

APPENDIX I

JUNE PUBLIC MEETING PRESENTATION

Public Meeting Phase II Master Plan & Pre-Reconnaissance Study Arkansas River Corridor

U.S. Army Corps of Engineers, Tulsa District
Indian Nations Council of Governments
C. H. Guernsey & Company

June 13th through 17th, 2005



Agenda for this Evening

- Power Point Presentation
 - Project Team
 - Open House Format
 - Project History
 - Phase I Summary
 - Phase II Intent/Purpose
 - Engineering/Ecosystem Studies
 - Conceptual Plans
 - Next Steps
- Adjournment to Stations

Project Team

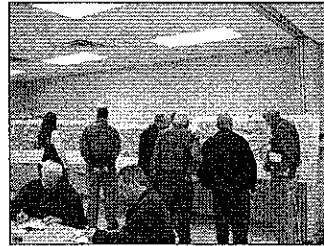
- U.S. Army Corps of Engineers, Tulsa District
 - Cynthia Kitchens
 - Andy Kmetz
 - Gene Lilly
 - Liz Bashaw
- Indian Nations Council of Governments (INCOG)
 - Jerry Lasker
 - Rich Brierre
 - Gaylon Pinc

Project Team

- C. H. Guernsey & Company Team (GUERNSEY)
 - Ken Senour, CEP, QEP
 - Jimmie Hammontree
 - Justin Proctor
 - Mike Peters, ASLA (Alaback Design)
 - Russ Butler, ASLA (EDAW)
 - Bill Smith, PE, CFM (HISINC)
 - Jesse Boudiette (Schnake Turnbo Frank)

Open House Format

- Formal presentation to provide history and project status
- Opportunity to review activities and findings at select stations
- Opportunity to ask questions at stations or by completing a questionnaire

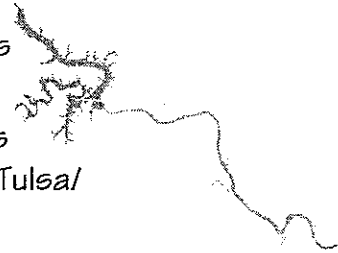


Phase I Intent & Purpose

- Phase I Vision Plan consisted of a series of public meetings and outreach measures to record interest and vision for each community and the corridor as a whole
- Addressed privately and publicly-owned property within the river corridor and identified potential restoration, development, and redevelopment sites

Phase I Summary

- Completed in August 2004
- Phase I was developed under the guidance of the Indian Nations Council of Government (INCOG)
- Integration of ideas that are supported by the community into a Vision Plan for the Arkansas River Corridor, a stretch of river encompassing 42 miles from Keystone Dam to the Tulsa/Wagoner County line



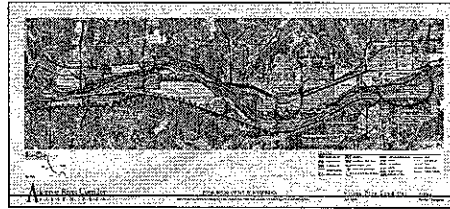
Phase I Summary

Community Wish List (Top Ten Wants and Needs)

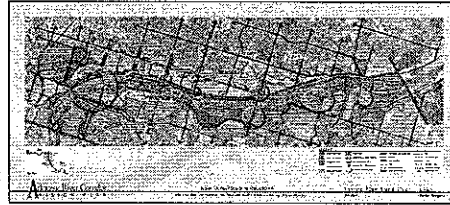
1. "Riverfront" oriented retail shops and restaurants
2. Enhanced preservation of natural resources
3. Water in the river - Develop river lakes for recreation (rowing, kayaking, fishing et al)
4. Additional multi-use trails
5. Entertainment districts
6. Improved access to public lands along the river
7. Additional wilderness areas and nature trails
8. Boardwalks
9. Additional amphitheatre/performing arts spaces and related parking
10. Improved connections to downtowns/neighborhoods

