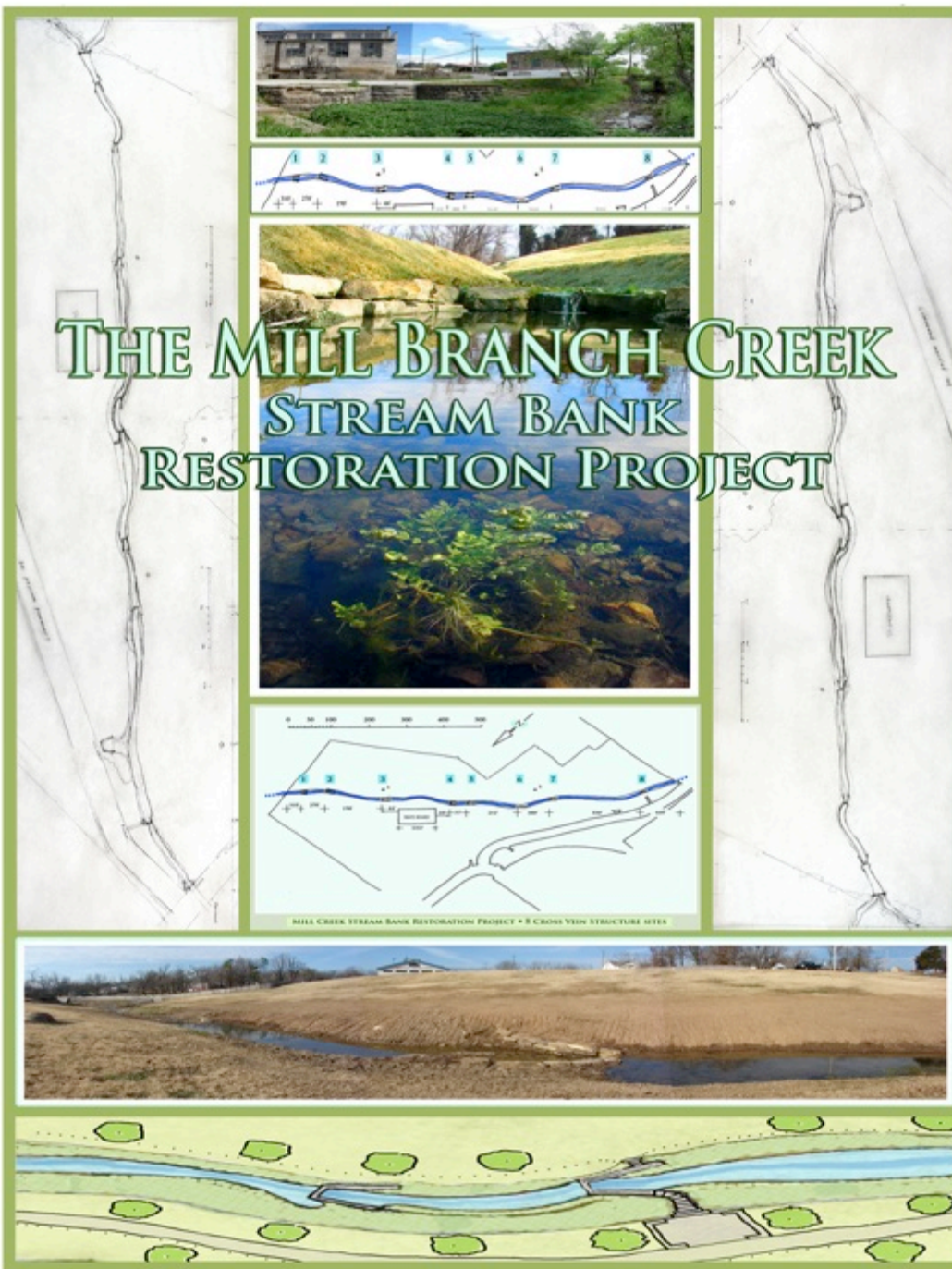
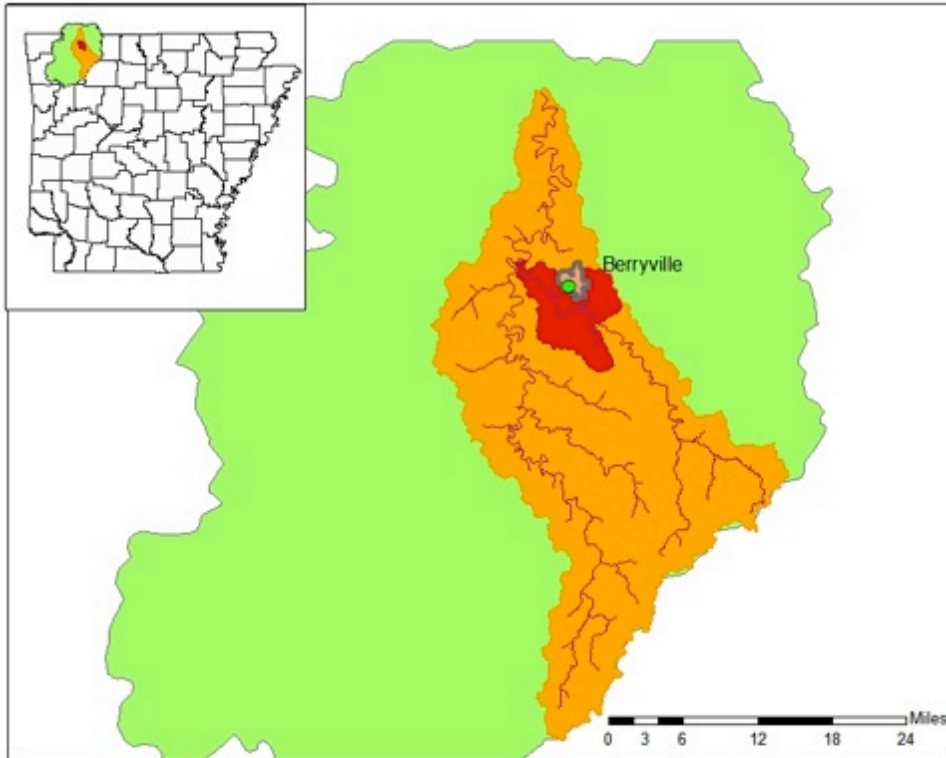


