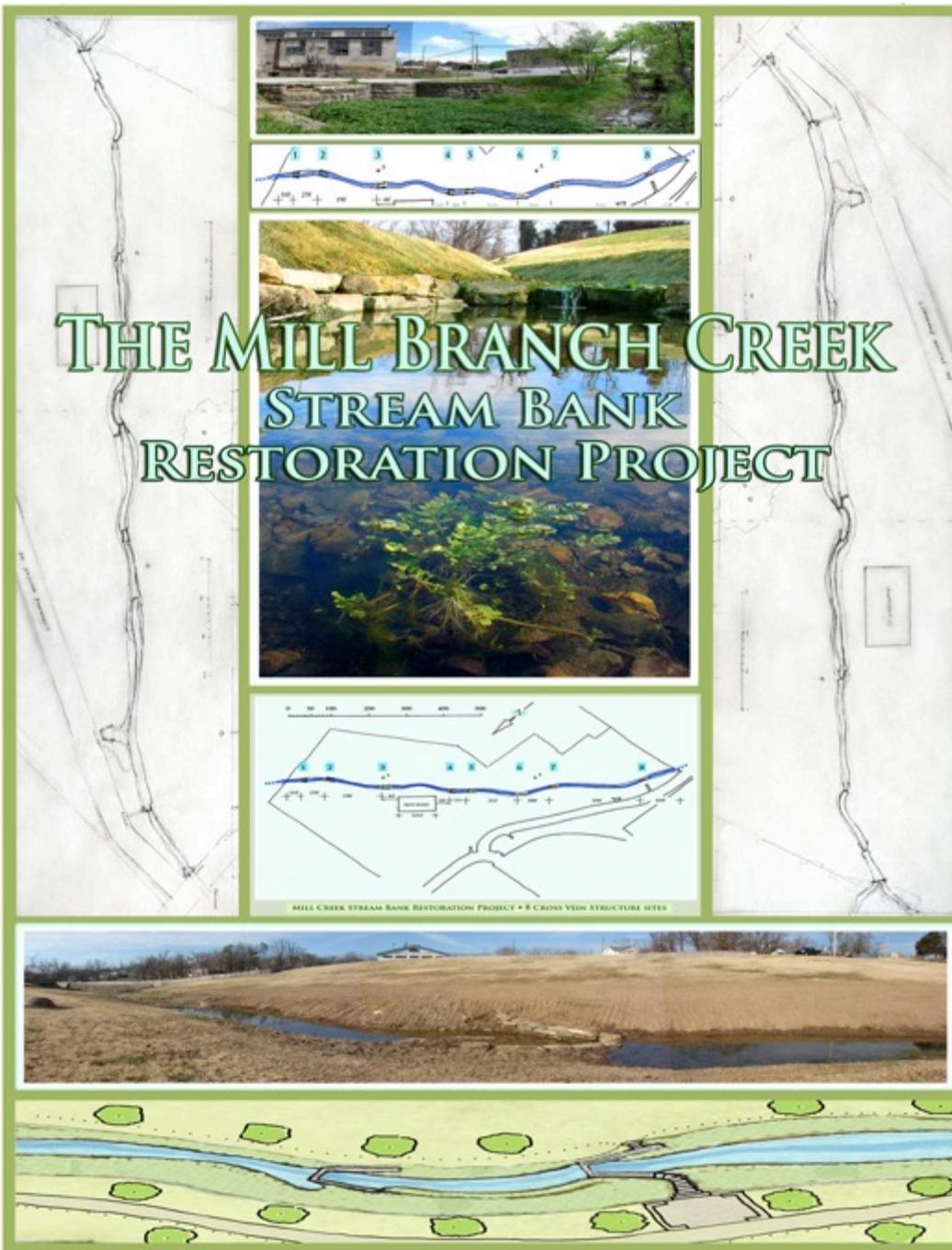
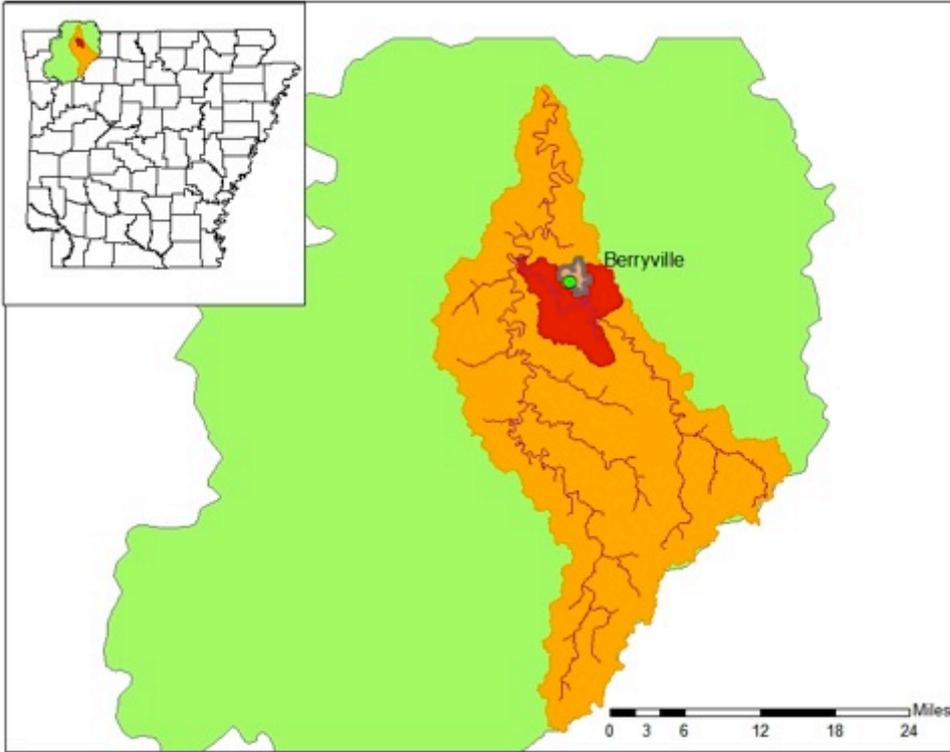


