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September 14, 2015

RE: Comments Regarding Colorado Water Plan (Draft Two, July 2, 2015)

Dear Ladies and Gentlemen:

The Board of Directors of the Pikes Peak Regional Water Authority is pleased to provide a set of comments and recommendations concerning the second draft of the Colorado Water Plan for your consideration. Since this may be the only opportunity to submit comments before the CWP is finalized and submitted to the Governor, we have tried to be as comprehensive as possible while striving to be succinct. We have also tried to be selective with the subjects we have chosen to comment on. There are other issues raised in the CWP that interest us but we did not include them among these comments.

For the sake of simplicity we did not trace the path of these comments through the entire document. The CWP is a lengthy and highly inter-related report and a single change often necessitates multiple conforming changes in other parts of the document. For that reason, we did not specifically address Chapter 10 (Critical Action Plan) since each of those items tie to recommendations made with regard to

the other chapters. We trust that the professional staff will capture the continuity of revisions as they edit the document for final publication.

The Pikes Peak Regional Water Authority is an organization of public water suppliers that was formed by the members to share information and to work jointly to address common issues concerning water supply. The PPRWA is located in El Paso County with a geographic area that extends from Palmer Lake in the northwest portion of the county across the northern areas, down the eastern area and back to the west through the Fountain Valley. Generally, the region can be described as a horseshoe that surrounds the City of Colorado Springs. The members are the Town of Palmer Lake, Forest Lakes Metro District, Donala WSD, the City of Fountain, Security WSD, Cherokee Metro District, the Town of Monument, Woodmoor Water & Sanitation District, Triview Metro District and El Paso County. PPRWA has both statutory municipalities and a home rule city as members as well as Title 32 special districts. In addition, PPRWA has several associate members to include the Fountain Mutual Irrigation Company. The City of Colorado Springs, while not a member, attends our meetings and participates fully in discussions and the sharing of information.

In many ways, the PPRWA provides a good representation of the range of issues that are described in the Colorado Water Plan. The PPRWA is also a good example of how the unique circumstances that affect the water supply issues for each of the members demonstrate that policies that are adopted by the State of Colorado must be flexible enough to allow tailoring to meet those local conditions and circumstances. For example, several of the members' service areas are highly dependent upon non-renewable groundwater and those members have been developing options and plans to move from the non-renewable water supplies to renewable water supplies. Other members' service areas in the southern portion of the county have experienced substantial growth due in large part to the presence of Fort Carson and other essential Department of Defense facilities.

The realities of providing reliable water supplies to meet the needs of our members has led them to consider a wide range of methods to address the constraints that define their options. Water conservation is of course a fundamental strategy. Development of renewable water supplies to relieve reliance on non-renewable groundwater is another strategy. Creative ideas such as the use of lease-fallowing arrangements with agricultural water rights owners are being used. Other creative ideas such as the development of aquifer storage of water in anticipation of future droughts is another. The PPRWA is uniquely positioned to evaluate the impact of the state water plan and to suggest revisions.

The board members commend the members of the Interbasin Compact Committee, the members of all of the basin roundtables, and the hundreds of citizens who have participated in the preparation of the two draft plans that have been circulated over the past few months. In particular, we wish to commend the professionalism and diligence of the staff of the CWCB and IBCC who were tasked with organizing all of the data and information and producing such a far reaching and comprehensive water plan for the state.

Our comments and recommendations are to Draft 2 of the Plan. We are aware that the IBCC has continued to work on some of the sections to craft clarifying language for certain provisions. However, as positive as those efforts have been, proposed new language has not been released for review and

comment or incorporated in a revised Draft 2. Additionally with the deadline for filing comments quickly approaching, there is insufficient time to wait for any revisions to be released and reviewed. For those reasons we cannot assume that those changes have been or will be formally adopted and we can only offer comments based on the publicly released Draft 2.

