



Date: June 21, 2017

Elise Jones
Cindy Domenico
Deb Gardner
Boulder County Commissioners

Transmitted via email

RE: **Gross Dam Expansion (Moffat Collection System Project)
Boulder County Residents & Environment Suffer Impacts & Lack Benefits from
Unneeded Project**

Dear Commissioners:

[TEG Colorado](#) (TEG) is a citizens and homeowners group surrounding Gross Dam and Reservoir in Southwestern Boulder County. Our organization has operated several programs over the last decade, including our program to defeat the unnecessary proposed expansion of Gross Dam and Reservoir (Moffat Collection System Project).

TEG has hundreds of supporters and donors throughout the three residential neighborhood areas surrounding Gross Dam: 1) Coal Creek Canyon/Wondervu/Pinecliffe, 2) Flagstaff Road, Pika Road, and Lakeshore Park on the north shore and 3) Magnolia Road/Lazy Z Road/Nederland. The great majority of our supporters and members are Boulder County residents.

I. Background

For more than a decade, TEG has actively questioned the “need” for Gross, and fought for better solutions than the proposed Gross Dam expansion. As the permitting process has moved along, we organized our community and submitted technical comments at all available times including in the Draft Environmental Impact Statement (DEIS) process, Final Environmental Impact Statement (FEIS) process, Federal Energy Regulatory Commission (FERC) process, Boulder County hearings and meetings, and several comment letters to the Army Corps of Engineers since the FEIS was released in April, 2014.

The more we learn about this project and the more closely we and independent experts examine the record, the more convinced we are that: 1) the project is not needed; 2) the existing analysis does not support approval; and 3) the project violates federal law, including

the National Environmental Policy Act (NEPA) and the “Least Environmentally Damaging Practicable Alternative” (LEDPA) standard of the Clean Water Act. In short:

- 1) The data is outdated
- 2) The assumptions are flawed
- 3) The projections are inaccurate

When the Boulder County Commissioners held hearings on the Gross Dam expansion in 2014, TEG organized about 200 people to attend, with dozens testifying. Most recently, we organized an email campaign which generated 1,400 emails to the Boulder County Commissioners. We now work in a coalition of environmental groups that oppose the dam expansion, and we have retained legal and scientific representation to assist us.

If the U.S. Army Corps of Engineers permits the project without remedying the numerous legal violations in the FEIS, we are likely to challenge that permit in federal district court. Claims are expected to include “new information”, “hard look,” and “inadequate range of alternatives” under the National Environmental Policy Act, the “LEDPA” standard under the Clean Water Act, and possibly the Endangered Species Act and other laws.

In 2017, it is clearer than ever before that the project is unnecessary and would have unacceptable environmental and socio-economic impacts.

II. Findings:

The proposed expansion is unnecessary, the existing environmental analysis is inadequate, and the project is not the LEDPA.

A. General concerns

If approved and constructed, the new dam would be the tallest in the State of Colorado at 471 feet. In 2017, scientific understanding and environmental awareness of the impacts of dams to healthy rivers are light-years ahead of where they were when the original Gross Reservoir was completed in 1954.

Across the country and the West, there is a growing movement to decommission unneeded dams to restore healthy rivers, aquatic ecosystems, and watersheds. Proposing to triple the capacity of Gross Reservoir in 2017 is akin to a proposal to triple the coal-burning capacity of the Valmont Power Plant in Boulder.

Proposing to triple the capacity of Gross to be fed from the already dying headwater streams of the Upper Colorado River is analogous to a hypothetical proposal to triple coal generation at Valmont despite climate science. For Gross, the facts and science establish that – like our climate - the Colorado River is already on life support from ongoing threats including existing trans-basin diversions, pollution, and climate change.

Permitting additional diversions is the exact opposite of what is needed to restore the Upper Colorado: an aggressive program to restore the river under baseline conditions. According to the FEIS prepared for the U.S. Army Corp of Engineers by Denver Water contractors, existing

diversions have already resulted in fisheries being “collapsed” or “near collapse” in ten headwaters streams, and fifteen streams are classified as being “at”, “near” or “past” the brink of overall ecological collapse.