THE MILL BRANCH CREEK STREAM BANK RESTORATION PROJECT

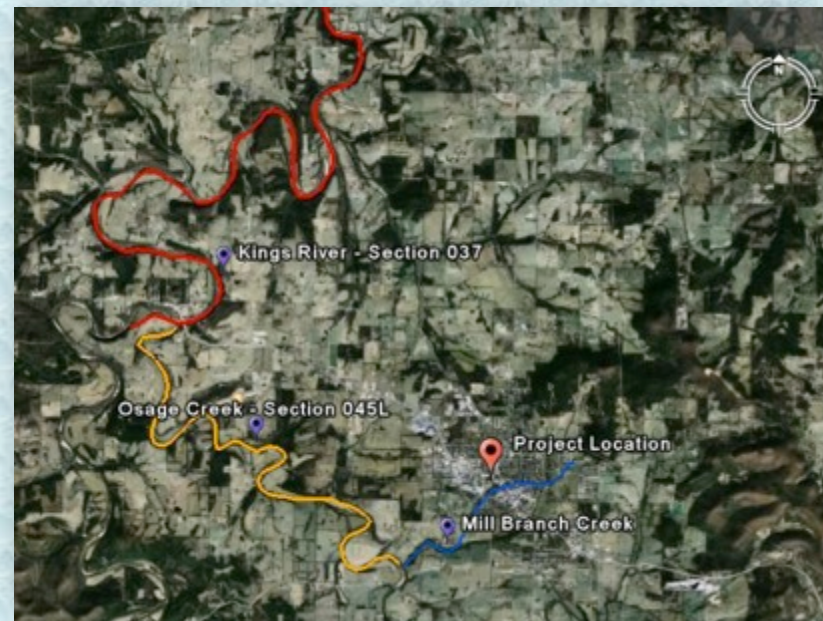


Project Location



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...