The board notes that the true measure of the CWP will be whether it can feasibly be implemented. A plan is nothing more than a narrative unless its recommendations can be implemented. For the public water suppliers that are local governments there are three critical factors that will be essential to the successful implementation of the CWP. Two of these critical factors can only be addressed by the General Assembly or the voters.

The first is that the entire fiscal infrastructure of water supply must be addressed in order to provide the financial capacity for governments, agriculture and other key parties of the water system to achieve the goals of the CWP. We will have comments with regard to this issue when we address Chapter 9 of the CWP.

The other issue that can only be addressed by the General Assembly or the voters is a restructuring of local governments with respect to their jurisdictional authority, fiscal capabilities and governance. The plan cannot be implemented if it imposes mandates on local governments that exceed or are not within their legal authority to undertake. Colorado has historically been a local government state and that value system has been incorporated into the CWP. However, as the CWP notes, several of the water supply, land use, economic and demographic issues have now grown to affect regions that transcend many of the jurisdictional boundaries of local governments. In some cases the region may be as large as an entire river basin. In some cases the region may be confined to one or two counties but encompass several municipalities, special districts, and other governmental entities. To accomplish some of the goals set forth in the CWP, it will be necessary for the General Assembly to provide the local governments with the tools to form and operate regional entities.

The third issue falls to both the General Assembly and the regulatory agencies of the executive branch. The Colorado Water Plan has many, many conclusions and recommendations that are useful and positive. But the recommendations must be crafted in such a way as to allow the local water suppliers to tailor them to local circumstances, constraints and needs. Although it is a trite saying, “one size does not fit all.” The PPRWA urges policymakers to keep in mind that blind conformity can be as counterproductive as doing nothing.

If there is anything that the PPRWA, its members or any of our professional support staff can do to assist in the comprehensive review of Draft 2 of the Colorado Water Plan, please do not hesitate to contact us.

Jessie Shaffer
Chairman

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Chapter 6: Water Supply Management

No one is more keenly aware of the economic value of water than a water manager who is responsible for the securing and delivering of reliable water supplies to the public. Public entities are designed and intended to exist in perpetuity in order to support their communities. It is the obligation of the water managers and the elected officials who provide governance for the local water provider to plan many years into the future. Planning for the future ultimately requires execution of the plan. Local governments must begin the installation of critical infrastructure years before those facilities may be needed. Rights of way must be acquired, engineering must be accomplished, water supplies must be acquired and the financing of the system must be put in place.

Plans are made and actions taken with the knowledge that the future is uncertain and cannot be predicted. Certain risks can be identified and analyzed, but the future cannot truly be known. Public entities must make decisions today to commit public resources for many years into the future. It is important to remember that local governments are accountable to the citizens that they serve and that the assets – including the water rights - of the local government are ultimately owned by those citizens.

The CWP recognizes the importance of local water providers both as the entities that are on point to manage local water supplies and as partners with the state to accomplish the goals and objectives set forth in the plan. However, there is a thread of inconsistency throughout the plan with respect to the roles of the local water providers and the state. In several sections the CWP mixes the roles in ways that are likely to lead to misunderstandings and tensions between the two levels of government. On one hand, the CWP frequently notes the need for local solutions to local problems and encourages the local providers to take recommended actions. On the other hand, and sometimes within the same section of the plan, the State is cast in a command and control role that preempts local actions. We recognize that there are situations and circumstances under which the State must play such a role, but we recommend that policymakers review those relationships so that the plan is seen as a consensus building plan rather than being a wedge between parties who should be partners.

> **Recommendation: The plan be revised to clarify the relationship between the State of Colorado and local public water supply entities and to deemphasize a philosophy of state level "command, compel and control."**

Section 6.3.1 – Municipal Water Conservation

Public water managers know the cost of bringing every drop of water into their systems and how critically important each drop of water is to the economic wellbeing, public health and safety and aesthetic needs of their communities. The members of the PPRWA have placed a high premium on water conservation for the past 20 years and strive on a daily basis to have their water supplies used in the most optimum way possible. For our members, water conservation is an ongoing commitment. Our members endeavor to take advantage of proven passive water efficiency technologies, to educate users (including residential, industrial and commercial) about wise use and efficient use of the water received and to continually upgrade capital infrastructure. Our members use both passive water conservation and also demand management techniques.