Phase I Vision Plan

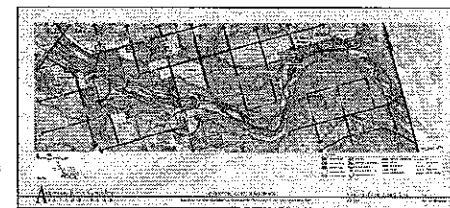
Upper reach



Middle reach



Lower reach



Phase II Intent & Purpose

- The current step in a multi-year process
- Address ecosystem restoration in conjunction with river development
- Evaluate engineering/environmental issues and new technologies
- Identify opportunities and constraints
- Identify funding mechanisms
- Identify areas requiring further evaluation
- Conceptual planning for development sites and low water dams
- Master Plan report summarizing Phase II

Phase II Summary/Status



- Includes Tulsa District, INCOG, and the GUERNSEY Team



- Various activities conducted:
 - Meetings with appropriate agencies and communities (Tulsa District, INCOG, all involved communities, federal and state agencies)
 - Site visits and reconnaissance tours of the river, communities, and facilities (recording observations, discussions with officials, photographs)



Phase II Summary/Status



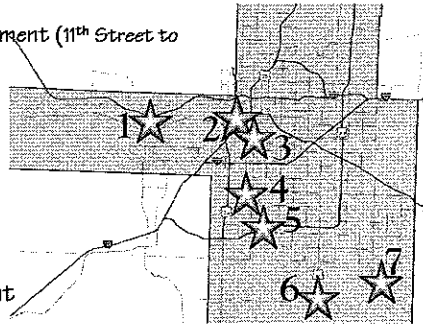
- Various activities, continued:
 - Team workshops to address needs and issues
 - Distribution of solicitation letters to municipalities, resource agencies (e.g. USFWS, ODWC, NRCS, EPA, SHPO, ODEQ, etc), Native American tribes, and State/Federal lawmakers
 - Inventory of infrastructure and environmental issues
 - Hydraulic, hydrologic, and water quality analysis
 - Conceptual plans of key development sites



Phase II Summary/Status

Key Development Sites

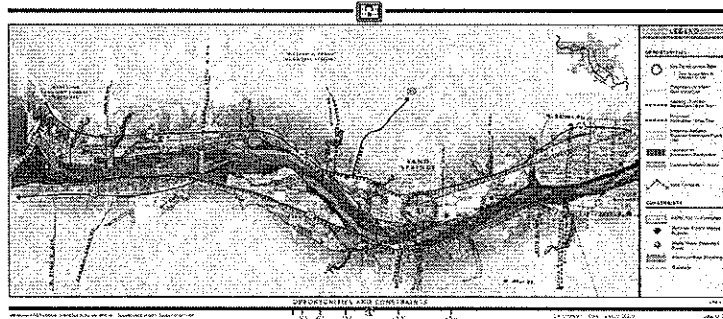
1. Sand Springs Riverfront
2. Zink Lake Riverfront
 - West Bank Redevelopment (Southwest Boulevard to 23rd)
 - East Bank Redevelopment (11th Street to 21st Street)
3. Crow Creek Corridor (from Peoria to River)
4. 71st Street Riverfront
5. Jenks / South Tulsa Riverfront
6. Bixby Riverfront
7. Broken Arrow Riverfront



Products Developed to Date

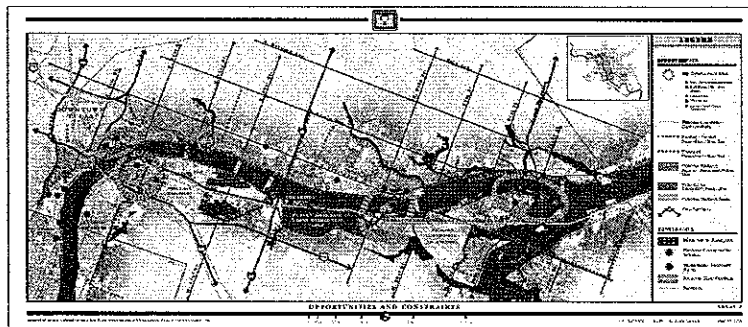
- Corridor Opportunities and Constraints maps
- Hydraulics/hydrology report and analysis of low water dams
- Report on ecological issues
- List of potential funding sources
- Draft conceptual plans for key development sites identified in Phase I

