

DRAFT Comprehensive Strategy to Meet Water Supply Gap
Prepared for Discussion by the IBCC's New Supply Subcommittee
Working Document Only – Not a Consensus or Decision Document
October 6, 2010

Subcommittee Members

Dan Birch	T. Wright Dickinson	Peter Nichols
Stan Cazier	Steve Harris	Mark Pifher
Carlyle Currier	Taylor Hawes	Mike Shimmin
Jeris Danielson	Melinda Kassen	Eric Wilkinson
Alex Davis	Eric Kuhn	

Note

The IBCC agreed at its August 2010 meeting that four sources are necessary to meet the water supply gap in Colorado: conservation, IPPs, agricultural transfers, and new supply development. This document outlines a comprehensive strategy to fill the gap with these four sources of supply. This document does not reflect consensus by the New Supply Subcommittee or the full IBCC. It outlines concepts, principles, and criteria that could be included in a comprehensive strategy to meet the gap.

I. New Water Supply Development

A. Three guiding principles necessary to develop new water supply are:

1. Any new supply from the Colorado River must be used to address both East and West Slope needs (needs includes both consumptive and non-consumptive). An explicit part of the goal is to allow for full development of Colorado's Colorado River Compact allocation.
2. As we develop Colorado Riverwater for new supply, such development must be accompanied by a risk management program that helps us determine when we are comfortable taking water and when we are not. Also described as a 'water supply plan' accompanied by or integrated with 'triggers' and utilizing other dry cycle sources to fill the gaps when the new supply water is unavailable.
3. Such development must also be accompanied by an emergency plan that addresses needs if "the bottom drops out."

B. Background and concept:

1. With the completion of the Phase I draft CRWAS report, it is very clear that that there is no simple or single answer to the question as to how much Colorado River water Colorado has remaining to develop. The answer will always be a range and because of the inherent legal, hydrologic and climate uncertainties, the range is big. The range of water available is from zero to 900,000 acre feet. The Subcommittee also recognizes that it will be virtually impossible to reach a consensus among the IBCC or roundtables on a water availability number that could be used for planning purposes. Therefore; rather than focus on water availability, the committee recommends pursuing an approach the minimizes that risk of a future Colorado River Compact curtailment on all Colorado River users, east slope and west slope.
2. The Subcommittee is moving ahead under the assumption that an extended curtailment of post 1922 uses under the 1922 Colorado River Compact would be

1 a very serious problem for the entire State of Colorado. Therefore, we are
2 recommending a two-pronged approach. The first would be to put in place an
3 “early warning” system that shuts down or curtails a/the new Colorado River
4 supply project (with back-up supply in place) in advance of a Compact
5 curtailment. The early warning system would be based on hydrologic triggers.

- 6 i. The 1968 Colorado River Basin Project Act contains an example of
7 such a trigger. Section 602 (a) (3) limits the Secretary of Interior’s
8 ability to release water from Lake Powell in excess of the 1922
9 compact requirements to times when storage in the CRSP reservoirs is
10 above certain triggers or levels. The language requires the Secretary
11 of Interior (as lower river master) to consider “all relevant factors
12 (including, but not limited to, historic stream-flows, the most critical
13 period of record, and probabilities of water supply) ... necessary to
14 assure deliveries under clauses (1) and (2) without impairment of
15 annual consumptive uses in the Upper Basin. These triggers are
16 referred to as “602(a) levels.” To protect existing uses Colorado
17 could adopt similar storage triggers.
- 18 ii. The water supply triggers would be coupled with an emergency water
19 bank or other operational scenario that would meet the critical needs
20 of Colorado’s post 1922 users if a curtailment can’t be avoided. This
21 water bank would utilize the consumptive uses of Colorado’s pre-
22 1922 water rights on a willing buyer/lessee–willing seller/lessor basis.
23 The bank could be combined with or include the use of the capacity of
24 existing reservoirs such as Blue Mesa. The concept of such a bank is
25 the effort of a current study by West Slope and Front Range water
26 users.
- 27 iii. The supply availability triggers and water bank concept are
28 interrelated from a risk management perspective. If the triggers are
29 too “loose,” then the risk of a curtailment will be more frequent and
30 the length of the curtailment could be longer. Therefore, the bank
31 would need access to more pre -1922 water resources, the impact to
32 west slope agriculture would be greater and the cost to existing users
33 that require protection will be much higher. If the triggers are too
34 “conservative,” then the cost of emergency supplies will be greater
35 and could undermine the feasibility of the new supply project.
- 36 3. If a 100% reliable water supply is desired, a new water supply project would
37 need to be coupled with a backup source of water for when the project does not
38 have access to Colorado River water. Back up options include additional
39 storage, temporary agricultural transfers/interruptible supply agreements and
40 integrated operations and infrastructure of water supplies.
- 41 4. The Committee recommends that the IBCC and roundtables discuss the need for
42 a detailed analysis of future risk and risk management strategies, including for
43 example, CRWAS/CCS.

