

Summer QQ Meeting

Wednesday, June 18, 2025

10 AM – 3 PM

Hybrid Meeting

Location: Colorado Mountain College (Auditorium, Room 118), 150 Miller Ranch Road, Edwards
CO

Zoom:

<https://us02web.zoom.us/j/87322291455?pwd=6MdWZnudmaG5Un6jRFxD3mUfpkcYPz.1>



AGENDA

- 10:00 AM Welcome and Introductions
Nina Waters, QQ Chair and Summit County Commissioner
- 10:15 AM Back to Basics on the Colorado River – the current negotiations and some essential principles
Anne Castle, Senior Fellow, Getches-Wilkinson Center, University of Colorado
- 11:15 AM Implementation Nonfunctional Turf Legislation (SB24-005; 25-1113)
Laura Belanger, Senior Policy Advisor, Western Resource Advocates
- 11:45 AM 208 Plan Update and Discussion
Ashley Bembenek
- 12:00 PM Lunch – provided by Smiling Moose
- 12:40 PM [Uranium in Chimney Hollow Reservoir Discussion](#)
Esther Vincent, Director of Environmental Services, Northern Water
- 1:00 PM Discuss Legal Defense Fund (\$119,909 Balance)
QQ Officers
- 1:15 PM Member Discussion of Federal Executive Orders and Policies
- 1:45 PM Discussion of other QQ issues, as needed
- 2:00 PM Member Updates
- 3:00 PM Adjourn

Essential Pillars for the Post-2026 Colorado River Guidelines

April 25, 2025

By Anne Castle,¹ John Fleck,² Eric Kuhn,³ Jack Schmidt,⁴ Kathryn Sorensen,⁵ Katherine Tara⁶

The process for determining the operating rules for the Colorado River system that will take effect in 2027 is in full swing. While various alternative operating regimes have been proposed, no preferred or consensus alternative has yet emerged. As a group of experienced Colorado River colleagues without affiliation to any Basin State, Tribe, or interested stakeholder, we submit that there are fundamental principles that should form the basis of the ultimate Record of Decision defining management of the Colorado River for the future. We propose the following essential pillars for inclusion in the Post-2026 Guidelines.

1. Enforceable reductions in water use in both the Upper Basin and the Lower Basin are necessary. The Colorado River has an acknowledged math problem – total legal allocations and average water use exceed available water supply. The legal allocations, based on an overestimation a century ago of how much water the Colorado River could provide, created water supply expectations on the part of communities across the West that the river can no longer meet. In addition, average use, while not exceeding the legal allocation, greatly surpasses average supply. It is widely acknowledged that every state and every sector of the economy must contribute to the solution to this imbalance. A broadly-based collective effort that shares the burden of the necessary water use reductions between the Upper and Lower Basin States is also essential to gaining the political support necessary to ensure the viability of a Record of Decision from the Department of the Interior. While the hydrology and the plumbing are different in the two basins, business as usual in either basin will not lead to a compromise that sufficiently ensures the reliability and security of the water supply for future decades and is sufficiently flexible that operations can be adapted if natural runoff continues to decrease. Shared pain is also critical to inducing the various states not to litigate over the interpretation of the 1922 Compact. “Shared” does not mean equal, either in amount, triggers, or duration.

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2. Reductions in water usage cannot be predicated on federal compensation. Recent events have demonstrated the unreliability of continued federal funding as an incentive to induce voluntary water conservation. Moreover, the funding made available by recent federal legislation, even if fully unfrozen, will inevitably be used up, and the prospects for new federal appropriations are slim. The Post-2026 Colorado River management framework cannot assume that federal taxpayers will reimburse Western water users over the long term to forgo the use of water that does not exist. Some federal funding may be available, and funding from states or water users in the basin will also likely continue, but operations cannot be grounded on compensation from the federal government. Importantly, this approach must not preclude compensation for Tribal communities, many of which were excluded from the bounty of federal funding that in the past allowed water supply development by non-Indian Westerners.