Opportunities & Constraints



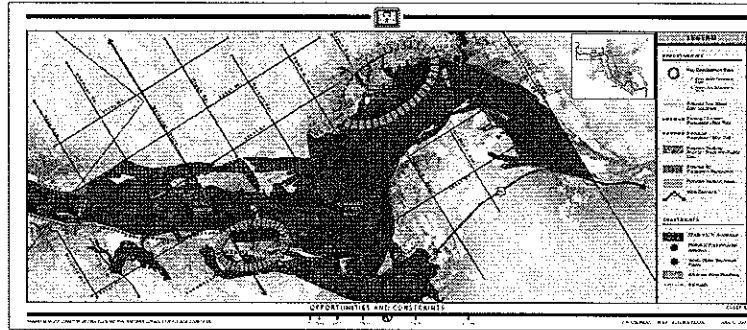
Sheet 1 - Upper reach

Opportunities & Constraints



Sheet 2 - Middle reach

Opportunities & Constraints



Sheet 3 - Lower reach

H/H & Low Water Dam Study

- Analyzed 8 potential dam locations from Phase I
 - Dam 1 - Broken Arrow (between 145th and 161st E. Ave)
 - Dam 2 - Bixby (downstream of Memorial Bridge)
 - Dam 3 - Jenks / South Tulsa (Yale Ave)
 - Dam 4 - Jenks / South Tulsa (downstream of Creek TP)
 - Dam 5 - Tulsa (upstream of 81st St)
 - Dam 6 - Tulsa (upstream of I-44)
 - Dam 7 - Sand Springs (near Main St)
 - Dam 8 - Sand Springs (downstream of 177th W. Ave)
- Feasible dams were classified into three categories:
 - Tier 1 - short range
 - Tier 2 - mid range
 - Tier 3 - long range

H/H & Low Water Dam Study

- Tier 1
 - Dam 4 - Jenks / South Tulsa (downstream of Creek TP)
 - Dam 7 - Sand Springs (near Main St)
- Tier 2
 - Dam 6 - Tulsa (upstream of I-44)
- Tier 3
 - Dam 1 - Broken Arrow (between 145th and 161st E. Ave)
 - Dam 8 - Sand Springs (downstream of 177th W. Ave)
- Currently infeasible dams
 - Dam 2 - Bixby (downstream of Memorial Bridge)
 - Dam 3 - Jenks / South Tulsa (Yale Ave)
 - Dam 5 - Tulsa (upstream of 81st St)

H/H & Low Water Dam Study

Dam 4 – Creek Turnpike

- Key design considerations
 - 2.9 mile river lake could be created
 - Would include pedestrian bridge, fishing piers, and boat ramp downstream of dam
 - Would include gates and other design elements to allow fish passage and sediment transport
 - Would likely create a seasonal impoundment
 - Creation of Least Tern island in pool

H/H & Low Water Dam Study

Dam 7 – Sand Springs

- Key design considerations
 - 4.8 mile river lake could be created
 - Would include pedestrian bridge, fishing piers, and boat ramp downstream of dam
 - Would include gates and other design elements to allow fish passage and sediment transport
 - Would likely create a seasonal impoundment
 - Creation of Least Tern island in pool based upon further evaluation of food source

Ecological Study

- Assessment of existing biological resources
- Coordination with agencies:
 - US Fish and Wildlife Service
 - Oklahoma Department of Wildlife Conservation
 - US Army Corps of Engineers
 - US Geological Survey
 - Oklahoma Conservation Commission
 - Natural Resources Conservation Service
 - Oklahoma Department of Environmental Quality

Ecological Study

- Protected Species identified in corridor:
 - Bald Eagle
 - Interior Least Tern
 - Piping Plover
 - American Burying Beetle
- Sport Fisheries
 - Striped, sand, and largemouth bass
 - Paddle Fish
 - Catfish
 - Sunfish
 - Sauger
 - Others
- Migratory Waterfowl