The vital bottom of the food chain is already being decimated by existing diversions. On a stretch of the Upper Colorado studied by Colorado Parks and Wildlife, 70% of mayfly species and at least 60% of stonefly species were missing from the study area in the past 30 years. Mayfly species are down from 17 to 5; and stonefly from 10 to 4 species.

Scientific evidence establishes that Gross Moffat would further stress aquatic ecosystems that are already failing on both sides of the Divide.

B. Denver does not need the water

Denver Water’s FEIS relies on 27 years of outdated demographic and water use data compiled prior to 2002. In its 2002 Integrated Resource Plan (IRP), Denver Water projected a 75,000 AFY shortfall by 2016. None of the projected shortfall has been realized, and the data since 2002 establishes that Moffat’s outdated “purpose and need” is invalid in 2017.

Moffat is not needed today because 1) conservation works; and 2) decoupling of water consumption and population and job growth is occurring across the Front Range and the Southwest.

The assumptions and projections presented in the FEIS regarding water demand and consumption are unreliable and inaccurate. They were based on outdated information, data, and assumptions. Projections are now disproven.

Conservation is taking root in the Denver Water service area and across the Southwest as decoupling supplants the longstanding assumptions of water demand growth trends relied on to justify the project. Amazingly, the 2014 FEIS lacks a single mention of the term “decoupling,” despite the fact that this concept goes to the heart of the project “purpose and need.”

The new information indicates that the Least Environmentally Damaging Practicable Alternative (LEDPA) is a program of continued water conservation projects in conjunction with ongoing, planned, and available supplemental strategies – including gravel pit storage and re-use of ditch water already being diverted from the West Slope but not previously available for re-use. Conservation and decoupling are success stories. The last thing we should do is back off when they have proven that new supply projects are unneeded.

By the numbers, Denver Water has the capacity to treat 715 million gallons per day (mgd), and to distribute 550 mgd. Current maximum daily use was 435 mgd as of 2011 or 2012. Denver Water projected that the 2002 “excess of 90,000 acre-feet of supply over demand” would disappear by 2016, and eventually give way to a 75,000 shortfall around 2050. However, system demand has levelled off since 2002 despite population and job growth. Customers are conserving, and they will continue to conserve. Moffat is not needed now or in the future based on current data.

It appears that Denver Water's continued interest has little to do with need, or whether the \$350 million project is a good use of public funds. Perhaps Denver Water seeks to proceed because it is increasingly evident that the difficulty of permitting major trans-mountain diversions will increase with time as climate change alters flows and demand along the river while exacerbating impacts to the aquatic environment. That is no reason to sacrifice Boulder County or Colorado's namesake river, the lifeblood of the Southwest.

Even had Denver Water presented a compelling case for the project, TEG Colorado opposes the expansion of Gross Dam and Reservoir because of many environmental, health, and property problems the expansion would cause. Those problems are summarized below.

C. Environmental Impacts and Concerns in Boulder County

The proposed Gross Dam expansion:

- Would be the largest construction project in Boulder County's history. Construction would take at least five years, disrupt the quality of life for thousands of Boulder County residents, and mar the County's reputation as an environmental leader and recreational paradise.
- Would impair water quality and the South Boulder Creek aquatic ecosystem. There would be negative impacts to fish and other species due to unnaturally cold temperatures of water released from bottom of dam for long periods of time. The project would compromise stream health, fisheries, and nutrient production below the dam and above Walker Ranch and Eldorado Canyon State Park. Clean Water Act water quality standards for iron and copper would be exceeded.
- Would cause large greenhouse gas emissions from construction and operation of Gross Dam and Reservoir.
- Is inconsistent with Boulder County's Comprehensive Plan, including Critical Wildlife Areas and the Walker Ranch/Upper Eldorado Canyon Environmental Conservation Area.