THE MILL BRANCH CREEK STREAM BANK RESTORATION PROJECT

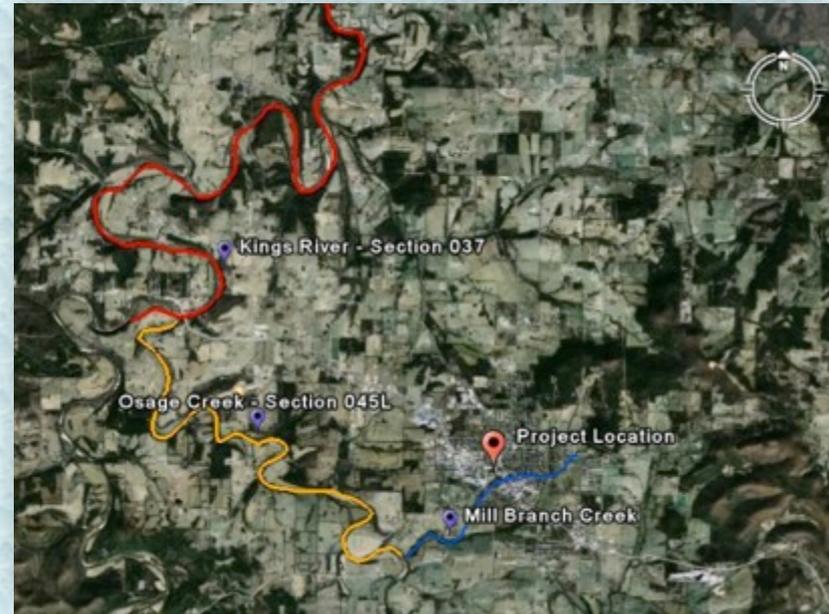


Project Location



Mill Branch Project Location

- Mill Branch Location
 - Kings River Watershed
 - Berryville
- HUC 12
- Warden Branch-Osage Creek
- HUC 8
- Beaver Reservoir
 - Mill Branch Reach



Project GOALS

- ❖ **Decrease Sediment Flow;**
 - through erosion control (rock weirs/cross veins) and
 - bank stabilization

- ❖ **Restore the Riparian zone**
 - Creating urban green space
 - Restore streamside ecology

- ❖ **Showcase best management practices**
 - Increase public awareness about stream bank erosion
 - Reduction of sediment load (est. at 7000 cubic ft/year) to the Kings...

Before project work...