3. Conservation pools in both Lake Mead and Lake Powell are essential. In the Lower Basin, a Lake Mead pool filled with conserved water removes the “use it or lose it” incentive that existed prior to the adoption of the 2007 Guidelines. In the Upper Basin, a Lake Powell conservation pool can be used to ensure that required releases can continue to be made, even when annual supplies are low. Such a pool can also be used in part to help mitigate or offset a portion of mandatory reductions in Lower Basin water usage. Both pools should be operationally neutral (also referred to as a “top bank” or “floating pool”) and not affect the amount of usage reductions or required releases. Saved water stored in the conservation pools must have a history of consumptive use. This requirement is necessary to ensure that “saved water” represents actual reductions in use and does not include water that would have otherwise flowed downstream. It is critical, however, that this requirement not preclude compensation to Tribal Nations for foregoing the use of unused or undeveloped quantified water rights, but this forbearance would not constitute a contribution to the conservation pool. Deposits, withdrawals, and releases from the pools would be measured and accounted for in coordination with the Bureau of Reclamation. Essential to implementation of this strategy is accurate and timely accounting for evaporation and bank storage losses, incorporating best available scientific insights into operational and timely reporting of reservoir losses. These conservation pools are a critical tool but do not substitute for sustained reductions in consumptive use.

4. Water management opportunities must be fully open to Tribal Nations across the Colorado River Basin. In coordination with the relevant state agencies and the Bureau of Reclamation, all Colorado River Basin Tribes must have the same opportunities as those available to other water users to advocate for their water needs, provide feedback on proposed flow regimes, conserve water for future use, and be reimbursed for contributions to a conservation pool. Each of the Basin States and the Department of the Interior have recognized the need for increased Tribal participation and consultation in Colorado River decision-making and management processes. Furthermore, several Basin States and

Interior have acknowledged the need to explore compensation to Tribes for their forbearance in developing and using currently quantified but unused Tribal rights, grounded in the unique nature of Indian reserved water rights. Compensated forbearance should be formally addressed as a component of the Federal treaty and trust responsibility to Tribal Nations.

5. Storage recovery in Lakes Mead and Powell must be built into the mandatory reductions in use. These two reservoirs are the foundation of the Colorado River water storage system and ensure the reliability and security of the Basin's water supply. They cannot serve these purposes, however, if they are only one-third full. While it is very difficult to forgo use of water when it is available in the reservoirs, it is not prudent water management to continually operate at crisis level. We cannot depend on sporadic large runoff years to refill the reservoirs to acceptable levels. A post-2026 operating regime that balances supply and demand must also include sufficient reductions in use to recover reservoir storage to acceptable levels. All previous voluntary agreements have failed to regain storage on a sustained basis. Modifications to the reservoir release structures at Glen Canyon and Hoover Dams should be explored to access water now deemed "dead pool." The cost of accessing this reservoir capacity, including the production of hydroelectricity when making lower elevation reservoir releases, should be compared to the economic cost of foregoing the use of the same amount of water.

6. Flexibility in reservoir operations is necessary to achieve environmental objectives. Strict adherence to annual release requirements may jeopardize the ability to achieve necessary or desired future ecosystem and natural resource conditions in Grand Canyon and other critically important environmental resources in the Colorado River system. In the case of releases from Lake Powell, multi-year flexibility within a prescribed moving average and established minimum and maximum deliveries can mitigate potential for environmental damage without risk or injury to Lower Basin water availability. Determinations concerning annual releases within these parameters can be made by the Secretary of the Interior in consultation with the Basin States and advice from the Glen Canyon Dam Adaptive Management Program and relevant endangered species recovery programs.

7. There must be absolute protection of domestic water deliveries for public health and safety. In a worst-case scenario, the operating regime must ensure that water sufficient to supply the health and safety needs of all residents of the Basin continues to be provided. This essential water may include supplies for some industries critical to public safety.

Conclusion

These principles are proposed as foundational pillars for a successful post-2026 operating regime for the Colorado River that balances use with supply and accomplishes reservoir storage recovery to an

acceptable level of reliability and security. We recognize that much complexity exists within these broad tenets, and there are myriad difficult details to be analyzed, negotiated, and determined. The purpose of this paper is to provide a balanced overall framework for operational rules with the goal of avoiding litigation about the interpretation of various provisions in the 1922 Colorado River Compact and subsequent federal legislation.

Agreement among the Basin States to a consensus alternative should include significant protection against litigation under the Compact. This would include, without limitation, potential litigation about the Lee Ferry non-depletion obligation of the Upper Division states, the use of water from Lower Basin tributaries, and the appropriate allocation of the obligation to Mexico under the 1944 Treaty. Without this shield against litigation, there is little incentive for the states to forego their legal arguments about Compact allocations and agree to reductions in their water usage. In addition, these Compact obligations, whatever they might be, should be tolled for the duration of the term of the post-2026 regime, so that no state or basin is worse off at the end of the term than it was at the outset.

