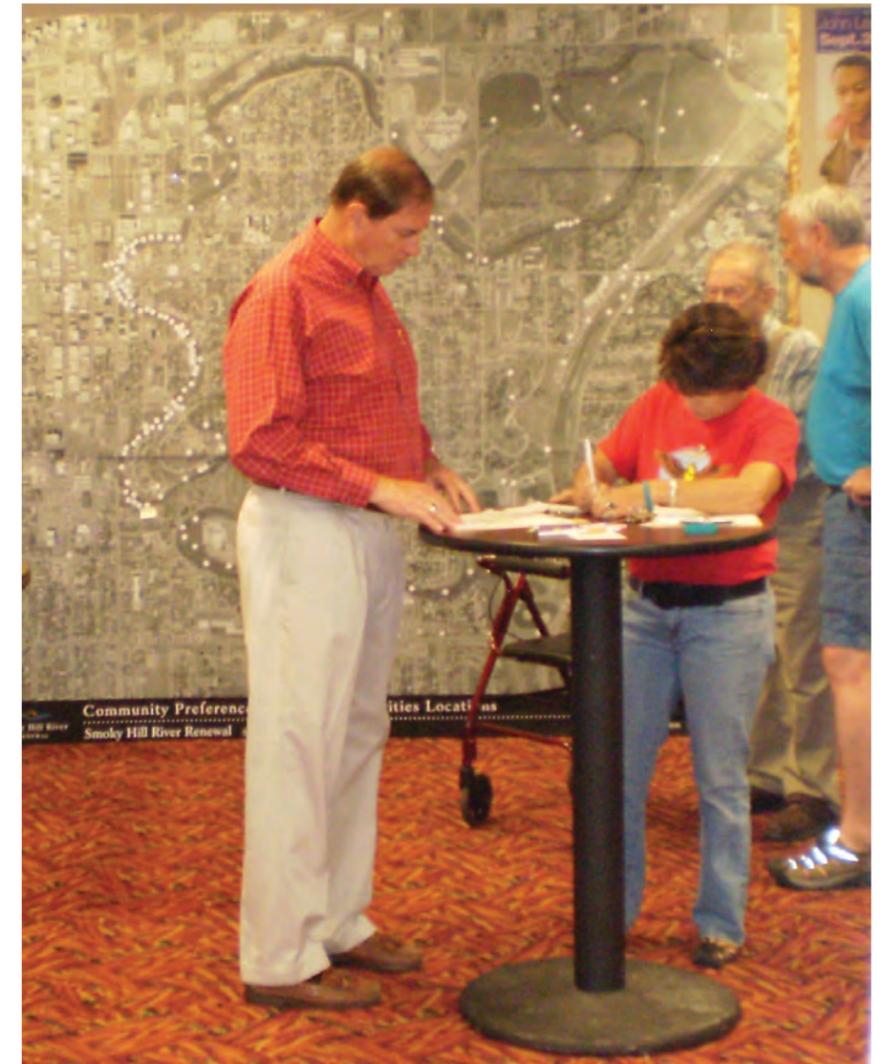
*...History.*

*...it could be the life force  
of our community.*

*...enormous potential to  
improve life in Salina in so  
many ways...*

*...it has a mysterious, inviting  
shade, cool quality*

*...the falls behind the  
Community Theater*



## CITIZEN COMMENTS

Citizen Comments about the Smoky Hill River Renewal effort included:

*...the project is crucial for stabilization and enhancement of downtown.*

*...it's a wonderful idea which might make young people like myself and my fiance more inclined to stay in Salina...*

**We need to restore the flow...do it right or don't do it at all.**

*The development will bring more people to Salina... a pleasant place to live as we watch wildlife grow.*

**Would like to see our community tackle this project.**

## FINAL PHASE ONE - PUBLIC OUTREACH SUMMARY



### DRAFT PRESENTATION TO CITY STAFF

Following the conclusion of the Phase One Public Outreach and Community Preferences, the consultant team met with City Staff to present the Community Preferences results and to present draft Phase One findings regarding river renewal opportunities and constraints based on conditions evaluated from existing and available information.