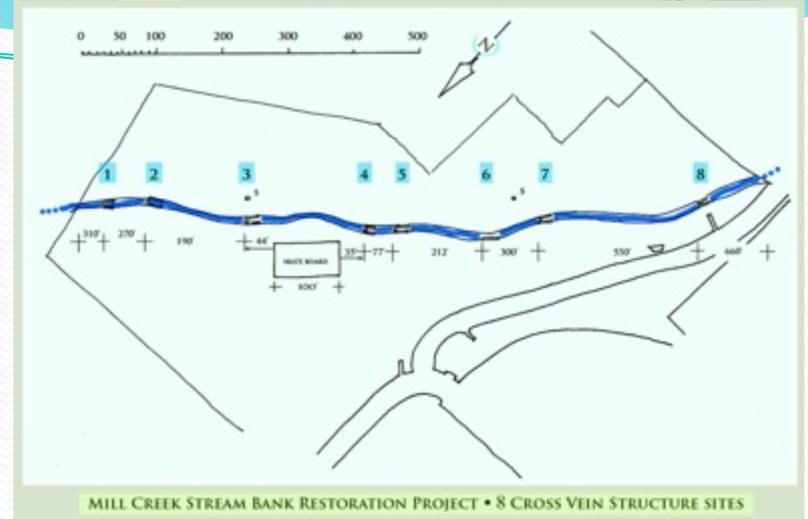
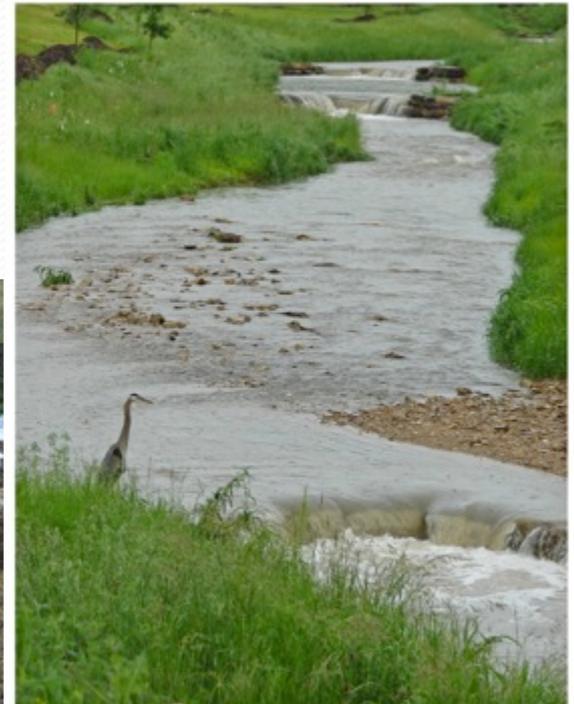


Mill Creek Branch, Berryville AR; Berryville Community Center Park -- **Looking upstream**