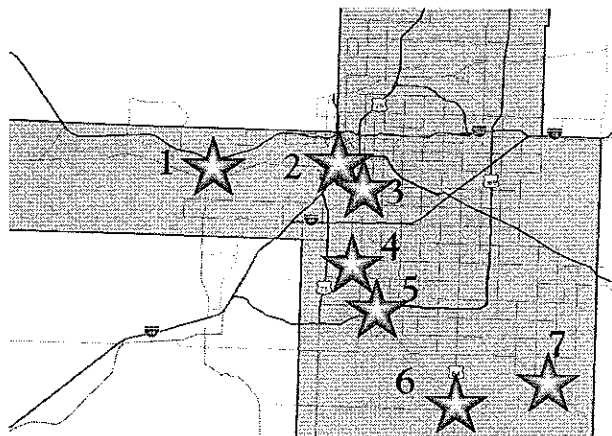
Ecological Study

- Restoration opportunities identified
 - Recreation
 - Wetlands
 - Aquatic habitat
 - Riparian habitat
- Potential for Concern
 - Zebra mussels
 - Golden Alga

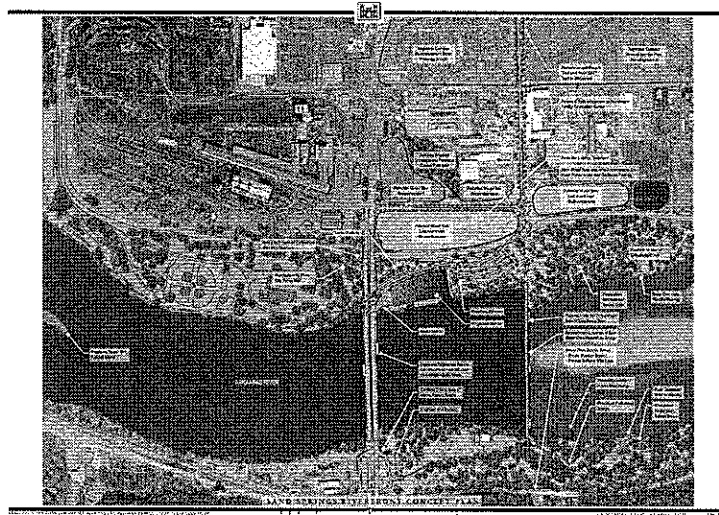
Ecological Study

- Additional studies required
 - Habitat assessment for planned projects
 - Downstream effects of dams
 - Angling benefits in pools
 - Golden alga blooms in pools
 - Food supply for artificial tern islands
 - Concerns and design constraints for sport fish
 - Maintenance / operation of dams
 - Angling locations and boat ramp locations

Conceptual Plans

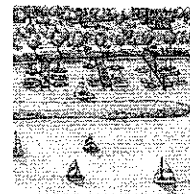
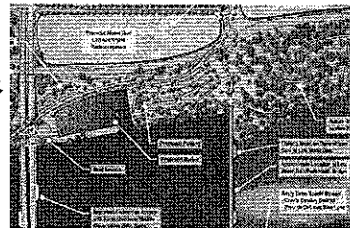


Sand Springs Riverfront

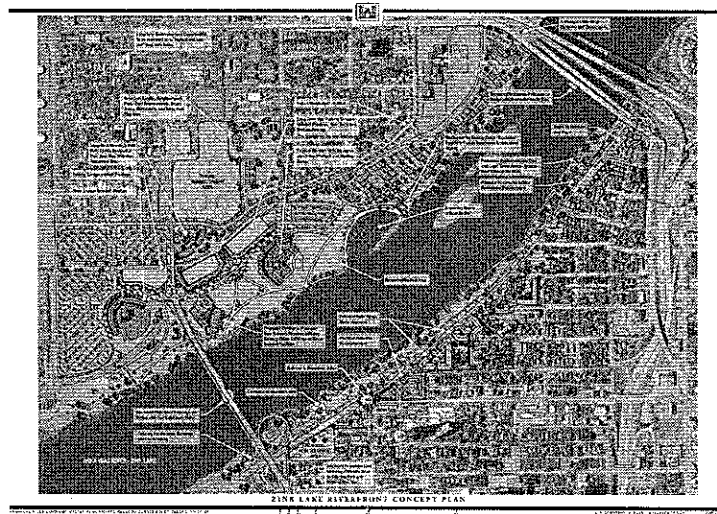


Sand Springs Riverfront

- Low water dam and pedestrian bridge
- Extension of Main Street boulevard to river
- Potential redevelopment sites
- Marina
- Ecosystem restoration / trails
- Improved connection to River City Park
- Creation of Least Tern island
- Highway 97 Bridge enhancements
- Fishing piers / community boat ramp