Based on those draft summary findings staff and the consultants discussed community issues that potentially need to be addressed in the Phase 2 - Master Plan. City-related issues identified for consideration in Phase 2 - Master Planning included:

1. Project Boundary
2. Old Channel Ownership
3. Kenwood Park Disposition -City / County Ownership/Management
4. Compliance with Comprehensive Plan, and Use and Zoning
5. Management, Maintenance and Operations
6. Flow Capacities
7. Sediment Removal
8. Stormwater Management Plan
9. Levee Certification
10. Groundwater Contamination
11. Wetland Delineation & Assessment

## PRESENTATION TO THE SALINA CITY COMMISSION

With City staff concurrence on the completeness and direction indicated by Phase One, and with their informed input on issues to consider in the Phase Two-Master Plan, the consultant team and the Friends of the River prepared a final Phase One Summary Presentation. That presentation was made to the Salina City Commission, with the request that the Phase Two – Master Plan be authorized as a City-managed and City-funded next step. Presentation highlights included:

### COMMUNITY PREFERENCES SUMMARY

The results of the Public Outreach and Community Preferences demonstrated that there has been a high level of:

- Dedicated Citizen Involvement
- Broad Community Participation in Outreach events
- Strong & Favorable Response to questions and informational input

### INVENTORY AND ANALYSIS SUMMARY

**1. Physical Water Supply** in the Smoky Hill River has historically been subject to periods of extended drought at approximately a ten year interval. During periods of extended drought, the Old Channel will experience periods of low-flow, or no flow. Conceptual approaches to mitigate periods of low-flow or no flow that appear feasible include:

- Dams that raise and lower
- Line selected channel reaches
- Narrow, low-flow channel and other channel design techniques
- Pump back/ re-circulating alternatives (e.g., pumped re-circulation of channel water with supplements from the Lakewood Park lake)

**2. Legal Water Supply** - Initial discussions with Kansas Division of Water Resources (DWR) indicate that DWR would be receptive to a recreational water right application by the City.

**3. Sedimentation** - As noted in prior evaluations, sediment removal and on-going management remains an important design issue that will require further investigation in Phase Two-Master Plan and resolution in future phases. Recommendations include:

- Review historic sediment data and/or sampling to determine quantities and potential contamination
- Assessment of amount of sediment to be cleaned out for proposed improvements
- Determination of whether special disposal requirements are required (if contaminated)
- Mitigation techniques to reduce sedimentation in future

**4. Water Quality and Aquatic Life** - Aquatic life is present, but degraded. Existing water quality is sediment laden and should be further tested to evaluate quality in relation to health standards. Increased flows in the Old Channel may have significant positive effect on controlling algae and aquatic plant growth.

**5. Stormwater Quality Management and Permitting** - Currently, the required Stormwater Discharge permitting is in place through the stormwater management plan administered by the City. Best Management Practice (BMP) opportunities may exist upstream, before outfall into the Old Channel, to demonstrate new techniques addressing existing run-off from approximately five (5) square miles of urban watershed.

**6. Channel Improvements and 100-Year Floodplain Regulation** - Channel Improvements could effect the 100-Year Floodplain, but improvements can be planned to present no adverse effect.

**7. Environmental Regulatory Requirements** - Environmental Regulatory requirements, administered by State and Federal agencies that require permitting may include:

- Clean Water Act
- Federal Endangered Species Act
- National Historic Preservation Act
- National Environmental Protection Act
- Environmental Audit

As future phases proceed, on-going dialog with responsible agencies is recommended.

**8. Channel Access, Maintenance, and Utility** - Provisions for channel access, maintenance and utility relocations appear manageable and will require coordination in future phases.

**9. Existing Property Ownership** - The City and other public entities currently own property on at least one side of the Old Channel for 80% of its length. Public and private ownership and their relationship to channel improvements will need to be addressed in future phases. Easement acquisition allowances should be incorporated in Phase Two - Master Plan. Strategies for acquisition and management of potential construction, maintenance and access easements should be addressed in Phase Three – Implementation Planning.

**10. Capital and Operations/Maintenance/Replacement (OMR) Costs** should be estimated for proposed improvements in Phase Two – Master Plan and later phases of the project. The structural integrity of the Western Star Mill dam should be further evaluated in future phases of the project.

**11. Phased Implementation** - A phased implementation plan should be developed, with channel flow restoration as a priority, in Phase Two – Master Plan and future phases of the project.

### COMMUNITY SUPPORT SUMMARY

Statistically, the results of the Community Outreach and Preferences have demonstrated a high level of support for:

- Goals and Objectives as defined by Friends of the River Committee volunteers
- Diversity of Riverfront Uses and Activities
- Desire to move forward with next steps of the Project

### CITY COMMISSION ACCEPTANCE AND APPROVAL OF PHASE ONE – PUBLIC AWARENESS AND COMMUNITY OUTREACH

On August 17, 2009, the Salina City Commission accepted the Friends of the River findings from Phase One – Public Awareness and Community Outreach. With City Commission acceptance of the findings of Phase One, they authorized the City Staff to solicit proposals for Phase Two- Master Plan and negotiate a scope of work and work program for a City-funded and managed next phase of work. That scope and work program would then be brought to the City Commission for their review and approval.