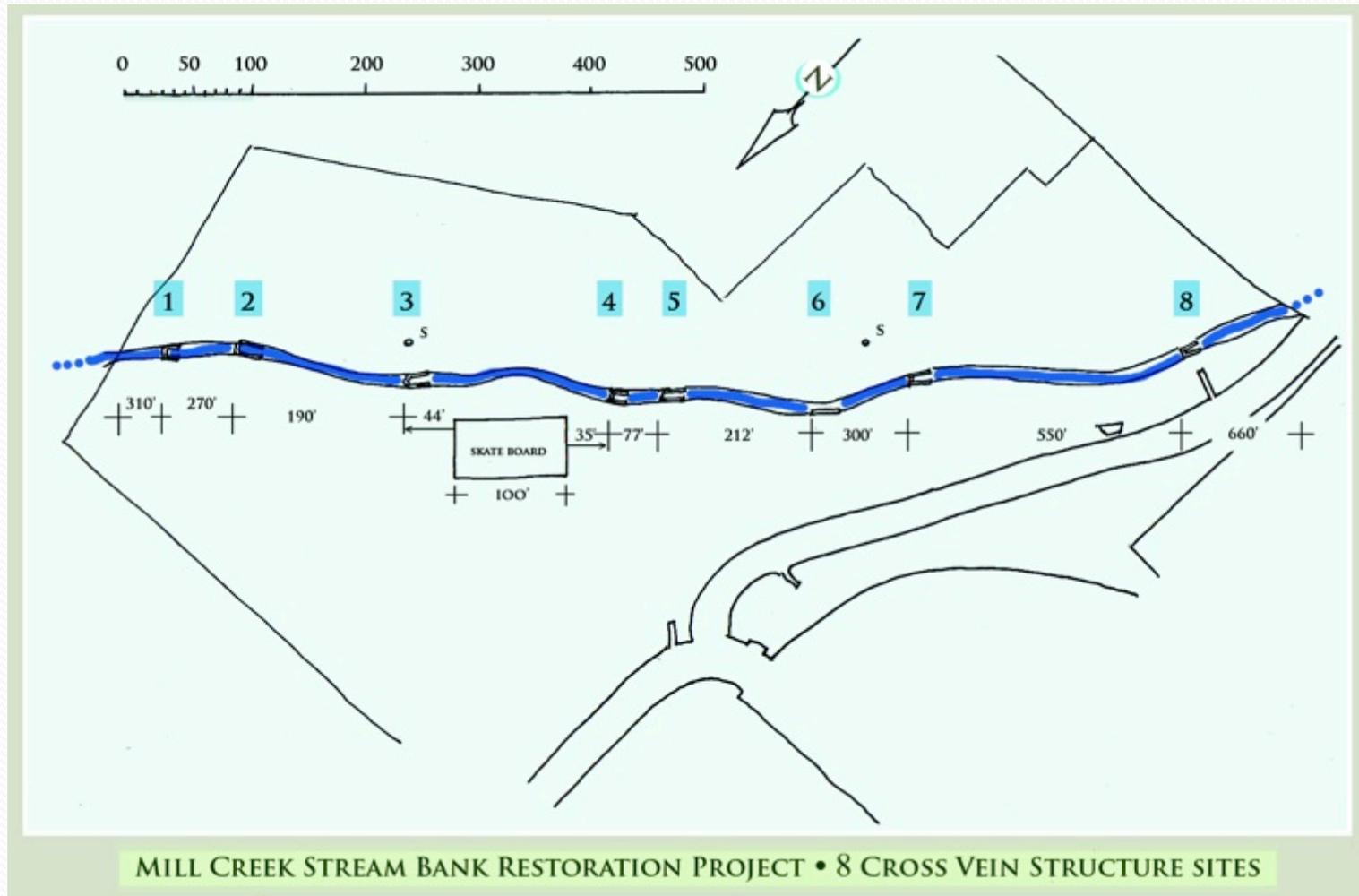


-- **Looking downstream**

Rock Weirs
redirect water flow
to center channel;
create water fall
(step) and pooling,
slow water and
capture sediment.