Conservation and efficiency are mutually supportive and strengthening concepts. Efficient use requires conservation and conservation requires efficient use.

Our water managers recognize that water conservation is both a strategy and a tool that is essential for supply management. However, it is not a magic wand that can solve all current and future water supply and management issues. Conservation is subject to diminishing returns. Each sequential action produces lesser results than its predecessor action. It is risky to rely too heavily or disproportionately upon water conservation to manage water supply. For example, modern prices set for residential consumption of water are designed in such a way as to increase the price as the volume of water consumed increases. A customer who uses a lot of water will pay more at the meter than a customer who uses significantly less water. The rate structure is intended to incentivize the customer into making knowledgeable choices with respect to the purposes for which he or she is using water.

Some advocates of water conservation seem to view higher prices as a mechanism to reduce individual and overall water use. It is more appropriate to view water pricing as a mechanism to align the value of water with the value of the use of that water and to recognize that water is a scarce resource. Achieving customer awareness of these two realities provides constant evaluation and judgment regarding how the water received is allocated among the varied uses that are important to the customer.

It is well established that the uses of residential water vary with respect to their importance to the customer. Outdoor water use for lawn irrigation tends to be less important than water used inside the home for cooking, bathing and so on. This reality means that it is relatively easier for a customer to reduce outdoor water use as prices increase but less easy to curtail indoor use. Customers are likely to demonstrate an initial significant reduction in water use in response to a price increase when outdoor water use is part of the mix of uses. However, a subsequent price increase is unlikely to result in a comparable reduction in use because the increment most easily given up has already been curtailed. Each subsequent reduction will be smaller than the previous reduction. This point will be revisited in our comments on Chapter 9 when we discuss the phenomenon of higher prices and decreasing total revenue.

Economic incentives embodied in customer rates are not the only forms of pricing that are used. Plant investment fees (frequently called tap fees) are being structured in ways to allow the applicant to structure an entire project around wise water use with the plant investment fee being customizable to provide an incentive for such decisions. One of our members, the City of Fountain, has pioneered the use of such fee structures and has had extraordinary success with it.

> **Recommendation: PPRWA recommends that the CWP include a discussion of the use of structured or tiered tap fees as a method of incentivizing applicants to incorporate wise water use and water conservation into their designs and plans with a particular focus on reducing the presence of irrigated lawn areas.**

There is no doubt that customers of water (whether residential, commercial or industrial) are price sensitive with respect to the water that they acquire. Price is not, however, a silver bullet that can transform consumption behaviors as a standalone strategy. Sometimes it is necessary for the water

supplier to impose behavioral controls on the customer as well as structuring the rates to incentivize wise use. An example would be schedules for outdoor watering that limit the unbridled application of water for lawn irrigation. Another example would be the use of incentives for the customer to install water saving fixtures or to convert the landscaping to favor plants that need less water to thrive. Our members have established these programs as well as having adjusted their price systems.

Many studies have shown that customers can be educated with respect to the wise use of the water that is delivered to them. For a municipal water system, however, water is very often a public good that must be made available on demand for the public health and safety of the community. Fire protection is an obvious example. Environmental concerns over air quality and the quality of street run-off require water to be used to mitigate dust and street dirt and debris. Parks and open space provide opportunities for public recreation, urban wildlife, the tempering of heat buildup during summer months and aesthetic enjoyment. Public goods by their very nature are not capable of being priced as is water provided as a commodity. Nor may public goods exclude any users – they must be universally available.

