

Decreasing Flood Risk in the Midwest with Regional Collaborations: Lessons from the Field

Welcome! The webinar will begin shortly.

May 24, 2023

Dubuque County. Photo credit: John Wiley

Project team



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Dubuque County
Watersheds, Iowa



Atchison County, Missouri



Dodge County, Nebraska



Central Arkansas Water



Marengo River Watershed
Partnership, Wisconsin



Today's speakers



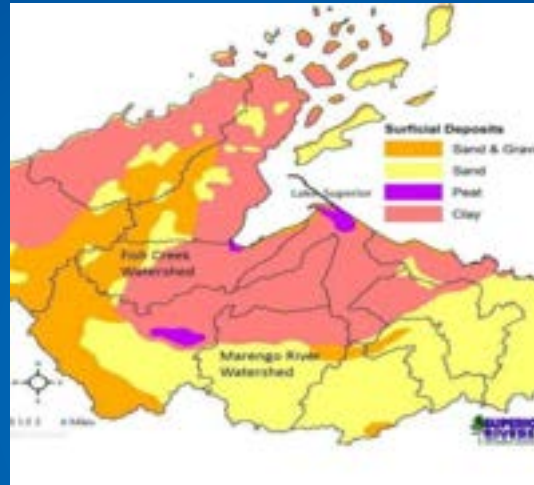
Kevin Brewster
Superior Rivers
Watershed Association



Raven Lawson
Central Arkansas
Water



Connecting People, Land, and Water



A Landscape Transformed: Living with Unstable Hydrology



Stewardship and Restoration Through Community Engagement and Stakeholder Collaboration



From Planning to On-The-Ground Results

Attribute	Subwatershed																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Stream Main-Use Potential (percentage to right)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Flow (cubic feet per second)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Waters Present (1-50%)	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0
Culvert Failure Risk (percentage to right)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Open Lands Present (in 1000 acres)	11.1	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
High Intensity Agriculture Present (1-50%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USF (percentage to right) (percentage to right)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shading Present (high to moderate)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transitional Agricultural Land Present (1-50%)	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0	1.1	11.0
USF (percentage to right) (percentage to right)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Projected 10 yr. Stream Temp. (1-50 deg. C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dissolved Nutrients (1-50% mg/L Total P)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Culverts Backed-Up (percentage to right)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Priority																		
Stream (Blue)																		
Hydrological																		
Stream (Blue) & Land Use																		
Natural Infrastructure																		
Stream (Blue) & Land Use																		
Stream (Blue)																		
Stream (Blue)																		
Stream (Blue)																		





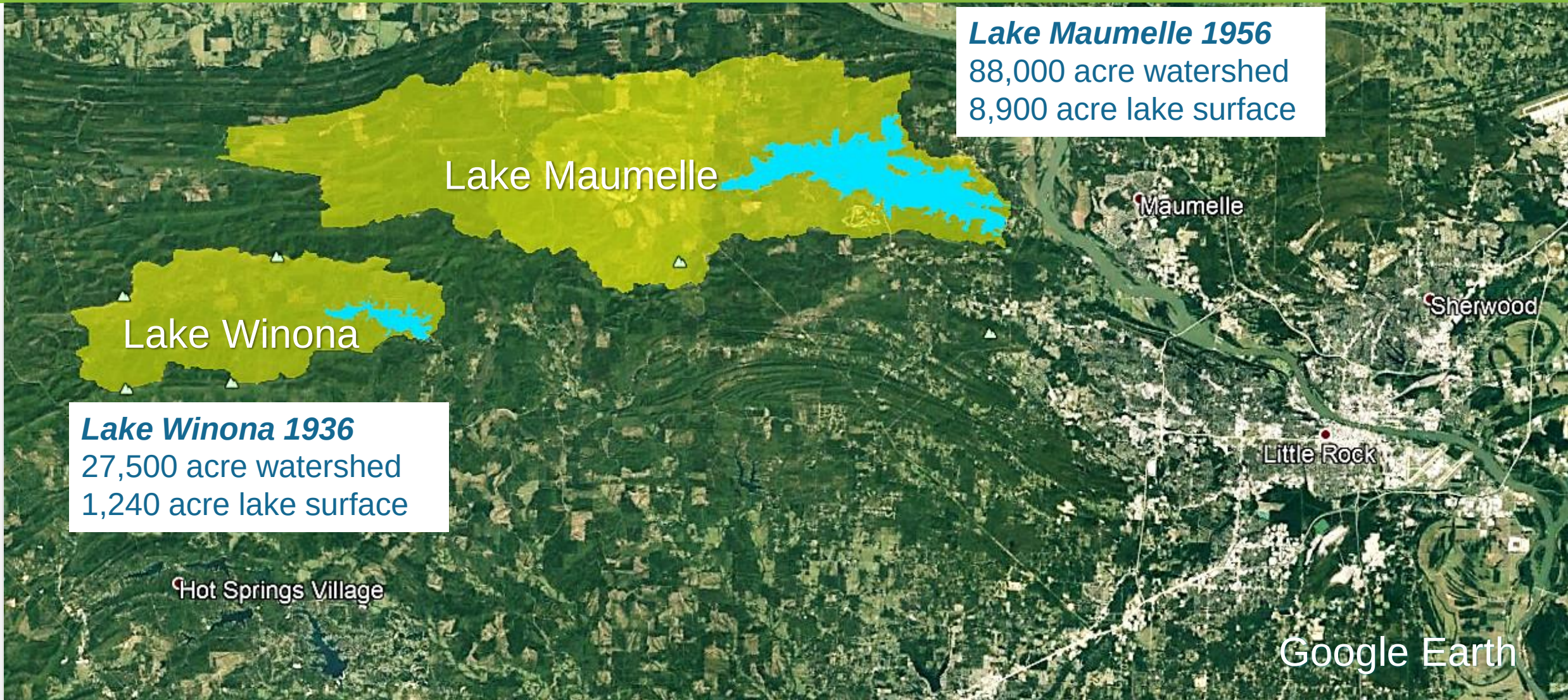
Central Arkansas Water- *Green Bond for Watershed Protection*