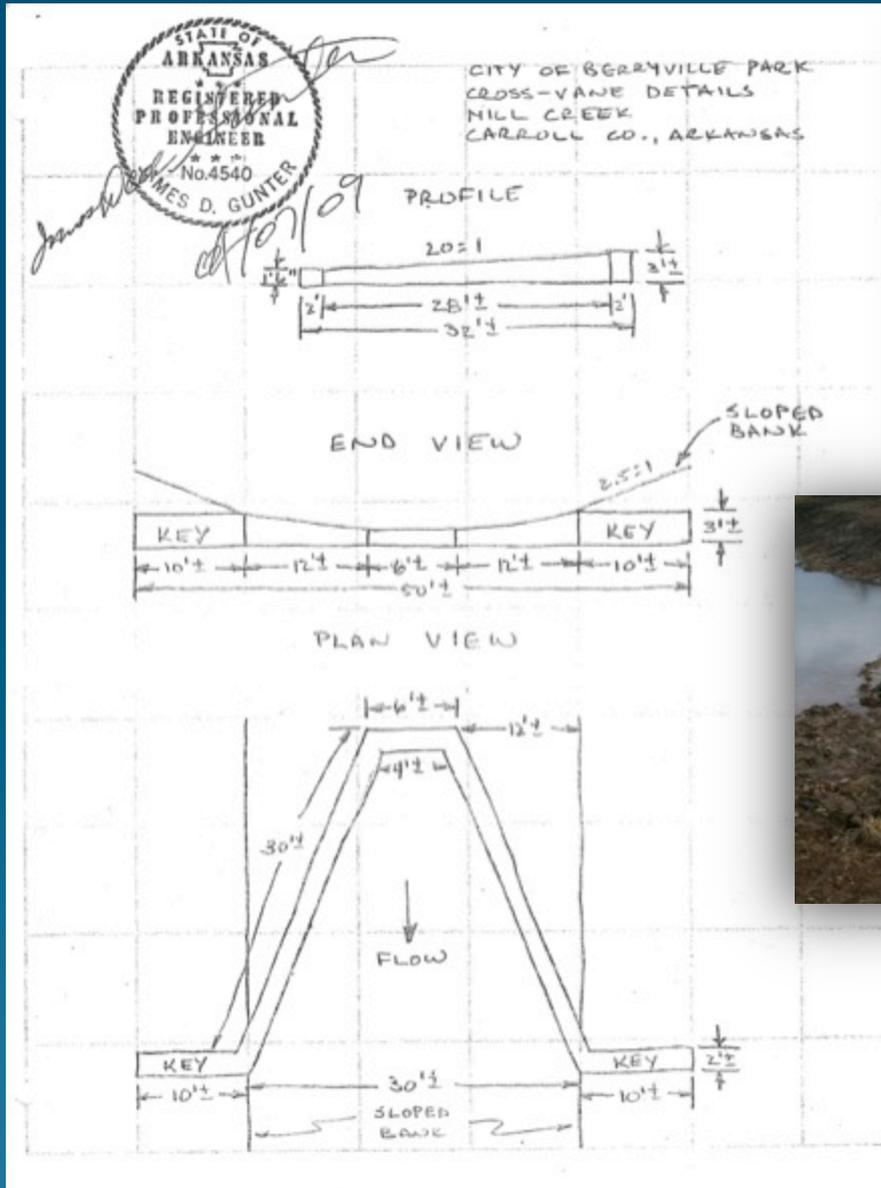


Rock Weirs, redirect water flow to center channel; create water fall (step) and pooling, slow water and capture sediment.





The rock structures...







Rock Weir / Cross Veins Structure

- ✓ **Shape to focus stream flow**
- ✓ **Step/Fall & Pooling**
- ✓ **Keys & Dowels to anchor structure to bank side and bed**

Rock Weirs



Re -Vegetation

- ❖ Plants chosen to: Restore stream bank stabilization - soil stability; erosion control; provide habitat and food source – birds, insects, animals...; added benefit as well to restore this urban green space / parkscape.
- ❖ Plants include 500 shrubs donated by U of A Cooperative Ext. Services, John Pennington, and others donated by Dave Evans, AR Fish and Game Commission. Plants from Forrest Keeling Nursery, MO.
- ❖ First Phase to include aprox. 1,500 plants, to include:

Shrubs: (most as 18” bare root stock)