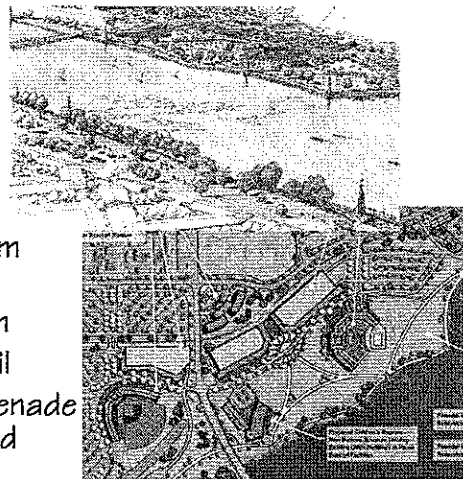
Zink Lake Riverfront



Zink Lake Riverfront

West Bank

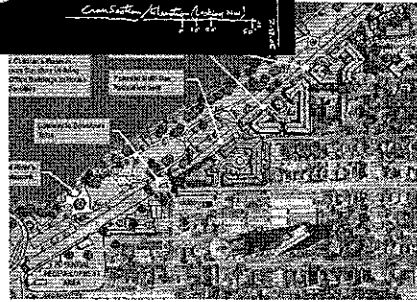
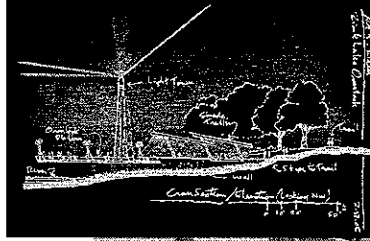
- Festival Park expansion
- Expanded marina and boat docks
- Children's Museum
- Minor League Baseball Stadium
- Restaurant/retail
- Pedestrian promenade with overlooks and light towers



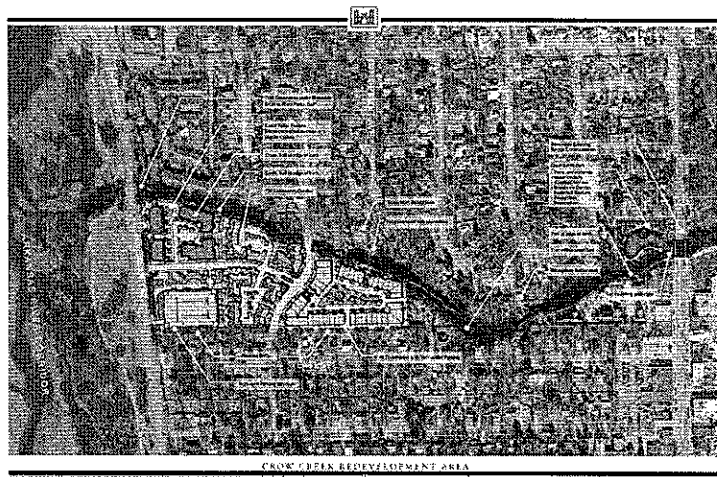
Zink Lake Riverfront

East Bank

- Multi-use and residential opportunities
- Route 66 Museum and Plaza
- Pedestrian promenade with overlooks and light towers
- Ecosystem restoration / trails

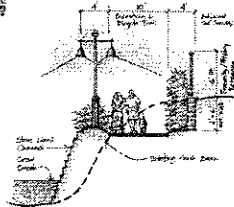
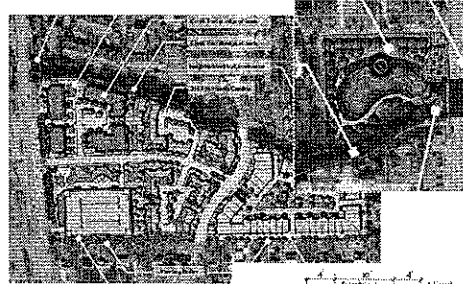


