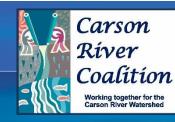
## CRC Process and Carson River Watershed Adaptive Stewardship Plan

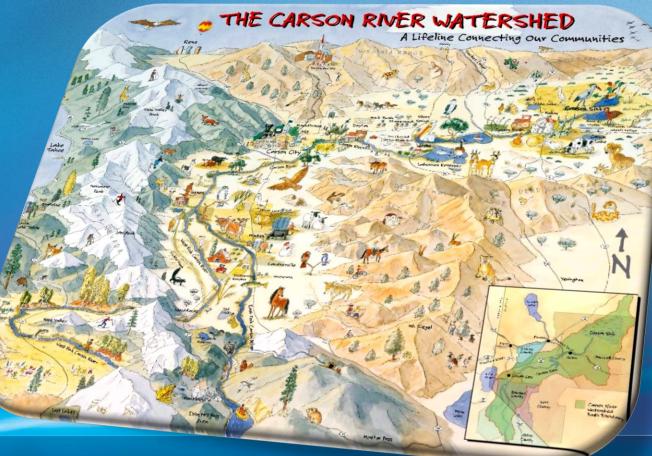
January 17, 2024 Brenda Hunt Watershed Program Manager

#### Made possible by:









#### **Carson River Coalition** M U.S. FISH & WILDLIFE SERVICE SON WA rw CHURCHILL COUNTY University of Nevada **Cooperative Extension** There's no place like home! **River Wranglers** jounte FRVANCY NEVADA DIVISION OF **ENVIRONMENTAL Conservation** PROTECTION **Districts:** NEVADA DIVISION OF STATE LANDS **Carson Valley** LIC WOR **Private Citizens & Dayton Valley** The Nature Conservancy **Producers** Lahontan Fallon Paiute Shoshone Tribe **CWMAs** Vashoe Tribe evad of Nevada State of Nevada and California Department of Conservation & Natural Resources Division of Water Resources Tracy Taylor, P. E. State Engineer Douglas County, Nevada LAND HR ANRCS Natural Resources Conservation Service CONSERVANC NEVADA DEPARTMENT OF NSPORTATION



## **Current Challenges**



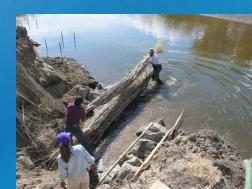


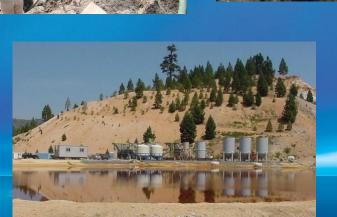














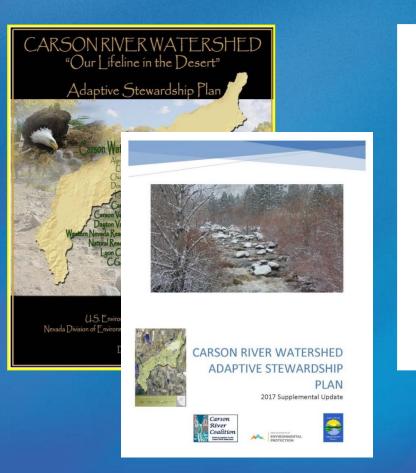


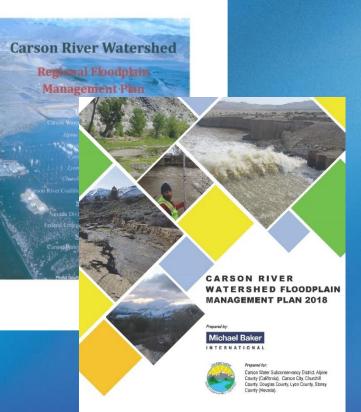




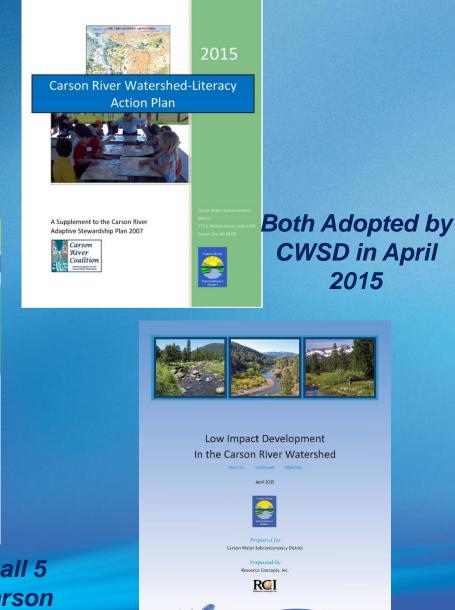


## **Effective Planning**





Both original (2007) and updated(2017/2018) Stewardship Plans meet EPA 319 criteria for watershed plans and were adopted by CWSD. Formally adopted by all 5 counties along the Carson River in 2008 and 2018

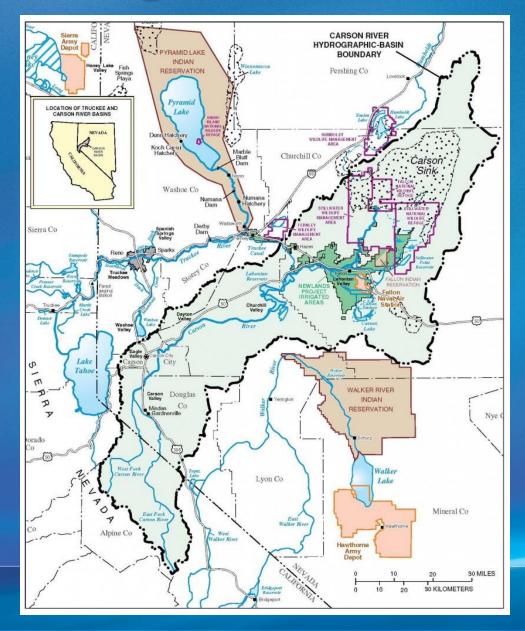




#### Watershed Plan Purpose:

- Meets USEPA requirements for a watershed-based plan (NV Side).
- Provides priority access to NDEP's CWA 319(h) funding.
- Details Water Quality (WQ) impairment data and WQ objectives.
- Lists proposed projects and suggested actions for WQ improvements.
- Step toward achieving USEPA/CA Lahontan requirements for CA side).