Shrub Indigo, *Amorpha fruticosa*

Buttonbush, *Cephalanthus occidentalis*

Redosier Dogwood, *Cornus stolonifera (sericea)*

Eastern Witch Hazel, *Hamamelis virginiana*

Gray Dogwood, *Cornus foemina (racemosa)*

Silky Dogwood, *Cornus amomum*

Ninebark, *Physocarpus opulifolius*

Southern Arrowwood, *Viburnum*

Trees: (Containers)

Red Maple, *Acer rubrum (red sunset)*

X Bur/White Swamp Oak, *Quercus x schuettei* (Kimberley Oak)

Northern Red Oak, *Quercus rubra*

Triumph Elm, *Ulmus X (Morton Glossy)*

Black Gum, *Nyssa sylvatica*

Sycamore, *Platanus occidentalis*

Where we go from here & now...

Celebrate the **PROGRESS** of this urban stream rehabilitation!

Saturday, April 9th 2 pm to 4 pm

Here at Berryville Community Center Lot overlooking the Branch

The original grant requirements:

- Demonstration Workshop
 - Monitoring
 - Reporting, including Final Report
-

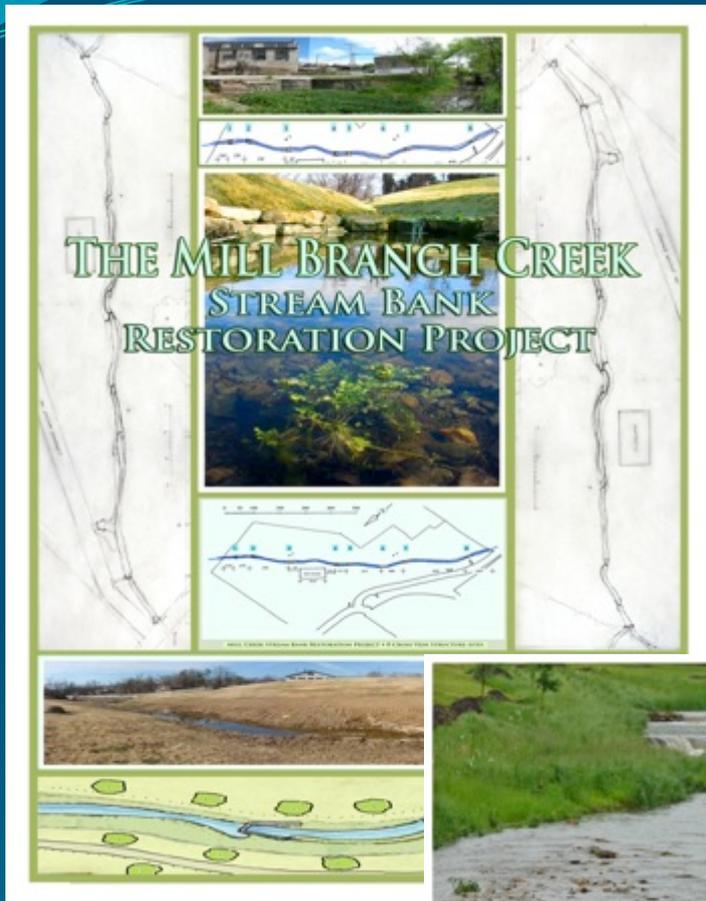
VOLUNTEER !!!