Raven L. Lawson
Watershed Protection Manager

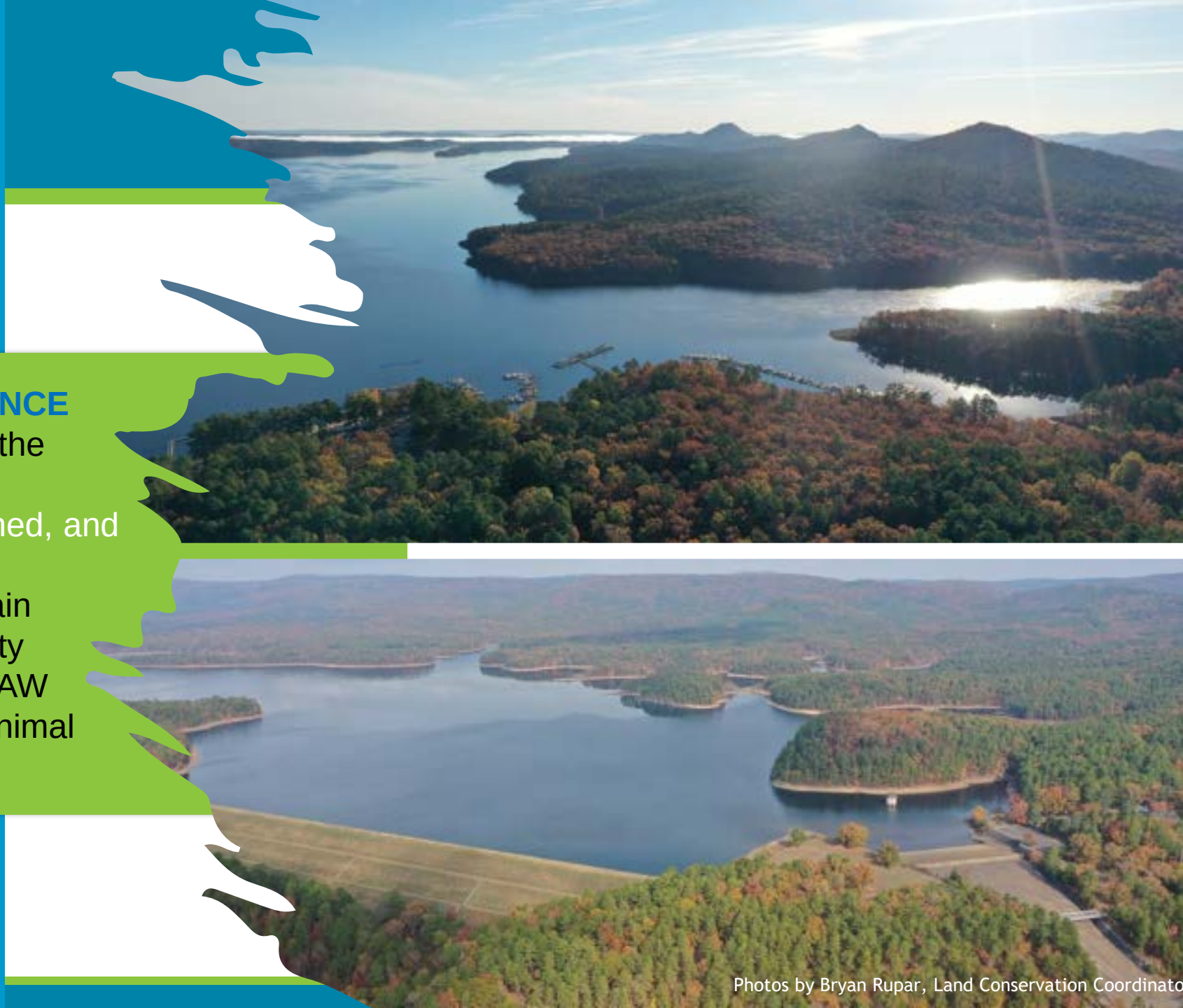
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CAW Watersheds



