

## Watershed Health Action Plan – Arkansas Basin Implementation Plan

Collaborative Dialogue with Community and Key Stakeholders				
Action		Responsible Party	Available Resources	Timing
1	Convene a small group via phone to strategize about invitations to a larger group to participate in a meeting to plan and frame a new watershed health coalition for the Upper Arkansas Basin (above Pueblo Reservoir) and to strategize about appropriate outreach	Kyle Hamilton	Heather Bergman; Watershed Health Working Group and documents	By August 12, 2014
2	Reach out to Arkansas Basin Roundtable, its nonconsumptive subcommittee, conservancy districts, and the Arkansas River Basin Water Forum to gather input regarding watershed health coalition	Gary Barber, Kyle Hamilton	Watershed Health Working Group and documents	Through August 2014
3	Convene a meeting of interested parties to help scope and frame a new watershed health coalition for the Upper Arkansas Basin (above Pueblo Reservoir); focus of new group is to address and improve management activities that affect watershed health (habitat, forest health, wildfire planning, mine stability, etc.)	Heather Bergman	Watershed Health Working Group and documents, DOLA, AWRA, NFF, Arkansas Basin Roundtable, Front Range Roundtable, others	Mid-September 2014
4	Convene the Upper Arkansas Watershed Coalition	TBD/volunteer entity from first meeting (above)	Watershed Health Working Group and documents, Arkansas Basin Implementation Plan	Fall 2014
5	<p>Develop a strategic plan for the Upper Arkansas Watershed Coalition to include:</p> <ul style="list-style-type: none"> <li>• Function, mission, and scope</li> <li>• A funding strategy with multiple options identified</li> <li>• Identification of potential partner or participating entities</li> <li>• Approaches to inter-agency collaboration at state and local levels</li> <li>• Clarification of roles and responsibilities of different agencies, groups, and other stakeholders</li> <li>• How to build on the work that is already underway in the Basin</li> <li>• Rapid identification of areas in the Arkansas Basin that are most at-risk from fire or flood</li> <li>• Exploration of flooding and other watershed health issues in addition to fire</li> <li>• A plan for annual operating review to assess progress, inclusiveness, effectiveness, and relevance</li> <li>• A plan for how to include education and outreach in operations</li> </ul>	Upper Arkansas Watershed Coalition*	Watershed Health Working Group and documents, Arkansas Basin Implementation Plan ; Brad Piehl's work; Watershed Condition Framework; Colorado Watershed Assembly directory	Initial organizational description, purpose, and strategy by third quarter 2015; others as ready and appropriate
6	Interface with Arkansas Basin Roundtable's Nonconsumptive Subcommittee and other nonconsumptive groups to identify overlaps in values/interests and consequences from wildfire	Upper Arkansas Watershed Coalition*; Kyle Hamilton	Colorado Watershed Assembly; Colorado Parks and Wildlife	Ongoing

\* All actions suggested for completion by the Upper Arkansas Watershed Coalition are also recommended for completion by any additional Watershed Coalitions that are created in Arkansas Basin or elsewhere in Colorado.

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Action	Responsible Party	Available Resources	Timing	
7	Explore the creation of additional watershed coalitions in the Middle Arkansas, Lower Arkansas, etc.	Arkansas Basin Roundtable / Conservancy Districts	Upper Arkansas Watershed Coalition, Watershed Health Working Group and documents; Colorado Watershed Assembly	2015
8	Develop a summary PowerPoint presentation and associated handouts to capture key outputs and themes from Watershed Health Working Group	Heather Bergman	Watershed Health Working Group and documents	August 12, 2014
9	Share Watershed Health Working Group outputs, tools, and information with others in Colorado	Watershed Health Working Group	Summary PowerPoint and handouts	December 31, 2014

### Condition Assessment and Data Gathering

Action	Responsible Party	Available Resources	Timing	
1	Summarize and map categories of watershed resources to protect (land, animals, habitat, fish, water infrastructure, etc.)	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, CWCB, Arkansas Basin Roundtable, others	Year 1
2	Summarize and map risks and threats (fire, flood, water quality, stream stability, land use, etc.)	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, CWCB, Arkansas Basin Roundtable, others	Year 1
3	Compile existing federal, state, and local projects and processes related to pre-fire assessment and mitigation; review Fire Management Unit maps with USFS to understand fire management options on USFS lands, including wilderness and roadless areas	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, CWCB, Brad Piehl's work, Arkansas Basin Roundtable, others	Year 1
4	Compile existing federal, state, and local plans, processes, and projects related to post-event assessment and mitigation	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, CWCB, USEPA, Arkansas Basin Roundtable, WARSSS, Brad Piehl's work	Year 1
5	Develop and assess baseline data: <ul style="list-style-type: none"> <li>• Compile all existing GIS layers of relevant data (including nonconsumptive values, water infrastructure, and specific data from Snotel, DWR, NRCS, USGS, etc.)</li> <li>• Prepare a database that identifies the location and ownership of the data</li> <li>• Prepare maps of relevant data</li> <li>• Identify data gaps and develop a strategy to gather and integrate missing data (e.g., GIS layers for past forest management projects, FEMA flood mapping in counties where it is not yet developed)</li> </ul>	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, CWCB, Arkansas Basin Roundtable, others	Year 1