D. Impacts to Boulder County – Gross Reservoir Area: Flagstaff, Magnolia, Gross Dam Road, Coal Creek. The project would:

- Increase the height of the concrete dam by 131 feet requiring tens of thousands of tons of cement poured across South Boulder Creek.
- Require the large-scale use of explosives to blow up a nearby mountain for creating cement.
- Increase mercury levels in water and fish in the reservoir, exceeding health standards.
- Require tens-of-thousands of semi-tractor/trailer trips along the curvy mountain roads.
- Clear-cut of 200,000 trees, with some use of "hydro-axing" and helicopter logging.

- Require helicopter staging and landing sites that would impact the north shore neighborhood.
- Cause significant noise pollution from helicopters and other construction. Note that as recent fire fighter drills demonstrated, helicopter noise alone is ear splitting and reverberates for many square miles effecting not only communities surrounding Gross Reservoir but surely beyond. Such untenable noise must also impact resident wildlife including a raptor population.
- Cause significant air pollution from construction.
- Inundate a substantial area of forest lands including Forsyth Canyon and waterfall.
- Cause wetlands destruction.
- Disrupt migrating elk, cougars, and newly resident moose. The Winiger Ridge elk herd, elk severe winter range, an elk winter concentration area, and migration corridor would be disturbed and partially lost to inundation.
- Degrade habitat of diverse wildlife population including bear, mountain lion, coyote, fox, bobcat, elk, moose, deer, eagles, osprey and numerous other raptors, songbirds and smaller mammal, reptiles and amphibians. Habitat recovery will take many years beyond construction (if it ever recovers).
- Cause the loss of 5 acres of two globally rare foothills riparian shrubland communities: 1) river birch/mesic forb community and 2) thinleaf alder/mesic forb community.
- Cause the loss of 1 acre old growth ponderosa pine forest.
- Cause the reservoir to have fluctuating water levels, revealing a larger denuded wasteland as water goes up and down every year. Current winter water declines leave well over 100 feet of gravel shoreline exposed. The expansion could double or even triple that scar, not only creating an eyesore but also creating a dangerous and hazardous situation for those who recreate at Gross Reservoir.
- Cause significant negative impacts on the home values and quality of life of nearby residents. Potentially permanently change the character of surrounding neighborhoods as roads are widened and recreation areas relocated or eliminated.
- Cause huge disruptions for the many Boulder County residents and visitors who recreate on the existing reservoir, in the surrounding Boulder County Open Space and National Forest lands, and along South Boulder Creek. South Shore access would be closed for duration of project. Boaters, fishermen, hikers would all need to use the steep and lengthy North Shore access which would further disrupt North Shore residents.
- Be incompatible with the vision to “re-wild” South Boulder Creek and restore the ecosystem.

III. TEG Request to Boulder County:

TEG Colorado requests that Boulder County actively oppose the expansion of Gross Dam and Reservoir, and fight to stop the expansion throughout the permitting processes. This project comes with huge costs to Boulder County with no associated financial, social or environmental benefits. No proposed mitigation measures would address our deep-rooted concerns.

We request that Boulder County oppose this unjustified and unlawful project during the FERC permitting process and the Army Corps 404 permitting process. Boulder County should also exercise its authority pursuant to [1041 regulations](#) – which very clearly applies to the Gross Dam expansion – to prevent the project from going forward at great cost to Boulder County citizens and to the environment of one of the greenest counties in Colorado and the nation.

Gross Moffat is a major threat to the environmental and climate leadership that has been a hallmark of Boulder County's government and citizenry for many decades. Stewardship efforts and hard-fought conservation victories are at risk, along with rural residents' quality of life.

TEG residents are enormously appreciative of Boulder County's support on this issue. We ask that Boulder County continue to protect our environment, our watersheds, our personal safety, our home values, and our quality of life by fighting to stop the Gross Dam expansion.

Please feel free to reach out to us with any questions. We request to meet with the Commission and County staff to further discuss how to protect Boulder County from suffering the avoidable impacts an unneeded project.

Thank you for your past support and we look forward to working with Boulder County going forward to ensure the safety of residents, protect the environment, and enforce the law. Water is life. It's time to take a stand.

Sincerely,

Michael Thomason, President, TEG Colorado

Cc: Conrad Lattes, Office of the County Attorney