The discussion of water conservation included in the CWP is helpful but limited in its scope. Conservation is more than simply ratcheting down on consumption and use or redirecting the water from a current use to another use that is deemed to be of higher priority. Conservation is also managing the source of the water supply to shift reliance from limited or diminishing supplies (such as the Denver Basin aquifers) to the use of renewable water supplies. The CWP should recognize in its narrative that not every development of a water supply that is new to the provider is inherently suspect. Often such development is a sound and structured balancing of the water supply so that the public water supply is stable, sustainable and efficient.

> **Recommendation: The narrative in the CWP should recognize that conservation includes the decrease in use of nonrenewable supplies and a shift to renewable water supplies.**

An Unsound Reliance on Per Capita Use Statistics

The CWP in several places refers to per capita use of water within municipal water systems and makes note that reductions in per capita use have been positive. While that is undoubtedly true, we urge caution not to become overly enamored with or committed to a statistical measure of per capita use on the premise that it is the only relevant indicator of efficient or non-efficient water use in a municipal setting. Per capita calculations are a simple but potentially misleading statistic and should not be relied upon without an analysis of underlying factors and dynamics related to use.

Caution should be taken to avoid assuming that per capita use means exclusively metered water service. If the per capita number is arrived at by the simple arithmetic of dividing total water delivered to the community by its aggregate population, that number will be misleading because it includes among other things water made available as a public good. To be useful the calculation must be specific to the use of the water and not include irrelevant or unrelated uses. While the narrative of the CWP with respect to per capita use is valuable, we believe that the narrative should include a description of the limitations of the statistic as an indicator of performance.

In addition to the preceding cautions, it should be noted that exogenous factors should be identified and taken into consideration when calculating per capita use. Weather, for example, is a very powerful influence on residential water use. If the weather is hot and dry for extended periods, water use per capita will likely be higher than when the weather is cool and wet. As another example, consider the statistical effect if a water provider has had a manufacturing plant that commands the use of significant amounts of water in the production process locate within the service area. That new and sustained use can affect the calculation of per capita consumption if it is not accounted for in the analysis of actual use. The plant may be an employment and economic benefit to the community and its water consumption may also make it an important revenue source for the water provider. Per capita water use can be a useful statistic but we urge caution before relying on it too heavily to craft water supply policies.

As a final comment on the limitations of relying too extensively on the statistic of per capita use, making comparisons between time periods requires significant qualification to avoid reaching misleading conclusions. The further apart the two time periods are the more likely it is that they are not as comparable as might first appear. As an example comparing the gas mileage between an automobile manufactured in 2015 with an automobile manufactured in 1955 are not very useful because while the product (automobiles) is the same the technologies employed for each model are separated by generations of improvements. That point is relevant to the per capita use of water in 2015 as compared to the per capita use of water in 1965 or 1975 or 1985. Technologies related to the delivery of water have changed dramatically. Societal values related to the uses of water have also changed.

> **Recommendation: PPRWA urges policymakers to frame the narrative concerning the statistic of per capita water use in a proper context to avoid inappropriate conclusions and enactment of ill-designed policies.**
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> **Recommendation: The CWP cites several examples of tools that a water supplier can mix and match to be the most successful fit for its system. However, not every tool must be used by every supplier in every set of circumstances. The PPRWA urges the policymakers who will finalize the CWP to avoid developing a "straightjacket" of required practices that must be employed by each and every supplier but rather to support each supplier to select those which will have the greatest benefit for its system. It is the result that is important rather than the method used.**

Table 6.3.1-1 – Item 2 "Establish a Statewide Conservation Goal with Intermittent Benchmarks"

PPRWA believes Item 2 in Table 6.3.1-1 (page 164) needs to be reviewed before it is included as a final element in the CWP.

As item 2 is currently structured, it presents a significant conflict between the role of the State as a facilitator to move conservation forward and an imposer of mandates upon the local providers.

Future action "2 b" is very problematic as it is written. The language clearly indicates that the State will develop and impose external conditions on the development of new water supplies regardless of source or proposed use and will prohibit any transfers that do not meet the criteria. Not only does this

statement embody a heavy-handed command, compel and control role for the State, it is a refutation of the expressed goals of working with suppliers – which are by and large other governments with locally elected officials – in developing local solutions to local problems.