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Condition Assessment and Data Gathering				
Action		Responsible Party	Available Resources	Timing
6	Conduct a basin-wide water quality assessment, building on 305b report	Upper Arkansas Watershed Coalition*	Colorado River Watch; 305b report	Year 1
7	Assess local, state, and federal policies that impact watershed health; if needed and appropriate, pursue changes to those policies (e.g., emergency NEPA processes, legislation for aerial fire suppression)	Upper Arkansas Watershed Coalition*	Arkansas Basin Roundtable	Year 1
8	Compile statewide preparedness data on the following components: <ul style="list-style-type: none"> <li>• Oil and gas: pipelines</li> <li>• Utilities (electric): lines and substations</li> <li>• Communications: radio, TV, police, EMC, cell phone</li> <li>• Mines and industrial facilities</li> <li>• Geologic hazards</li> <li>• Water intakes</li> <li>• Water treatment facilities</li> <li>• Threatened &amp; endangered species</li> </ul>	USFS, CDPHE, utilities, Arkansas Basin Roundtable, others	Upper Arkansas Watershed Coalition*	Year 1
Coordinated Planning for Event/Threat <sup>1</sup>				
Action		Responsible Party	Available Resources	Timing
1	Prepare a strategic plan for Upper Arkansas Basin (see detailed list of components on Page 1 of this Action Plan)	Upper Arkansas Watershed Coalition*	Watershed Health Working Group and documents, Arkansas Basin Implementation Plan, Brad Piehl's work, Watershed Condition Framework; Colorado Watershed Assembly	Year 1
2	Prepare a tactical preparedness plan for high-priority assets (e.g., water supply infrastructure, endangered species protection); coordinate with local, state, and federal agencies to identify additional assets (e.g., work with CDOT to identify critical roads to keep open in an emergency); develop a fire response emergency action plan	Upper Arkansas Watershed Coalition*	Watershed Health Working Group and documents, counties, CSFS, CDFPC, USFS, Arkansas Basin Roundtable, others	Year 1
3	Distribute tactical plan to agencies who will respond to fires, floods, and other threats; identify how and where Arkansas Basin data/GIS information fits into fire-related models and tools; enter existing local watershed health GIS data into WFDSS, CO-WRAP, and other applicable databases; push toward shared technology and mapping platforms and	Upper Arkansas Watershed Coalition*	USFS, CSFS, CDFPC, others	Year 1

<sup>1</sup> Appendix 4.2.J is a list of relevant tools to assist in the creation of the plans suggested in this section.

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Coordinated Planning for Event/Threat <sup>1</sup>				
Action		Responsible Party	Available Resources	Timing
	approaches across efforts, regions, and agencies; identify obstacles, opportunities, and related resource needs			
4	Prepare a mitigation plan to protect high-priority assets (e.g., hazardous fuels reduction); develop improved planning for post-fire sediment and water quality problems due to erosion and floods; assess and identify where to pre-position post-fire flooding mitigation; investigate pre-permitting for post-fire improvements	Upper Arkansas Watershed Coalition*	USFS, USACE, USBOR, USEPA, CDPHE, BAER Response Guide, Arkansas Basin Roundtable, others	Year 1-2
5	Update strategic plan to integrate and/or reflect tactical and mitigation plans and cross-reference with other planning documents in the area	Upper Arkansas Watershed Coalition*	USFS, USACE, USBOR, USEPA, CDPHE, county emergency action plans, Arkansas Basin Roundtable, others	Year 1-2
6	Identify IPPs related to watershed health in addition to those listed in the BIP, including by working with other stakeholders and agencies to summarize their planned projects and identifying multi-purpose projects that fill water supply gaps and improve habitat, recreation, wetlands, and water quality	Upper Arkansas Watershed Coalition*	Arkansas Basin Implementation Plan, Arkansas Basin Roundtable	Year 1-2
7	Identify new watershed health funding sources to target desired outcomes (e.g., CWCB, NRCS, USDS, EPA, FEMA, etc.)	Upper Arkansas Watershed Coalition*	Watershed Health Working Group, Arkansas Basin Roundtable	Year 1-2
Resilience Initiatives and Pre-Event Mitigation				
Action		Responsible Party	Available Resources	Timing
1	Develop a process for filling the GIS and mapping data gaps; integrate new data with existing local, state, and federal databases; complete GIS mapping for all key values, including water infrastructure	Upper Arkansas Watershed Coalition*	USFS, CDPHE, CSFS, others	As possible, and ongoing
2	Complete the mitigation treatments outlined in the mitigation plan	Upper Arkansas Watershed Coalition*	Mitigation plan developed by Upper Arkansas Watershed Coalition	As possible, and ongoing
3	Continually update watershed health project lists, datasets, and maps	Upper Arkansas Watershed Coalition*	Arkansas Basin Roundtable, USFS, CDPHE, CSFS, others	As possible, and ongoing
4	Request that CDPHE extend a WFDSS-like resource throughout the state and better define how it will be used by different agencies (e.g., DFPC) in fire suppression.	Upper Arkansas Watershed Coalition*	USFS	Year 1-2

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