44
45 Even if a mechanism is in place which would reflect the 3 guiding principles and under
46 which new supply projects could proceed to the point of seeking necessary approvals, there
47 are remaining impediments, e.g., permitting hurdles, to actually constructing and operating
48 new supply projects. Further, a question may remain as to the appropriate “phasing” of such

projects as compared to other supply alternatives. In response to such issues, the Subcommittee offers the following conceptual outline:

II. Agricultural Transfers

- A. Considering a streamlined process for the approval of the temporary agricultural transfers, for example, administrative approval, ditch-wide historical consumptive use analysis, etc.
- B. Supporting the development of additional storage and infrastructure in the Arkansas and South Platte river basins to facilitate temporary ag transfers
- C. Considering “deficit irrigation” and different cropping as potential sources of water from agricultural transfers in a manner that supports the agricultural economy

III. IPPs

- A. Formal State support
[insert other IPP Subcommittee recommendations]

IV. Conservation and Reuse

- A. Enact statewide municipal conservation, reuse, plumbing, urban landscaping and/or land use standards/BMPs
[insert other Conservation Subcommittee recommendations]
- B. Consider agricultural conservation goals where such conservation contributes to meeting consumptive and non-consumptive needs

V. Timing/Phasing

- A. Aggressively pursue conservation, reuse and IPPs to minimize risk, defer the costs, and delay the need for and reliance on new supplies and agricultural transfers
- B. Concurrent planning for new supplies and infrastructure for temporary agricultural transfers to ensure these supplies are developed and available to fill the gap when needed

VI. Process Issues for New Water Supply Development [and Agricultural Transfers]

- A. Water Transfer Fee
 - 1. Project beneficiary(s) must agree to pay annual water transfer fee for each acre-foot of new water development to be used to address projected and ongoing social, economic, environmental, and recreational impacts of the new supply project or agricultural transfer.
 - 2. The projected and on-going impacts of the new water development or an agricultural transfer shall be reevaluated at a specified regular interval to facilitate the effective use of the water transfer fee.
- B. Process to be administered by [IBCC/CWCB/?]. The Subcommittee intends that implementation would use existing processes whenever possible to satisfy the following:
 - 1. Thresholds to a new water development [or an agricultural water transfer] could include
 - i. Minimization of impacts to existing water rights and uses
 - ii. Existence of a water conservation program approved by CWCB
 - iii. Existence of a conservation program in compliance with urban landscaping codes and/or statewide plumbing code, if any

- iv. Implementation of land use controls to reduce average gpcd demand of new growth
- v. Implementation of conservation Best Management Practices
- vi. Water conservation of a specified amount of water from the proponent's existing supplies for each acre-foot of new water development or agricultural transfer
- vii. Reuse of a specified percent of the proposed new water development
- viii. Integrated operations of water facilities and supplies

2. Potential new water development [or an agricultural water transfer] project review criteria

- ix. Public notification requirements
- x. Avoid, minimize or mitigate environmental impacts of proposed water transfer and historical impacts
- xi. Compliance with fish and wildlife mitigation requirements
- xii. Existing and future demand for the new water development or agricultural transfer is consistent with anti-speculation principles
- xiii. Alternatives to / reconfiguration of / collaborative approach to 1041 permitting process in specific contexts
- xiv. Compliance with water conservancy and water conservation district mitigation requirements
- xv. Project proponent would still need to obtain any necessary water court approvals; any local location or construction impact approvals; any necessary federal approvals; and any required water quality approvals or certifications

