Methods

The purpose of this report was to explore the lessons learned and important takeaways from going through compact compliance as experienced by water users and managers in the Arkansas, Republican, and Rio Grande Basins.

The lessons explored in this report represent the analysis of interviews with individuals from three basins in Colorado who have had to adjust water supplies and management to achieve compact compliance. Analysis consisted of reviewing interviews, noting and coding for thematic elements that presented themselves as lessons learned. This process of allowing themes to emerge meant that no theme was the opinion or experience of one individual, but that of many individuals. Thus, the lessons in this report are both generally supported across all three basins and are not the viewpoint of the authors of the report or any other entity. Additionally, the report is not a complete catalogue of all possible lessons learned, nor is it a formula for correct action in the Colorado River Basin.

Interviews were conducted by Kelsea MacIlroy of MacIlroy Research and Consulting, LLC. Each interview lasted between 45 minutes and one and half hours. The majority were conducted over Zoom during the months of March and April in 2021 with analysis conducted by Kelsea in April and May 2021. Interviews were generally conversational, though a specific interview schedule was used. Questions focused on: 1) the background and experience of the interviewee in relation to a basin's compact administration and compliance; 2) Compact compliance measures, unintended and intended impacts to farmers, ranchers, communities, and water management operations; 3) Interviewee's advice related to their experience with compact compliance and general concerns in terms of water in the state of Colorado.

In total 20 individuals were interviewed. These interviewees represented all three basins in a variety of ways and effort was made in each basin to reach a diversity of perspectives relative to experience with compact administration and compliance. Interviewees included farmers, ranchers, ditch managers, well augmentation specialists, conservation district managers, state employees, municipal employees, environmental NGO employees, and water lawyers. Since we were concerned with people who had experience with compact compliance, interviewees ranged in age from late 30s to 70s. The majority were male and white, with three female participants.

In order to provide context for the interviewee narratives included in the report, sections on each basin include a short history of compact administration issues in the basin, as well as a brief timeline. Sources for this material are provided at the end of each section.

The report was jointly written by Kelsea MacIlroy, MacIlroy Research and Consulting, LLC and Hannah Holm, Director of the Ruth Powell Hutchins Water Center at Colorado Mesa University.

Authors

Both authors of the report have many experiences related to water in the state of Colorado that shape their perceptions, interpretations, and findings.

Kelsea MacIlroy, MacIlroy Research & Consulting, LLC

Kelsea is a PhD Candidate in Sociology at Colorado State University. As a sociologist, Kelsea examines how people's values, beliefs, and experiences shape their response to problems, particular when it comes to water. Her report, *Exploring Perceptions of a Voluntary Agricultural Water Conservation Program* on the Western Slope of Colorado, is based on interviews with farmers, ranchers, and water managers on the Western Slope in 2019. From 2014-2018 Kelsea was a Research Assistant with the Colorado Water Institute, working on their *Moving Forward with Agricultural Water Conservation* USDA grant. She traveled throughout the Colorado River Basin conducting interviews with a diversity of stakeholders to understand the



Kelsea MacIlroy

barriers and opportunities that exist in agricultural water conservation. The result was the publication of Every Ditch is Different: Barriers and Opportunities for Collaboration for Agricultural Water Conservation in the Colorado River Basin. Prior to that she completed her master's thesis in her former home of the San Luis Valley during the implementation of the first groundwater subdistrict looking at how people framed their willingness and objections to support and participate in the voluntary

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program. Kelsea has a master's degree in Sociology from Colorado State University, a master's degree in Secondary Education from Adams State University in Alamosa, CO, and a bachelor's degree in History from Gordon College in Wenham, MA.

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group board in Pennsylvania. Earlier in her career, Hannah worked

Hannah directs the Ruth Powell Hutchins Water Center at Colorado Mesa University, which promotes research, education and dialogue to address the water challenges facing the Upper Colorado River Basin. While working with the Center, which she co-founded in 2011, Hannah has organized numerous water conferences and educational seminars and worked with the Colorado and Gunnison Basin Roundtables on educational activities, as well as authored dozens of newspaper columns on current water issues. She has also taught classes on water science and policy, with an emphasis on the Colorado River Basin. Hannah previously facilitated the Grand Valley and Lower Gunnison Wise Water Use Council, advocated for stronger drinking water protections with Western Colorado Congress, and served on her local watershed



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for the North Carolina General Assembly, where she staffed committees on the Environment, Natural Resources, Sustainable Agriculture and Smart Growth. Hannah has a joint Master's degree in Community & Regional Planning and Latin American Studies from the University of Texas at Austin and a Bachelor's degree in Anthropology from Macalester College in St. Paul, MN.

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