Please help us plant, several phases, may start April 2nd or April 7th, 8th, or even the 9th a.m.

Sign up sheet in back – we will contact you.







2011 - 2013
Wildlife
Observation Trails
Grant

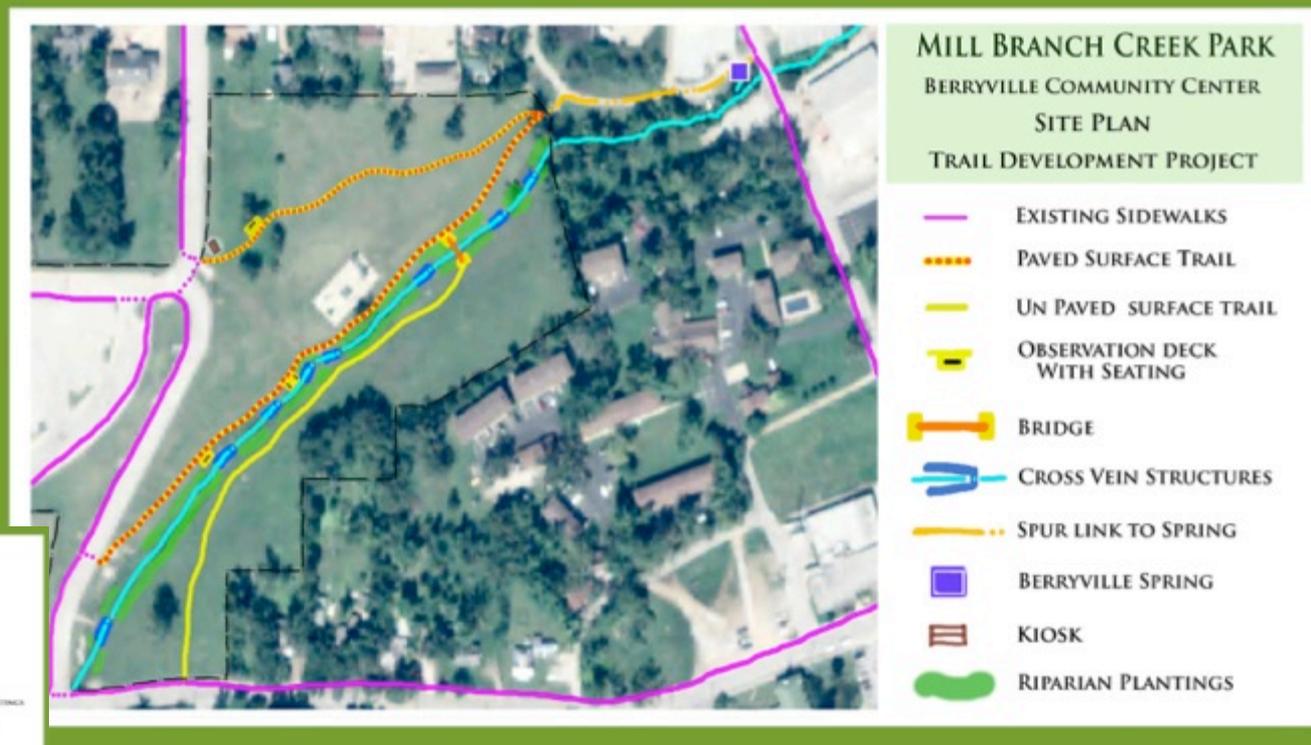
**AR Game & Fish
Commision**

**Mill Branch Creek
Berryville AR**



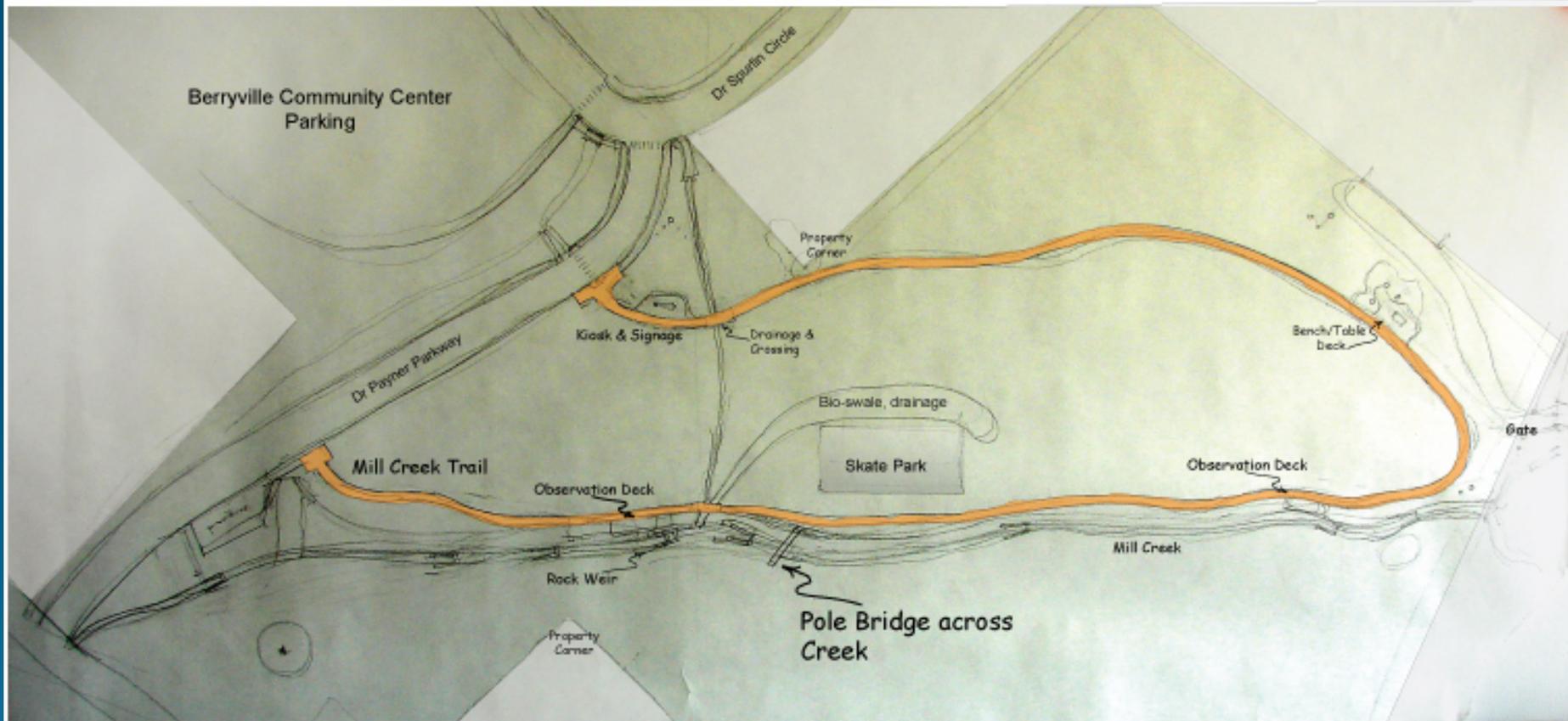
Wildlife Observation Trail Grant

The City of Berryville has submitted for a Wildlife Observation Trail Grant, funded by AR Game & Fish, via the AR Dept. of Parks & Tourism – to create a trail corridor and access along the branch; as extension of the City's Master Plan Urban Trail System.