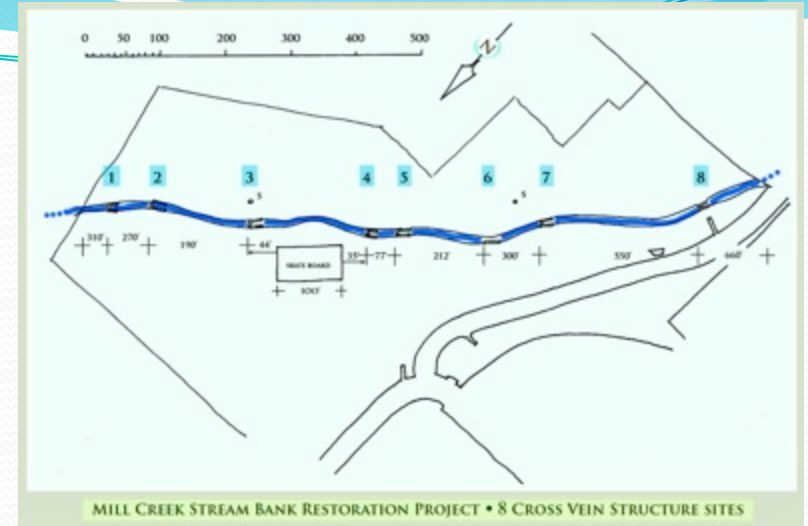
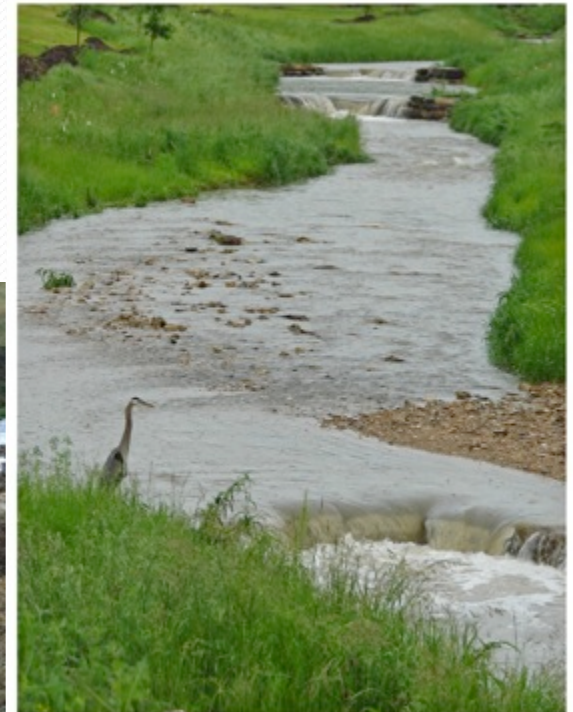


Mill Creek Branch, Berryville AR; Berryville Community Center Park -- **Looking upstream**