Future action "2 b" is an example of the kind of statement and policy that can lead to unintended consequences. If, for example, the criteria are so tightly drawn and implemented that a water provider is foreclosed from being able to develop renewable water supplies to supplement or replace reliance on nonrenewable water supplies such as groundwater, the provider will be locked into use of the nonrenewable supply and the CWP will have failed. Efficiency improvements and conservation gains can be undermined if the State ties itself to a rigid interpretation and adherence of "one size fits all" regulations.

The board notes that the other future actions are positive statements that can be readily embraced and supported. Unfortunately, future action "2 b" is wholly incompatible with the other items and divides the list of future actions into two distinct sets which are mutually exclusive. In fact, future action "2 b" is an outlier item that is inconsistent with the other action items and diminishes their importance.

> **Recommendation: PPRWA encourages policymakers to reconsider this set of statements and to strike future action "2 b".**

Table 6.3.1-1 – Item 5 "Develop New Incentives for Conservation"

We note that future action "5 c" is expressed as a command, compel and control regulatory imposition. A plain reading of the language leads to the direct interpretation that the State will summarily deny any financial assistance to an entity that does not meet an externally developed and imposed set of criteria. This approach is analogous to that used by the federal government to force states into adherence to its policies by using its financial power to compel compliance. This provision is puzzling because it leaves the impression that current procedures for reviewing requests for financial assistance are somehow deficient concerning conservation factors. That is simply not the case. Such elements are considered and reviewed and the CWCB has ample authority to modify its review criteria now.

> **Recommendation: PPRWA encourages policymakers to either revise action "5 c" to be less authoritarian and absolutist or to strike the item entirely.**

The same philosophy is embedded in future action "5 d" as well. Both "5 c" and "5 d" are directly in conflict with and undermine the other more positive statements under Item 5. We have grave concerns about this action item being misused and impeding activities that have been carefully designed to integrate agricultural and urban water uses through lease-fallowing contracts, interruptible water supply agreements or other mechanisms designed to mitigate the anticipated M&I Gap. We are concerned that this open ended action item will be used by opponents to such agreements in reviews by the State Engineer or in water court.

> **Recommendation: PPRWA encourages policymakers to strike future action "5 d".**

Stretch Conservation Goal

We were surprised that there was a completely new and previously undiscussed stretch conservation goal inserted into Chapter 6 of Draft 2. The new stretch conservation goal was not included in Draft 1.

The inclusion of the stretch conservation goal is not an insignificant technical revision. It is a major policy shift that colors many of the other sections and goals of the plan. Even if the stretch conservation goal is meritorious, it suffers from a deficiency in process simply as a result of how it was developed and inserted into the CWP.

Whereas the plan has otherwise been founded on a grassroots upward development of recommendations, the stretch conservation goal was not publicly discussed or presented in concept to the roundtables. It was developed by a small subcommittee of a committee of the IBCC. It appears only very limited input into its development and inclusion occurred. In fact, the opening sentences of the paragraph that introduces the stretch goal (page 164) refers specifically to the grassroots process. The following passage, while a bit lengthy, is very useful for understanding why the imposition of the arbitrary stretch conservation goal is problematic and inconsistent with the entire roundtable process:

> "The minimum amount of water saved through water providers' active conservation efforts is a goal that was identified through three stakeholder processes. The basin roundtables underwent a process to develop portfolios of water solutions to meet future water needs. The IBCC examined these as part of their no and low regrets action plan and determined that low to medium conservation levels defined in SWSI 2010 were needed; and the scenario planning process determined that all of low, or half of medium conservation SWSI active conservation levels, or nearly 170,000 acre feet will be needed. This is enough water to meet the needs of about 1.1 million people, or thirty percent of all the new people expected to move to Colorado between now and 2050. Recently, the IBCC Conservation Subcommittee developed a stretch conservation goal that goes beyond the no-and-low-regrets actions:" (CWP, page 164)

Clearly the stretch goal was developed and imposed subsequent to the completion of the entire stakeholder process and further on the narrative recognizes this fact. The new stretch conservation goal was developed and imposed upon the CWP which is very different than having been developed through the process. In an era of heightened public skepticism with governments and governmental processes the lack of transparency involved in the imposition of the stretch conservation goal undermines the stakeholder process that was used to develop the consensus goals that were accepted by the roundtables.