These principles can be the underpinning of a “grand bargain” – a compromise that results in acceptable sharing of the burden of reducing use throughout the system in exchange for a suspension of the threat of legal challenge. Litigation over the Compact has countless downsides but suffice it to say, it would unavoidably be expensive, protracted, disruptive, and risky, and would not provide a complete operating regime for the future. Because the term of the new management regime for the River will likely be lengthy, off-ramps that would permit litigation in carefully limited circumstances may be appropriate. Such circumstances could include failure by a party to comply with the prescribed operating rules and/or changes in the hydrological regime not contemplated by the rules with unacceptable adverse impacts on a party.

The role played by the Republic of Mexico in any new operating regime is critical. Mexico has been a pragmatic and cooperative partner with the U.S. in addressing Colorado River issues, as exemplified by Minutes 319, 323, and 330. With the prospect of even further declines in flows in the River as a whole, however, balance and storage recovery cannot be achieved without additional reductions of water use in Mexico.

This is an existential time in the history of the Colorado River. Water managers must take painful steps to avoid a catastrophic crash of the reservoirs with dire consequences for the 40 million people who rely on the River. As unaffiliated members of the Colorado River community, we suggest these principles as an equitable balance of the burdens caused by reduced flows in the system.

Local Compliance with Colorado Senate Bill 24-005

Prohibition of nonfunctional turf, artificial turf, and invasive plant species



Senate Bill 24-005 (SB5) passed with bipartisan support and was signed into law by Governor Jared Polis on March 15, 2024. The bill addresses the impacts of both climate change and increased demands on Colorado's water supplies by limiting specific uses of water-intensive turfgrass (turf) in Colorado landscapes. Specifically, **SB5 prohibits the installation of nonfunctional turf, artificial turf, and invasive plant species on non-residential properties for new development and some redevelopment projects on or after Jan. 1, 2026.** The bill acknowledges the community benefits of turf in appropriate locations and the importance of tree canopy and green spaces. On or before Jan. 1, 2026, local entities shall enact or amend ordinances, resolutions, regulations, or other laws in accordance with SB5.

Where does this bill apply?

SB5 applies to all new and some redevelopment* projects on:



Commercial, institutional or industrial properties



State-owned properties



Common interest community property, i.e., homeowner association (HOA) common areas



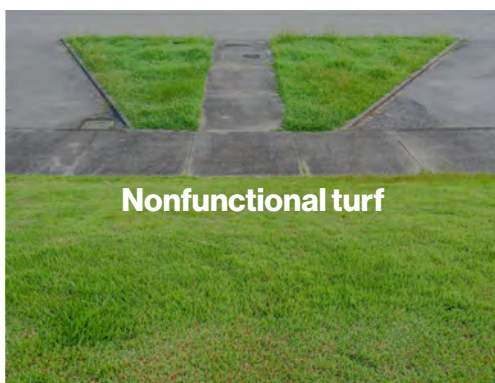
Street rights-of-way, parking lots, medians, and transportation corridors

*Redevelopment is defined as projects that require a building permit or landscaping permit, plan check, or design review AND that result in a disturbance of more than 50% of the aggregate landscape area.

Residential properties are not subject to SB5 requirements.

What does the bill prohibit?

SB5 prohibits the use of:



Nonfunctional turf



Artificial turf
(except for athletic fields)



Invasive plant species

myrtle spurge (*Euphorbia myrsinites*)

Key SB5 Definitions



Turf

Continuous plant coverage consisting of non-native grasses or grasses that have not been hybridized for arid conditions and which, when regularly mowed, form a dense growth of leaf blades and roots.

Per Colorado Revised Statutes Section 37-60-135(2)(i)



Functional Turf

Turf that is located in a recreational use area or other space that is regularly used for civic, community, or recreational purposes, which may include playgrounds, sports fields, picnic grounds, amphitheaters, portions of parks, and the playing areas of golf courses, such as driving ranges, chipping and putting greens, tee boxes, greens, fairways, and roughs.



Nonfunctional Turf

Turf that is not functional turf. Nonfunctional turf includes but is not limited to turf located in a street right-of-way, parking lot, median, or transportation corridor.