Crow Creek Corridor

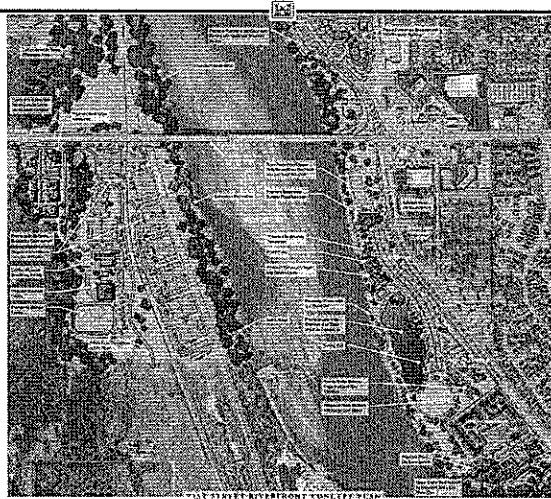


Crow Creek Corridor

- Ecosystem restoration
- Stream bank stabilization
- Flood damage reduction
- Trail connection from River Parks to Brookside
- Mixed use redevelopment of existing apartment complex
- Gateway / park at Peoria Avenue
- Replicate WPA channel aesthetics



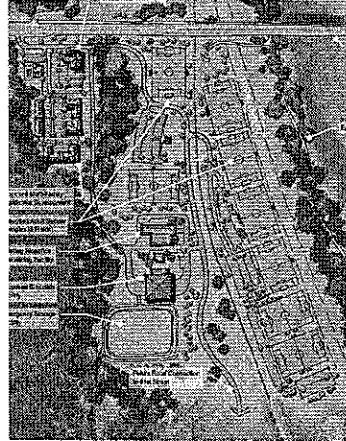
71st Street Riverfront



71st Street Riverfront

West Bank

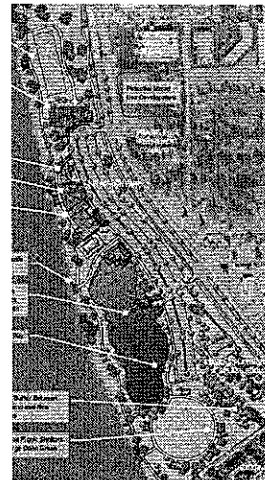
- Adult soccer complex
- Improved access to City of Tulsa biosolids facilities
- Multi-family residential
- Destination restaurant
- Ecosystem restoration / trails



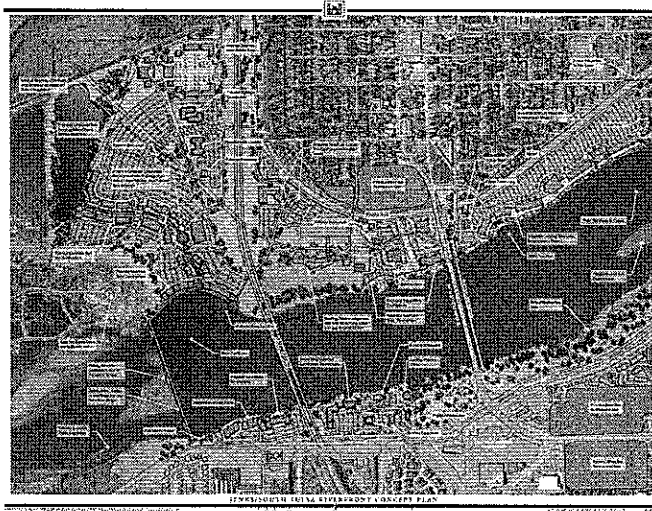
71st Street Riverfront

East Bank

- Community health and fitness center
- Riverfront restaurants and plaza
- Pedestrian promenade and river overlooks
- Lake and boat dock
- Enhancement of recreational open space
- Ecosystem restoration / trails

