

**SAVE THE COLORADO   WATEKEEPER ALLIANCE   COLORADO RIVER CONNECTED  
WILDEARTH GUARDIANS      LIVING RIVERS      THE ENVIRONMENTAL GROUP**

**Date: August 27, 2015**

**To: U.S. Army Corps of Engineers**

**From: Save The Colorado, The Environmental Group, Waterkeeper Alliance, Wildearth Guardians, Living Rivers, Colorado River Connected**

**Re: FEIS for Moffat Collection System Project failed to analyze impact of diversions on the Colorado River Compact, climate change, looming “shortages,” and increasing the likelihood of a “Compact Call”**

The National Environmental Policy Act requires that the Army Corps of Engineers (Corps) take a “hard look” at all direct, indirect, and cumulative impacts associated with the proposed alternative in the Moffat Collection System Project (Moffat)<sup>1</sup>. The proposed alternative for Moffat would take an average of 18,000 acre feet of new water out of tributaries of the Colorado River at the very top of the Continental Divide in Colorado. The other three action alternatives in the Moffat FEIS also would divert nearly as much water from the tributaries of the Colorado River.

Although the FEIS purports to analyze the environmental impacts on the tributaries at and near the diversion point, the FEIS completely fails to analyze the impacts on the water supply system for the entire Colorado River, including on the likelihood of the new proposed Moffat diversions adding to the potential for a “Compact Call” on the Colorado River.

The “Colorado River Compact” is federal law that allocates water in the Colorado River system, approved by Congress on August 19, 1921 (42 Statutes at Large, page 171), and ratified and legislated by the Acts of the Legislatures of participating member States. The Compact provides that the Upper Basin states (Colorado, Wyoming, Utah, New Mexico) shall get 7.5 million acre feet (maf) (Compact Article III(d)) and the Lower Basin states (Nevada, Arizona, California) shall get 7.5 maf.<sup>2</sup> Additional federal treaties have determined that the United States shall deliver 1.5 maf to Mexico annually. Thus 16.5 maf of water are allocated each year. Further, the Colorado River Compact requires that the lower basin has “senior rights” such that the Upper Basin states must deliver at least 7.5 maf to the Lower Basin states over any 10-year period, or 7.5 maf/year on average. Therefore, on average, 9.0 maf/year must be delivered by the upper basin to the lower basin and Mexico each year. In the Upper Basin, the State of Colorado shall get 51.75% of the upper basin’s allotment as long as the requirement of the lower basin is met.

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<sup>1</sup>

<http://planning.usace.army.mil/toolbox/processes.cfm?Id=231&Option=National%20Environmental%20Policy%20Act>

<sup>2</sup> <http://www.usbr.gov/lc/region/g1000/lawofrvr.html>

Due to long-term drought and a likelihood that climate change is already occurring in the Colorado River basin, over the past 16 years (1999-2014), the average flow in the Colorado River has equaled approximately 12.5 maf, well under the 16.5 maf allotted to all parties resulting in a large “cumulative streamflow deficit” across the system<sup>34</sup>. Despite the shortage, the delivery of water to the Lower Basin has still occurred because the Upper Basin stores water in the Colorado River Storage Project reservoirs – Navajo Reservoir, Blue Mesa Reservoir, Flaming Gorge Reservoir, and Lake Powell. Through “equalization” programs established as part of the 2007 interim guidelines, Upper Basin water can also be stored in Lake Mead. However, the dramatic decline in river flows has also caused a corresponding decline in reservoir levels in the two biggest reservoirs, Lakes Powell and Mead, and as of this writing the total combined storage in the reservoirs is at its lowest point in history since the reservoirs began to fill in the 1960s<sup>5</sup>.

Parties involved in Colorado River management agree that an official “shortage” is likely to be declared in 2017<sup>6</sup> which would cut water deliveries to Arizona and Nevada. Such a shortage just missed being declared in 2015 due to “miracle rains” in the Upper Basin and the state of Colorado<sup>7</sup>.

Climate change models developed and utilized by the U.S. Bureau of Reclamation<sup>8</sup>, NASA<sup>9</sup>, multiple university research centers<sup>10</sup>, and U.S. EPA<sup>11</sup> predict that the Colorado River basin will likely be greatly impacted by future droughts as climate change intensifies. In its recent “Colorado River Basin Study,” the U.S. Bureau of Reclamation predicted that temperature would increase across the basin<sup>12</sup>, less precipitation and more “drying”<sup>13</sup> would occur across the basin, and total flow in the Colorado River would decrease to 13.7 maf over the period of 2011 - 2060 due to climate change<sup>14</sup>. 13.7 maf is significantly lower than the total 16.5 maf that is allotted, representing a 17% reduction in flows from the quantity the Colorado River Compact anticipates and allocates.