CAW's Watershed Protection Program's Goals

To **PROTECT, RESTORE, and ENHANCE** the natural watershed environment of the Utility's two water sources through a variety of pollution prevention, watershed, and source water protection approaches as part of an overall strategy to maintain and enhance ecological and community sustainability, and ultimately ensure CAW can provide high-quality water with minimal treatment.





Received First Ever
Certified Green Bond
for Protection of Forest Lands
as Water Infrastructure
(October 2020)



WORLD
RESOURCES
INSTITUTE

Watershed Ownership*



	Acres	% of Watershed
CAW Total	21,678	25
USFS	13,591	16
Non-CAW Held Easement	856	1
TIMOs	31,216	35
Private/Other	20,952	23
Watershed	87,680	100

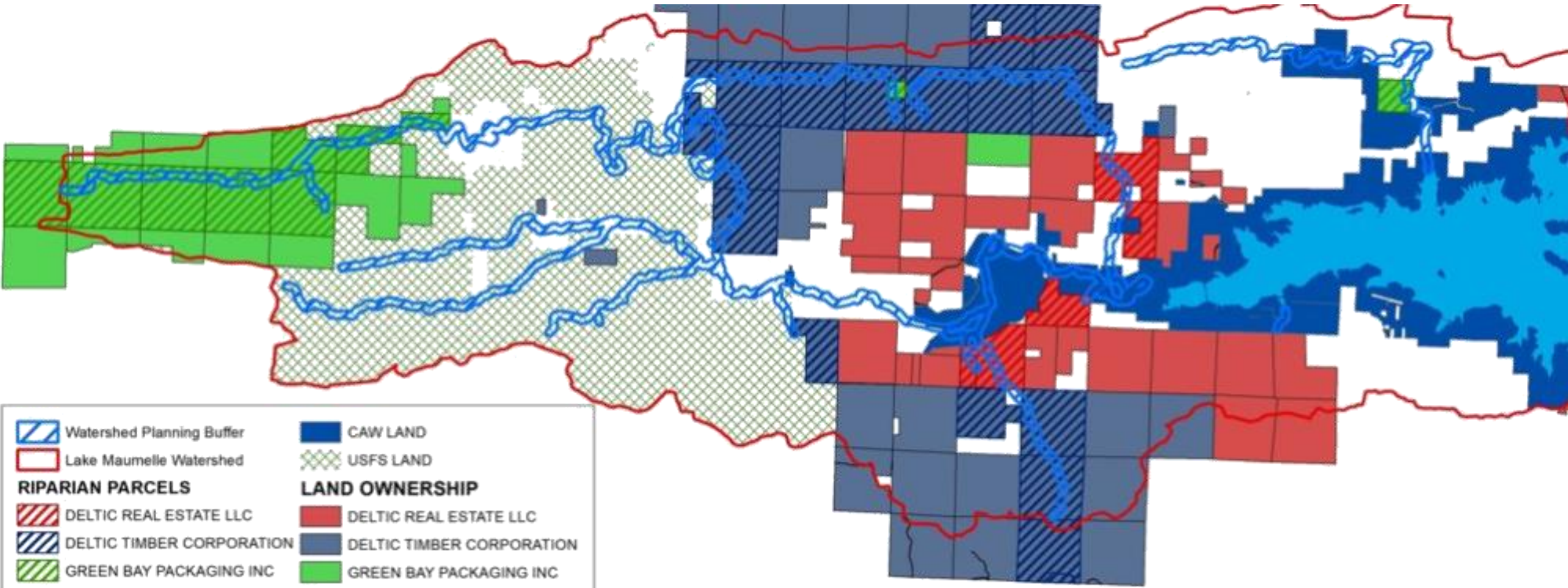
*Lake Maumelle Watershed

**42% of Watershed
currently conserved**

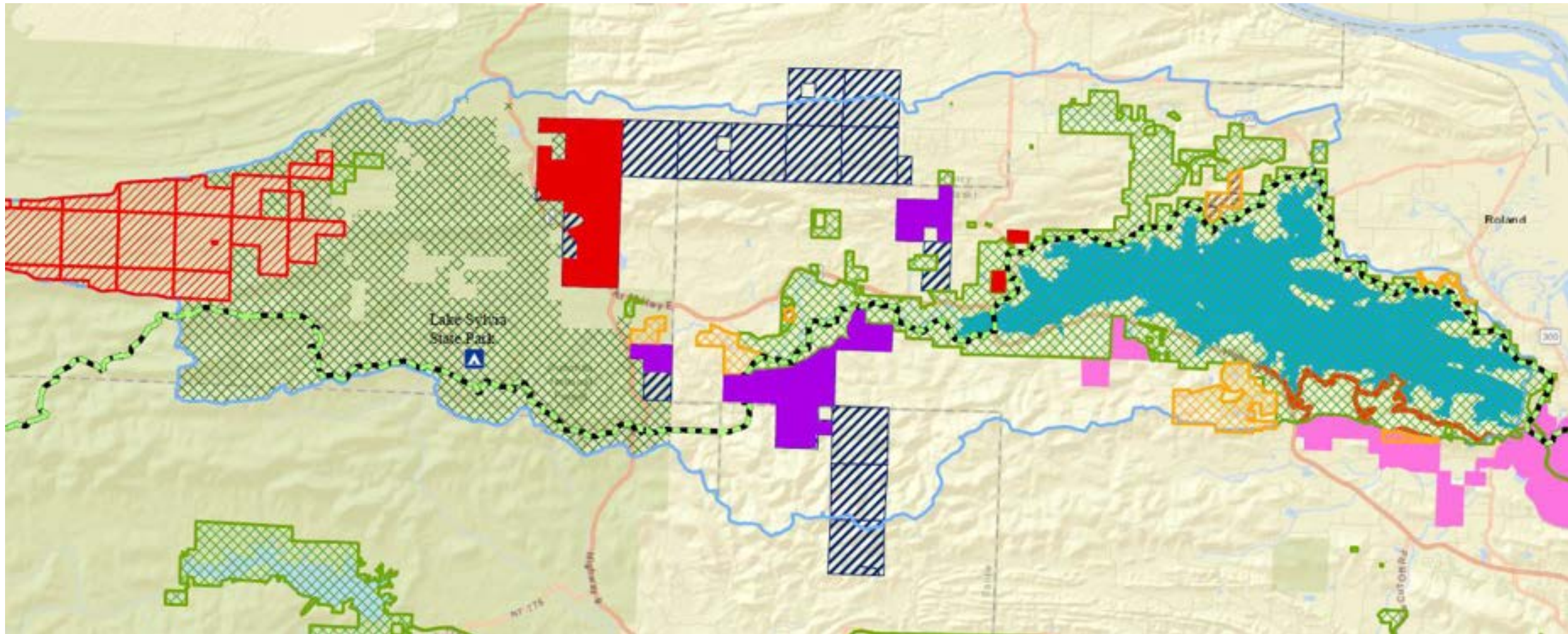
**Major Tributaries Buffer
Ownership**

**42% Conserved
34% TIMO's
24% Private**

Watershed Ownership



Green Bond Targets



Recommendations for Local Government



**Build a
diverse
coalition.**



**Invest
time and
start
small.**



**Partner
with
existing
regional
groups.**



**Focus
outreach on
why people
should care.**



**Consider
local
funding
options.**

Recommendations for State and Federal Government



Enable and empower regional authorities.



Design programs that foster regional collaborations.



Increase investments in planning and projects that reduce risk before a disaster occurs.



Federal cross-agency collaborations should support regional projects.



Free technical assistance to decrease flood risk & strengthen communities



Project planning



Capacity building



Customized research

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**Download the report at
headwaterseconomics.org**



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Photo credit: Bryan Rupar

GEORGETOWN
CLIMATE CENTER

 **HEADWATERS**
ECONOMICS