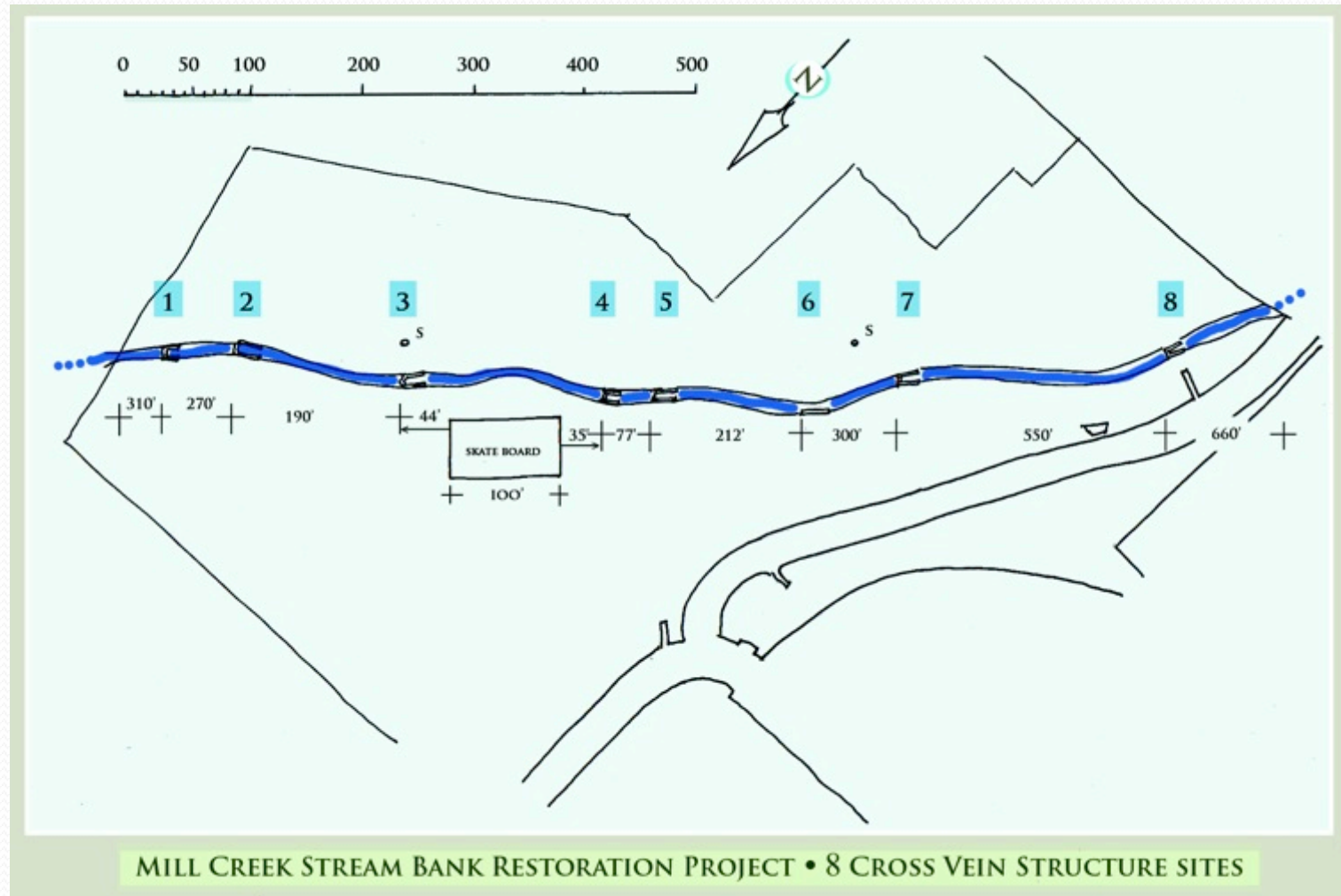


-- **Looking downstream**

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

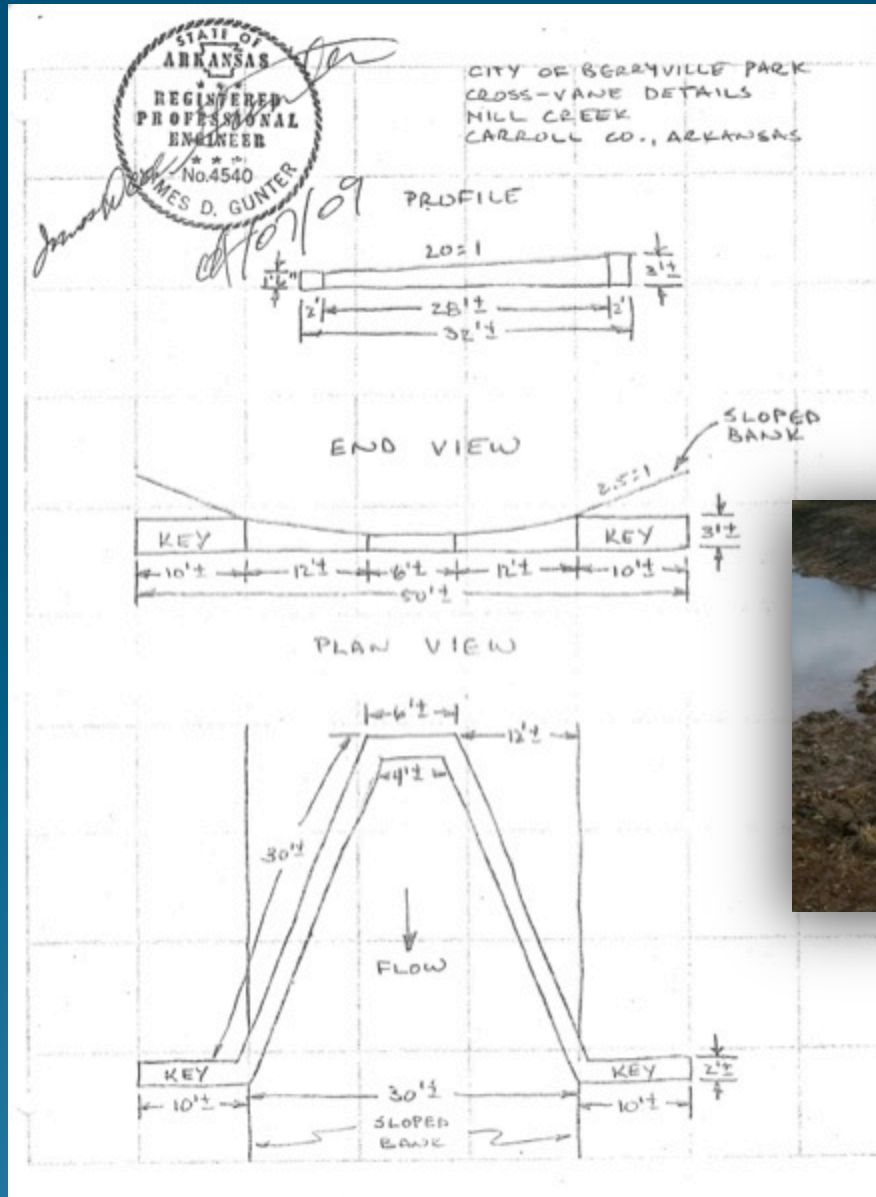


Rock Weirs, redirect water flow to center channel; create water fall (step) and pooling, slow water and capture sediment.





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.