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<sup>3</sup> See figure B-14 on page B 24:

[http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

<sup>4</sup> See figure B-18 on page B 27:

[http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

<sup>5</sup> <http://www.inkstain.net/fleck/2015/07/coases-reservoirs-how-transaction-costs-are-emptying-lake-mead/>

<sup>6</sup> <http://kjzz.org/content/145015/colorado-river-shortage-looms-arizona-water-managers-look-elsewhere>

<sup>7</sup> <http://www.gjsentinel.com/news/articles/miracle-may-8232for-colorado-8232water-levels>

<sup>8</sup> [http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

<sup>9</sup> <http://climate.nasa.gov/news/2238/>

<sup>10</sup> <http://summitcountyvoice.com/2015/08/20/climate-west-may-be-in-permanent-drought-by-2060s/>

<sup>11</sup> <http://www.epa.gov/climatechange/impacts-adaptation/southwest.html>

<sup>12</sup> See Figure B-37 on page B 53:

[http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

<sup>13</sup> See page B 56 and Figure B-40:

[http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

<sup>14</sup> See page B-65 and Figure B-45:

[http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B\\_Water\\_Supply\\_Assessment\\_FINAL.pdf](http://www.usbr.gov/lc/region/programs/crbstudy/finalreport/Technical%20Report%20B%20-%20Water%20Supply%20Assessment/TR-B_Water_Supply_Assessment_FINAL.pdf)

The Colorado River system is on the verge of having a “Compact Call,” whereby the lower basin states would legally force the upper basin to deliver their full of 7.5 maf (plus 1.5 maf to Mexico) down the river. The State of Colorado has been preparing for a Compact Call for nearly a decade<sup>15</sup>, and the State of Colorado’s ongoing “Colorado Water Plan” process has put significant thought and verbiage into how a Compact Call would be addressed as the state diverts more and more water out of the Colorado River system<sup>16, 17</sup>.

The likelihood and extent of a Compact Call absolutely would be exacerbated by new diversions out of the Colorado River and its tributaries in the upper basin. Further, each state in the upper basin is currently planning to divert more and more water out of the Colorado River system.

- Wyoming has claimed that it may be able to divert additional unallocated water out of the Colorado River system, and has stated that it intends to divert additional flows<sup>18</sup>. Wyoming is currently operating under a “10 new dams in 10 years”<sup>19</sup> policy – four of which would be on the Green River, a tributary to the Colorado River – as directed by Governor Mead. Further, Wyoming is trying to greatly expand the water diversion out of Fontenelle Reservoir<sup>20</sup> which is on the Green River, a tributary to the Colorado River.
- Utah has similarly asserted that it may be able to divert additional unallocated water because it alleges that it is not currently diverting its full allotment of Colorado River water. State officials have stated they want a new “dam on every river in the state,”<sup>21</sup> and are actively planning for the Lake Powell Pipeline<sup>22</sup> that would divert a very large amount of new water out of the Colorado River.
- It is unclear how much, if any, of Colorado's allotment of Colorado River water currently remains not diverted. Some people contend that Colorado may not be currently diverting the state’s “full” allotment of Colorado River water, and cite that belief to justify the fact that the state is planning for multiple new, largely transbasin diversions of water out of the Colorado River including the Moffat Project, Windy Gap Firming Project, and projects associated with the Eagle River MOU<sup>23</sup>. Further, the Colorado Water Plan process is laying the groundwork for a new major “trans-mountain diversion” of water out of the Colorado River, the Plan intends to “fully develop Colorado’s entitlement,”<sup>24</sup> and the director of the Colorado Water Conservation Board has publicly stated that the state does not intend to let its water flow to California<sup>25</sup>. During the

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<sup>15</sup> See slide 10: [http://water.state.co.us/DWRIPub/DWR%20Presentations/kknox\\_0607.pdf](http://water.state.co.us/DWRIPub/DWR%20Presentations/kknox_0607.pdf)

<sup>16</sup> See Draft 2 for discussion about risk of a compact call and trans-mountain diversions:  
<http://coloradowaterplan.com/>