### Integrated Watershed Planning and Management



The plan identifies projects and programs in the following categories: Floodplain Management River Restoration/Rehabilitation Water Quality Water Supply Invasive Species Outreach and Education Recreation

### **Chapter 8 Tables:**

Critical Area Management Measures and Water Quality Objectives

Critical Areas	Category 5 Impairment and/or TMDL parameters from Integrated Report	Potential Source	Recommended Management Measure to be implemented	Performance Indicator	Milestone measuring progress towards attaining WQ Objective	
EF Carson River- Stateline to Genoa including Bryant Creek Mainstem Carson River Genoa Lane to Lahontan	TP, TSS, NTU, DO, T, Phosphorus TDS (Arsenic, Iron, Nickel- Bryant Creek only)	Hydrologic Modification – channel & flow alteration Sediment Transport from upstream	<ul> <li>250 linear feet of River bank stabilization, rehabilitation, floodplain restoration or revegetation per year (NV SMP Milestone) including weed removal and reseeding/revegetation.</li> </ul>	<ul> <li>50 lbs/yr TP &amp; 50 tons/yr TSS kept out of river</li> <li>(R5 model estimate)</li> </ul>		
		Urban Development & Runoff	<ul> <li>Implement at least one LID/urban runoff project in the next 5 years</li> </ul>	Determine appropriate load reduction as part of LID/urban runoff infrastructure project	Decreasing trend in concentration or standard/TMDL exceedance	
		Agriculture – crop & livestock management	<ul> <li>Install cattle exclusions along River and irrigation return flow ditches where appropriate and if feasible</li> <li>Install stock watering systems</li> <li>Floodplain remains agricultural, removed from development, established as a conservation easement or designated as open space where feasible.</li> </ul>	<ul> <li>Feet of fencing installed</li> <li># of stock water systems installed</li> <li>Increase in acres of floodplain preserved or conserved above 2015 baseline</li> </ul>		

Table 8.3 Proposed Projects									
Critical Area*/Tributary Reach/ Project Area	Interfluve Sub- Reach**	Project Title/Description	Project Manager & Partners ****	Estimated Completion Date	Estimated Completion Costs	Map I.D. Code***			
	Floodplain Management/Meadow Restoration Projects								
Alpine County	Alpine County								
West Fork Carson River Headwaters to Paynesville*	N/A	Upper Hope Valley Meadow Restoration and Aquatic Habitat Enhancement - Implementation	USFS, CWSD, AWG, FOHV, Alpine County, American Rivers, Trout Unlimited	Contingent upon funding availability	\$243,870	AWG-5			
Markleeville Creek/ Upper East Fork Carson River*	N/A	Markleeville Creek Floodplain Restoration Project (Floodplain restoration/river rehabilitation) - Implementation	Alpine County, Alpine Watershed Group, Markleeville Public Utility District, U.S. Forest Service	Contingent upon funding availability	\$1,750,000	AWG-1			
Also See River Rehabilitation									
Douglas County									
EF Carson River Stateline to Genoa	E-5,E-6 88 to Muller Muller to Genoa	Park Property Potential Conservation Easement for Floodplain & Riparian Corridor Preservation	Private Property Owner, Legacy Land & Water, TNC, Douglas County	Contingent upon easement agreement & funding	TBD	TBD			

Carson River Adaptive Stewardship Plan Suggested Actions for Future Management and Implementation								
SA- #	Critical Area	Suggested Action	Responsible or Suggested Responsible Party					
		Floodplain Conservation						
SA-1	Watershed wide	Continue to implement Carson River Floodplain Management Plan 2008 and supplemental update 2013 Summary of Suggested Actions Table 4.7-1, pages 52-55 and any adopted updates.	CWSD, Counties, Other agencies	FEMA, CWSD, Counties, other relevant entities				
SA-2	Watershed wide	Continue to implement Carson River Discovery Report 2012 Recommended Watershed Projects Table and any adopted updates.	CWSD, Counties, Other agencies	FEMA, CWSD, Counties, other relevant entities				
SA-3	Watershed wide	Complete projects outlined in Current and Proposed Project Tables 8.3-8.7 relating to Floodplain/ Meadow Conservation	Relevant entities	Relevant entities				
		River Rehabilitation/Stabilization						
SA-4	Watershed Wide	Evaluate Carson River diversion structures to determine the feasibility and priority of replacement/retrofitting with permanent structures that transport sediment, allow fish passage, and provide recreational boat passage.	CWSD, NDOW, NDEP	NRCS, NDOW, CWSD, NDEP				
SA-5	Watershed Wide	Investigate what type or level of sediment transport study would be feasible for the Carson River.	CWSD, NDEP, USACE	CWSD, NDEP				
SA-6	Watershed Wide	Identify priority areas requiring bank stabilization/rehabilitation within each County's river and tributary reaches.	CWSD, Counties, Conservation Districts, NGO, Ag Community	CWSD, NDEP, NRCS, NDOW, FEMA, EPA				

## Workshop Preview



# Questions?