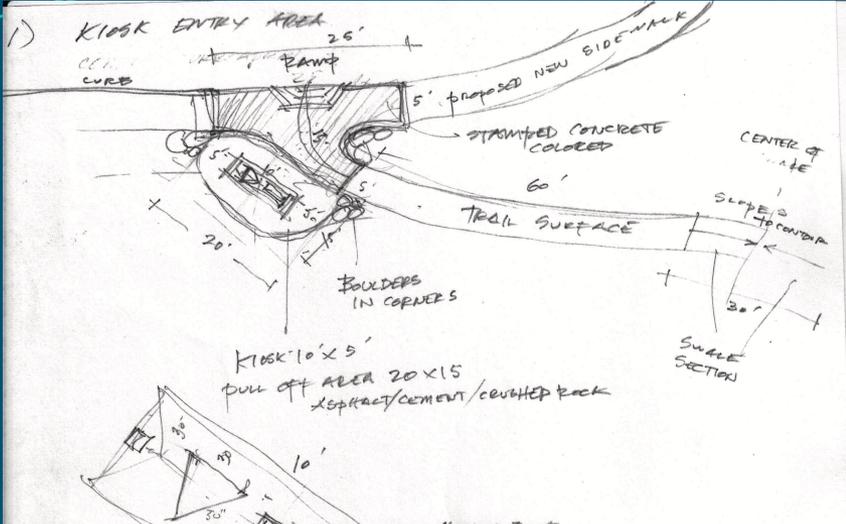




Mill Creek Wildlife Observation Trail
Berryville Community Center
Berryville, AR



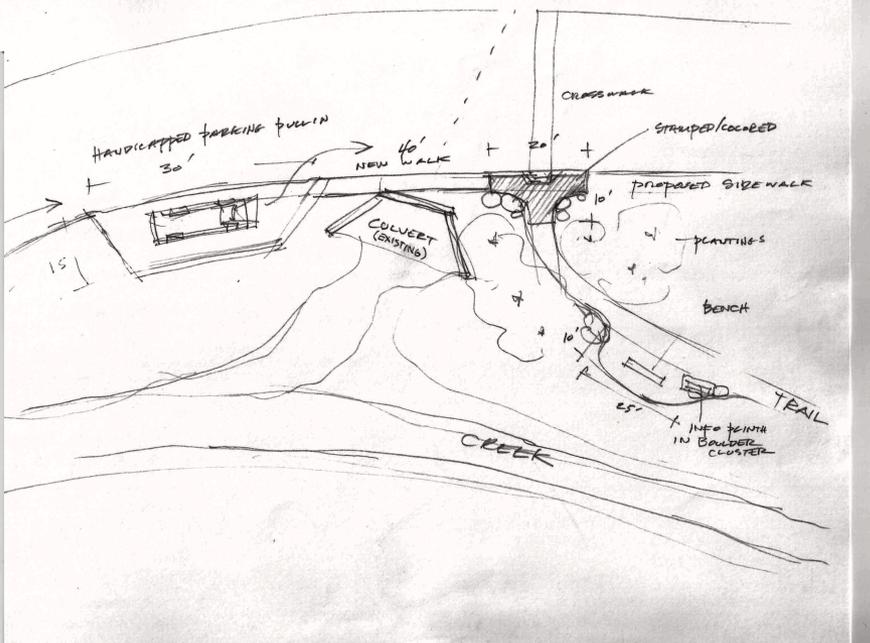
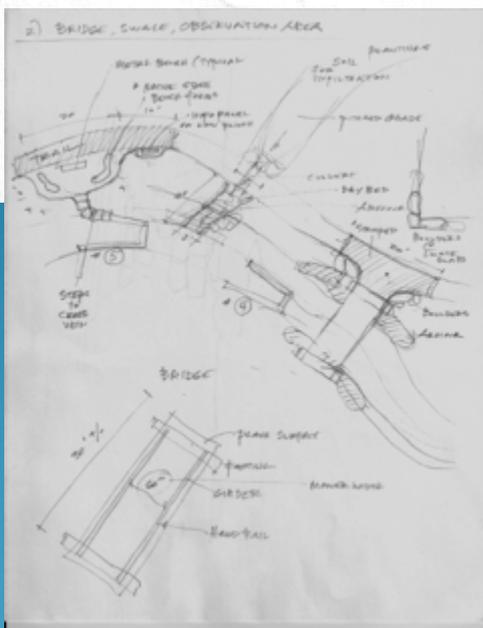
Site Plan Sketch #1
Orig. - Chris Fisher,
jps Jan. 2012



2) Kiosk

- 3 SIDING STANDING PANELS VERTICAL
- 1 - HORIZONTAL SITE PLAN CREEK/TRAIL PROJECT PARK FEATURES

3) DOWNSTREAM TRAIL ENTRY, OBSERVATION BENCH PULL OFF, HANDICAPPED PARKING AREA



THANK YOU !!!

The Kings River Watershed
Partnership

is doing good, and having fun

do Write a letter of THANKS to:

- ❖ Jimmy Jones, and Jimmy Jones Excavation
- ❖ Dave Evans with AR Game & Fish Stream Team
- ❖ City of Berryville, Mayor Tim McKinney & Council Members