<sup>17</sup> <http://aspenjournalism.org/2015/08/26/transmountain-diversion-framework-endorsed/>

<sup>18</sup> [http://www.wyomingnews.com/articles/2015/05/03/news/01top\\_05-03-15.txt](http://www.wyomingnews.com/articles/2015/05/03/news/01top_05-03-15.txt)

<sup>19</sup> <http://www.wyofile.com/wyoming-dam-construction-plans-advance/>

<sup>20</sup> <http://www.sltrib.com/home/2696289-155/wyoming-officials-want-expanded-usable-storage>

<sup>21</sup> <http://www.standard.net/Environment/2014/09/25/Talk-of-Utah-running-out-of-water-is-scare-tactics-says-conservation-group>

<sup>22</sup> <http://www.water.utah.gov/lakepowellpipeline/generalinformation/default.asp>

<sup>23</sup> <http://www.aspentimes.com/news/17406963-113/garco-water-meeting-seeks-to-protect-w-slope>

<sup>24</sup> <http://www.savethecolorado.org/blog/is-the-colorado-water-plan-ethically-bankrupt/>

<sup>25</sup> <http://www.sltrib.com/home/1928692-155/story.html>

Colorado Water Plan process, the CEO/Manager of Denver Water (which is the applicant of the Moffat Project) has very aggressively stated that his agency and the state intends to develop even more water out of the Colorado River through trans-mountain diversions<sup>26</sup>.

Each new diversion of water out of the Colorado River system increases the likelihood of a Compact Call. Supplemental NEPA analysis for the Moffat Project must assess the potential for additional diversion and storage facilities from each of the states considered above, in addition to the reasonably foreseeable future diversions in Colorado already partially addressed by the FEIS. The Moffat Collection System Project's 18,000 acre feet would exacerbate the stress on the Colorado River water supply system, cause less flow to the lower basin, and increase the likelihood of a Compact Call. The environmental impact of a Compact Call has not at all been analyzed in the FEIS for Moffat. Because a compact call has never historically occurred, it is unclear from what parts of the upper basin the water would be forced to be sent to the lower basin.

Denver Water acknowledged the possibility of a Compact Call and the potential for significant impacts in an August 6, 2014 press release summarizing voluntary efforts to mitigate impacts of such an eventuality:

In a first-of-its-kind partnership, agricultural and environmental organizations, West Slope water districts and Denver Water have come together to explore measures that could help benefit the Colorado River and avoid reaching critically low water levels in Lake Powell. Should levels in this important reservoir continue to decline due to the prolonged drought in the basin, it could result in a Compact Call, putting water supplies to much of Colorado and the upper basin states at risk.

"Complying with the Colorado River Compact is a shared responsibility across all water-use sectors and among all the upper basin states" said James Eklund, director of the Colorado Water Conservation Board. "We must control our destiny. The worst case is a Compact Call or a situation where the federal government determines how we will manage critical flows. We simply must work together to protect the future of this state, all our economies and critical industries to avoid a future compact call."<sup>27</sup>

Further yet, Denver Water has directly stated that a Compact Call would have devastating impacts on its water supply. In this August 2015 *Wall Street Journal*<sup>28</sup> article and in this August 2014 *Las Vegas Sun*<sup>29</sup> article, Denver Water Director James Lochhead stated:

"The biggest concern in Colorado and the upper basin states is the potential for what we call a "Compact Call," which is when we can't meet our water obligation to the lower basins. If we get to that situation on the river, it's not just a Las Vegas problem or an upper basin problem. If the river's to that point, then potentially we lose half of Denver's water supply."(underline added)

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<sup>26</sup> <http://www.savethecolorado.org/blog/will-denver-and-the-front-range-drain-the-colorado-river-and-the-west-slope/>

<sup>27</sup> <http://www.denverwater.org/AboutUs/PressRoom/B8EFE199-960D-766C-5D107097DDD3A65F/>

<sup>28</sup> <http://www.wsj.com/articles/water-fight-stirs-up-old-rivalries-in-colorado-1440439441>

<sup>29</sup> <http://lasvegassun.com/news/2014/aug/28/theres-drought-vegas-challenge-denver-water-biz/>

Thus, the project proponent is well aware of the looming likelihood of a Compact Call. Denver Water seems to be relying on untested voluntary cooperation to lessen the impacts. The Moffat FEIS must take a “hard look” at the entire Colorado River system and the potential for the proposed Moffat Project to exacerbate current shortages and ecological challenges, possibly contributing to a Compact Call sooner rather than later and reducing the ability to cushion the impacts of such a call to impacted entities on Colorado’s West Slope and across the Upper Basin.