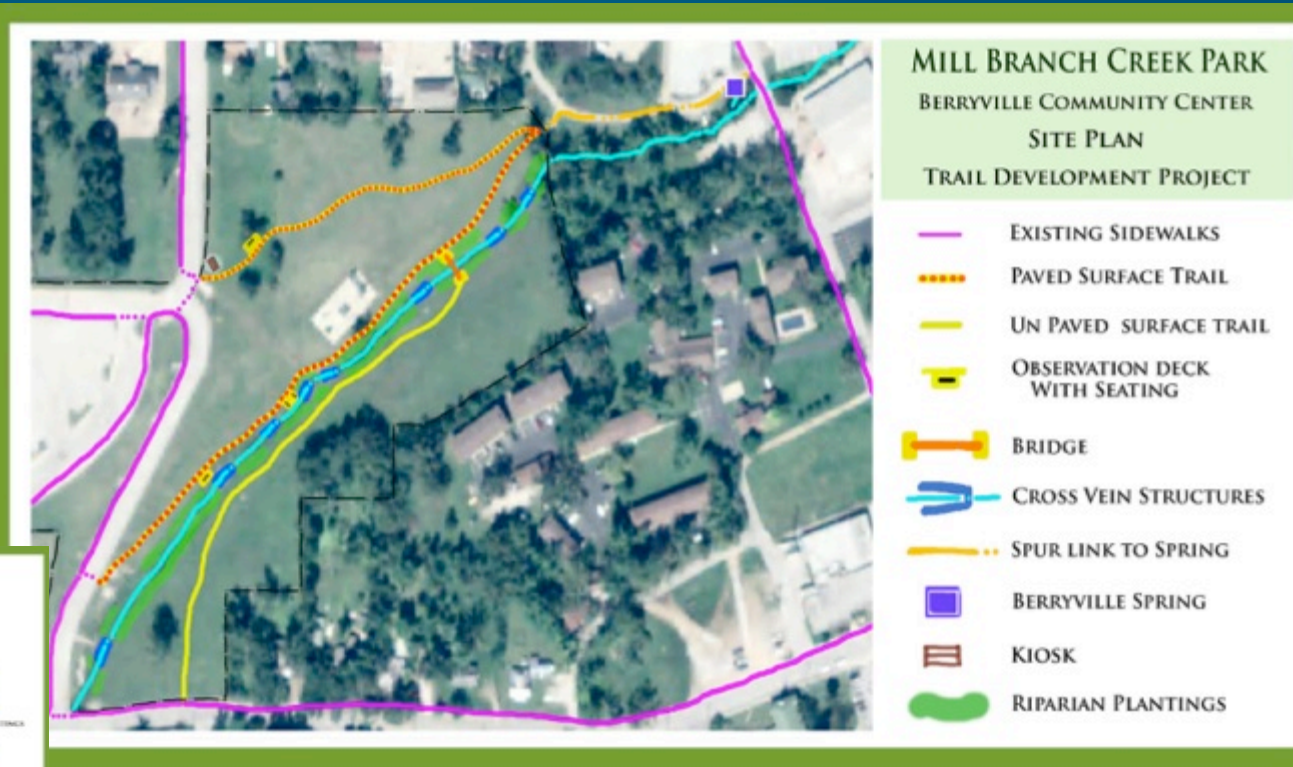
Sign up sheet in back – we will contact you.





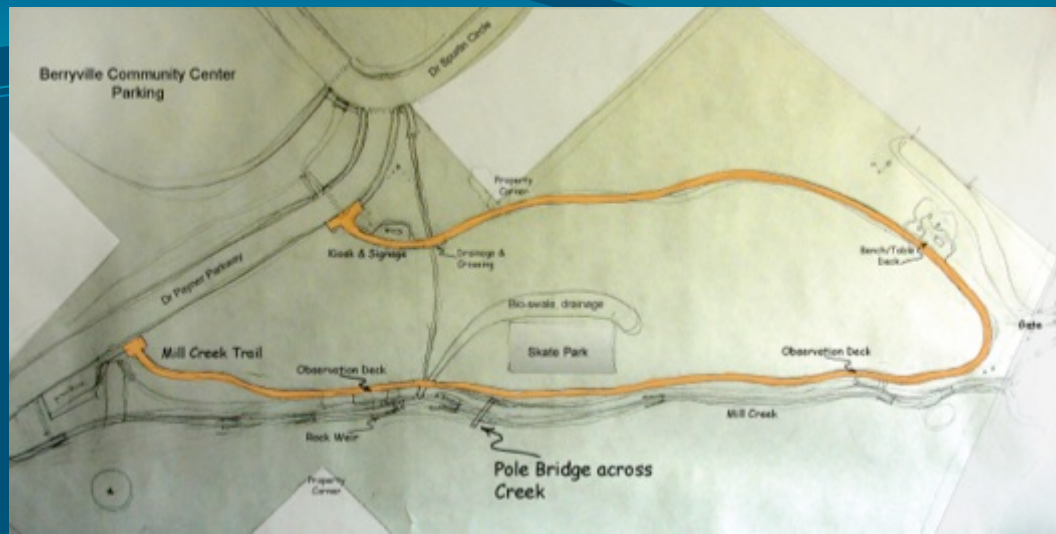
Wildlife Observation Trail Grant

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.

