



SECTION 6

CITATIONS

- ¹ Colorado Water Conservation Board, IBCC Annual Report (CWCB, 2012), 78 .
- ² Figure 4.9 in Colorado’s Water Plan shows the three composite scenarios selected representing “Hot and Dry”, “Between 20th century observed and Hot and Dry” (or “In-Between”), and the current hydrology (or “Baseline Hydrology”).
- ³ Temperature and precipitation were not attributes that were used in estimates of future hydrologies but are extracted from the datasets to help contextualize what the changes in IWR and runoff relate to. See Technical Update Volume 2 technical memo, “Temperature Offsets and Precipitation Change Factors Implicit in the CRWAS-II Planning Scenarios.” A temperature offset (°C) quantifies the predicted temperature change from baseline conditions (1970–1999) to future conditions (2050), summarized as (future = historical + offset). A precipitation change factor (unitless) is the ratio of predicted future (2050) to baseline (1970–1999) precipitation totals, summarized as (future = historical x factor)
- ⁴ The planning scenarios developed for Colorado’s Water Plan and this Technical Update were built upon the foundational work of the multiphase Colorado River Water Availability Study, Phase II (CRWAS-II). Detailed methodology and analysis results can be found in CRWAS-II Task 7: Climate Change Approach and Results.
- ⁵ House Bill 2010-1051 requires that the CWCB implement a process for the reporting of water use and conservation data by covered entities. A "covered entity" is defined as each municipality, agency, utility, including any privately owned utility, or other publicly owned entity with a legal obligation to supply, distribute, or otherwise provide water at retail to domestic, commercial, industrial, or public facility customers, and that has a total demand for such customers of two thousand acre-feet or more, per Section 37-60-126(1)(b) of the Colorado Revised Statutes (C.R.S.). 1051 reporting data provided by CWCB for the Technical Update in February 2018.
- ⁶ The adoption rate was applied to all demand categories except for non-revenue water.
- ⁷ Source: <https://www.onthesnow.com/colorado/skireport.html>
- ⁸ SWSI 2010 did not conduct any surface water modeling but Section 6 of that report provided a cursory review of water availability from existing studies.
- ⁹ Colorado Springs Utilities has water supply to meet additional future demands, and the additional supply was accounted for in gap calculations. Pueblo Board of Water Works did not have an estimate additional future demand that could be met with existing supplies, and gaps were not adjusted.
- ¹⁰ Source: Contribution of Agricultural to Colorado’s Economy (January 2012, Colorado State University Extension)
- ¹¹ Source: Rio Grande Basin Implementation Plan (April 2015)
- ¹² RGDSS represents groups of wells with similar hydraulic characteristics as a “response area”, and their combined impact to streams is represented as a “response function”. Each Subdistrict represents the geographic area reflected in the RGDSS “response area”.
- ¹³ The San Juan Chama Project delivers water from San Juan tributaries to the Rio Grande basin in New Mexico. The baseline and planning scenario models include the current demand and operations, but the project deliveries are not considered a transbasin export for the Technical Update as the project does not operate under a Colorado water right; cannot call out Colorado water users; and the supply is not delivered to a Colorado entity.
- ¹⁴ Other scenarios examined in the SWSI 2010 analysis projected the 2050 gap in M&I supplies to potentially be as low as 190,000 AFY or as high as 630,000 AFY.
- ¹⁵ See Table ES-6 from SWSI 2010 Executive Summary.
- ¹⁶ See Table ES-4 from SWSI 2010 Executive Summary
- ¹⁷ Based on the estimated existing gap between available water supplies for irrigated agriculture and the full irrigation requirement for current irrigated acres shown in Table ES-3 from SWSI 2010 Executive Summary.