Importantly, Colorado is but one of five Upper Basin states, and one of eight Compact states/countries. Notwithstanding the well-intentioned interest in various parties to work together in Colorado according to non-binding principles, Colorado does not now and never will control her own destiny so long as the Compact is the Law of the River conferring various rights and obligations to all eight member states and Mexico.

One Colorado River expert opines that “Colorado may already be at or above full development of its Colorado River supplies at certain periods.”<sup>30</sup> Among the “sobering thoughts” advanced by Eric Kuhn, General Manager of the Colorado River Conservation District, is:

Can you imagine the impacts to Colorado if a Compact Call curtailed projects such as the C-BT, Dillon Reservoir, Fry-Ark, Moffat Tunnel Collection System, Homestake, Twin Lakes, Wolford, Dallas Creek, Dolores and Central Utah Project, San Juan-Chama, etc., and they could not legally divert a drop of water?!

NEPA requires not only imagining such a scenario, but analyzing it. Kuhn states two equally sobering concerns demanding analysis in the Moffat FEIS:

- The model results Reclamation has provided the Basin States uses the 1906-1995 period. Is this period representative of the long term hydrology? This period looks very wet.
- Are hydrologic and climatic conditions changing faster than our ability to recognize these changes and develop near modeling and planning tools?

Kuhn’s sobering bottom line includes the possibility that: “If flow at Lee Ferry (undepleted) for the next 10-30 yrs. averages about 13 maf/year – could be big trouble.” Recall from text above, in the last 15 years, flow has equaled approximately 12.5 maf/year, and U.S. Bureau of Reclamation predicts that climate change will reduce flows to 13.7 maf/year over the period of 2011 – 2060.

The FEIS for Moffat must analyze the likelihood that the current proposed action and all alternatives under consideration in the Moffat FEIS could hasten a Compact Call, contribute to significant direct, indirect, and cumulative impacts both within and outside the State of Colorado, potentially affecting all eight member states/countries in both the Upper and Lower Basins.

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<sup>30</sup> <http://www.fs.fed.us/rmrs/docs/climate-change/western-watersheds-workshop/certainty-uncertain.pdf> at 18.

<sup>31</sup> Id. at 19.

<sup>32</sup> Id. at 22.

<sup>33</sup> Id. at 25.

Accordingly, before issuing a final Record of Decision, the Corps must prepare a Supplemental EIS analyzing the critical environmental impacts of unprecedented water shortages in the Colorado River system, and the environmental and socio-economic impacts of a Compact Call on applicable rivers, streams, states, and impacted populations. This analysis must encompass the entire Colorado River system and tributaries.

While Moffat proponent Denver Water has asserted that the Project would increase security for its own system, it is incumbent on the Corps to analyze 1) the possibility that completing the project would actually diminish water security for - not just Denver Water - but all users in the Upper Basin; and 2) the potentially significant socio-economic impacts that could unfold in such a scenario.

Failure to analyze these impacts violates NEPA should the final decision adopt any of the current action alternatives. The only way to proceed without preparing an SEIS would be to select an alternative that avoids any additional diversions from the West Slope to Gross Reservoir and Dam, and rejects the proposal to expand Gross Reservoir by raising the dam.

We send these comments to you for insertion into the public record for Moffat under the direction you have previously given the public that you will accept “meaningful and substantive comments on the analysis until the agency makes a decision on the project...”<sup>34</sup>

The groups signed below stand ready and willing to meet with the Corps and Denver Water officials to discuss this crucial and glaring omission in the current NEPA documents prepared in conjunction with the Moffat project.

Please acknowledge receipt of this letter. Thank you,

Gary Wockner  
Executive Director  
Save The Colorado

Pete Nichols  
National Director  
Waterkeeper Alliance

Jen Pelz  
Wild Rivers Program Director  
Wildearth Guardians

John Weisheit  
Colorado Riverkeeper  
Living Rivers

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<sup>34</sup> [http://www.dailycamera.com/boulder-county-news/ci\\_25989891/epa-see-plans-gross-reservoir-expansion-threat-water](http://www.dailycamera.com/boulder-county-news/ci_25989891/epa-see-plans-gross-reservoir-expansion-threat-water)

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