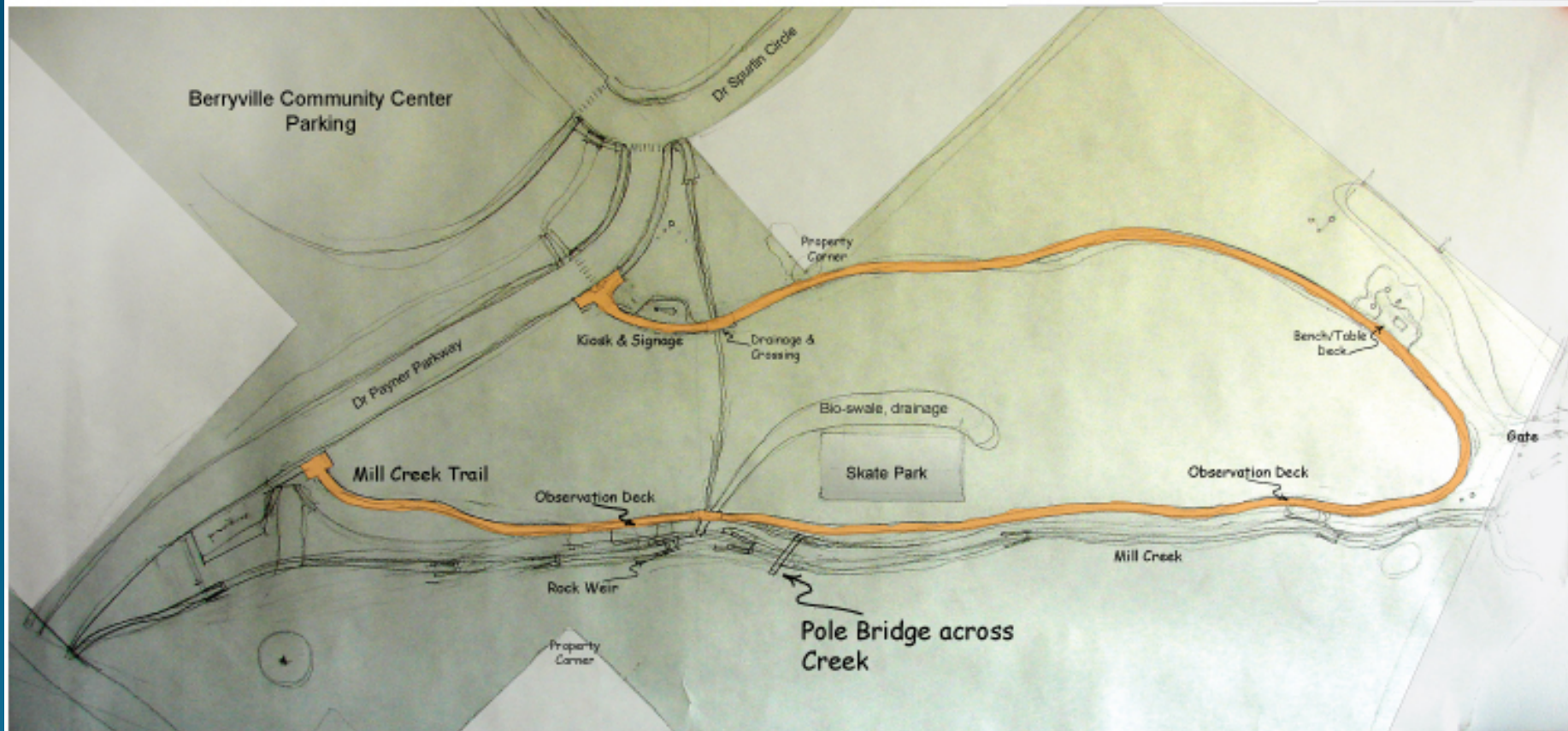


STREAM BANK OBSERVATION AREA AND TRAIL IMPROVEMENTS *SITE PLAN DESIGN





Mill Creek Wildlife Observation Trail
Berryville Community Center
Berryville, AR



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

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