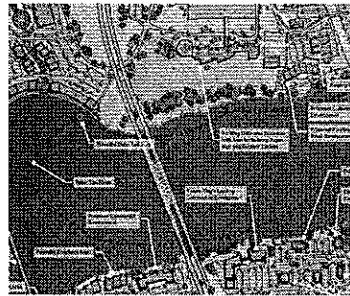


Jenks/South Tulsa Riverfront

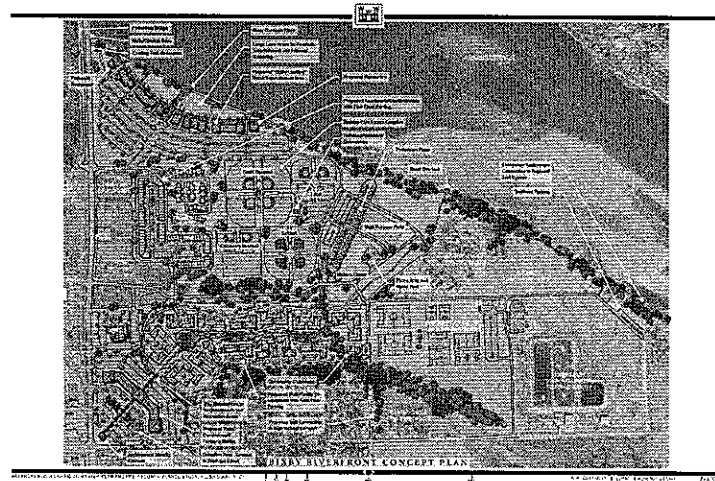


Jenks/South Tulsa Riverfront

- Low water dam and pedestrian bridge
- Fishing piers and boat ramp
- Oklahoma Aquarium campus development
- Ecosystem restoration / trails
- Least tern foraging habitat and island
- Bald eagle habitat
- Flood damage reduction
- Commercial riverfront development / water taxi

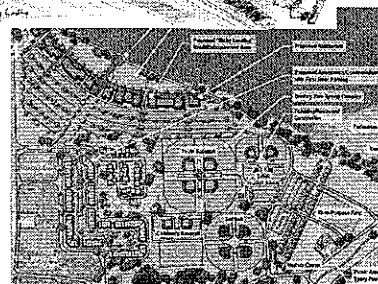


Bixby Riverfront



Bixby Riverfront

- Riverfront retail / entertainment area
- Bentley Park Sports Complex
- Multi-family development opportunities
- Commercial redevelopment along Memorial Drive
- Ecosystem restoration / trails



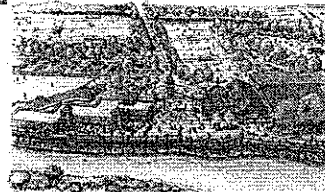
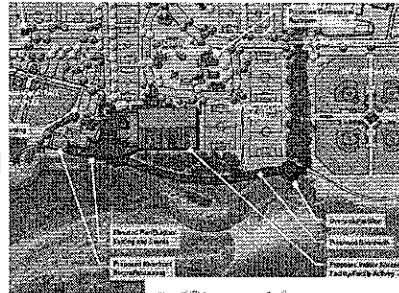
Broken Arrow Riverfront



BROKEN ARROW RIVERFRONT CONCEPT PLAN

Broken Arrow Riverfront

- Indoor soccer complex
- Riverfront shops and restaurants
- Elevated pier and boardwalk
- Improvements to sports fields and parking
- Nature center
- Ecosystem restoration / trails
- Least tern habitat



Phase II Continuing Activities

- Incorporate public input from meetings
- Draft master plan (June 30)
- Final report (July 30)
- Local public/private investment
- Further Corps project participation:
 - Reconnaissance/feasibility study
 - Planning, engineering, and design
 - Real Estate acquisition and construction
- Other Federal participation

Public Information/Input

- Three break out topics:
 - Hydrology & Hydraulics / Low Water Dams
 - Opportunities & Constraints
 - Key Development Sites Preliminary Conceptual Plans
- Comment forms available
- Email address established for public comments
arkansasrivermasterplan@chguernsey.com
- Phase II information to be posted on INCOG's website (www.incog.org)

Adjournment to Stations