For more information

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Frequently Asked Questions

How do I establish a clear definition of nonfunctional turf for my community?

The goal of SB5 is to prohibit high water use turf in areas not used for civic, community or recreational purposes. These are areas where other landscaping can be installed without impacting community use. SB5 provides examples of “functional turf” and defines “nonfunctional turf” as turf that is not functional including at a minimum: medians, rights-of-ways, parking lots, and transportation corridors. This provides communities with flexibility as they identify what areas are functional and nonfunctional when developing regulations to meet SB5 requirements. To further clarify, communities may elect to include additional areas of nonfunctional turf in their own definition including, for example, turf in sloped areas, in a business or industrial park that is not used by employees for recreational purposes, in hard to access areas, between buildings, and in areas that are too small or narrow to be utilized, among many others.

How does SB5 address homeowner associations (HOAs)?

HOAs are referred to as “common interest communities” in SB5. New developments or significant redevelopments of HOA commonly owned areas are covered under SB5. Privately owned properties in communities with HOAs are not. For example, landscaped areas owned and managed by an HOA along roadways, at community entrances, and in community parks are covered under the bill. Front and backyards owned by individual property owners are not covered under the bill and do not need to meet the bill's requirements.

Does SB5 include any requirements for residential properties?

SB5 only applies to non-residential properties, though HOA common areas are covered as explained above. Communities may elect to include turf limitations for residential properties as they are addressing SB5 in their regulations. For example, a community may limit residential turf to a certain percentage or square footage of the landscaped area or restrict turf in front yards and narrow areas.



View the [*State of Waterwise Landscaping Standards in Colorado*](#) by Western Resource Advocates for strategies communities have adopted to limit residential turf.

What waterwise landscaping alternatives should be installed in place of nonfunctional turf?

The intent of the legislation is to promote waterwise landscaping materials and practices that reduce landscape water demand without adversely impacting quality of life or landscape functionality (see Colorado Statutes Section 37-60-135(2)(1) for the complete definition of waterwise landscaping). Waterwise landscaping provides multiple benefits over nonfunctional turf including creating pollinator habitat, improving water quality, and lowering emissions from lawn mowing. Beyond artificial turf and invasive plant restrictions, SB5 leaves it to each community to determine the specific landscape material that will be installed in place of turf. Native and other climate-adapted grasses, waterwise plantings, and organic ground covers that maintain vegetative cover and avoid heat island effects are all good alternatives to water-intensive turf. SB5 states that as Colorado continues to grapple with the impacts of climate change, protecting and expanding green spaces, especially urban tree canopies, is a vital adaptation tool.

Frequently Asked Questions

Why does the legislation prohibit artificial turf when it doesn't use any water?

The aim of this restriction is to ensure that turf is not replaced with landscape material that could cause other environmental or health concerns. While artificial turf can reduce water use and eliminate the use of pesticides, herbicides, and fertilizers for landscape maintenance, it can have considerable drawbacks. The legislative declarations in SB5 includes the finding that artificial turf can cause negative environmental impacts, such as exacerbating heat island effects in urban areas and releasing harmful chemicals, including plastics, microplastics, and perfluoroalkyl and polyfluoroalkyl chemicals into the environment and watersheds.

What are invasive plant species?

Invasive plant species are plants that are not native to Colorado, can have negative environmental or economic impacts, and spread readily, outcompeting native plants for space. A complete definition of "invasive plant species" can be found in Colorado Statutes Section 37-60-135(2)(e).

What types of turfgrasses are restricted under SB5?

The legislation defines turf as, "Continuous plant coverage consisting of non-native grasses or grasses that have not been hybridized for arid conditions and which, when regularly mowed, form a dense growth of leaf blades and roots." Generally, turf restricted under SB5 will be cool season varieties that are classified as high water demand such as Kentucky bluegrass or fescues. Native or climate-adapted turfgrasses are not restricted under SB5 and may be a viable alternative to nonfunctional turf. Examples of native or climate-adapted turfgrasses include blue grama and buffalo grasses propagated as turf, and cold-hardy Bermuda grass.

How will SB5 be enforced ?

SB5 directs each city and county to enact or amend its local code requirements to be compliant with SB5. Implementing the nonfunctional turf prohibition is the responsibility of each local jurisdiction. The legislation does not specify reporting requirements or penalties for noncompliance; however, SB5 is state law as of Jan. 1, 2026.