The stretch conservation goal establishes an additional municipal conservation target of 400,000 acre feet by 2050 in addition to the conservation goals established in the basin implementation plans. This new conservation target of 400,000 additional acre feet needs to be put into context. The CWP in Table 5-1 (page 78) displays the consumptive use of water on a statewide basis. The Table notes that of the 13,700,000 acre feet of water that is, on average, naturally occurring, 5,300,000 acre feet (39%) is consumptive use. Of that consumptive use, municipal consumptive use is estimated at 400,000 acre feet or 7.5% of total consumptive use.

The stretch conservation goal of an additional 400,000 acre feet is the exact equivalent of the total municipal consumptive use that is currently occurring. In other words, the stretch conservation goal is tantamount to eliminating all municipal consumptive use. Another way of viewing this stretch conservation goal is to note that it is the equivalent of the yield of the Denver water system that serves approximately one-third of the state's population.

The CWP provides no methodology nor offers any explanation for how this additional amount of conservation was derived. Nor does the CWP reveal the assumptions upon which is was calculated. There is no data, no research and no description of the model used. Therefore it must be concluded that the number is simply arbitrary which suggests that its validity is questionable.

It is known and has been commented on in CWCB information that municipal water use has declined significantly since the onset of the drought of 2002. What makes this observation important is the phenomenon of diminishing returns. It becomes increasingly more difficult to secure the same gains as were accomplished previously. Simply mandating an arbitrary standard does not change that reality. The adoption and insertion of the stretch conservation goal simply ignores that reality and imposes a target derived without benefit of analysis and which may not be even achievable. In fact, it may be counterproductive if one of the mechanisms to achieve the target is to limit or disallow any of the IPP's that are included in the basin implementation plans.

The stretch conservation goal was a last minute insertion into the CWP and arbitrarily trumps the combined work of all of the roundtables. The stretch conservation goal was not vetted beyond a very small group before it was inserted into the CWP. In addition to suffering from a lack of process and review by the roundtables, this stretch conservation goal has widespread and long term implications for other critical sectors of the state. For example, it will have profound implications for economic development and the ability of the state to attract the kinds of businesses and industries needed to produce the economic product of the state in future years.

The roundtables were designed by the General Assembly to be broadly representative of the water users and water interests in the basins. The roundtables are not only broadly inclusive, their meetings, activities and information have been available to the public and the media since their creation. Any interested party had the ability to monitor and participate in the deliberations of the roundtables. The effect of this stretch conservation goal reaches far beyond the water community and touches the broadest sectors of the state from business and industrial to recreation to environmental to agriculture. It should not be imposed upon them without having been made available to them for comment.

The lack of substantive public discussion of the stretch conservation goal argues very strongly for policymakers to review this provision of the plan carefully and in detail. Reducing municipal water use by such a large amount on top of the other conservation goals embodied in the basin plans is simply unrealistic. For illustration purposes, one only need to add the amount of conservation set forth in the basin implementation plans and the amount of the stretch conservation goal to see that the combined total far exceeds the total municipal consumptive use displayed in Table 5-1.

Any water conservation target that is of this magnitude, scale and aggressiveness exceeds the capabilities of the water supply community to achieve by itself. It must be accompanied by a paradigm shift that includes the participation of businesses, governments, cultural institutions and others as well as the technical expertise of the water providers. Rather than simply accepting and endorsing the subcommittee's stretch conservation goal, the CWP should endorse a process for a broader community dialogue to develop a consensus for an ambitious - but achievable - conservation target. The CWP is intended to be a "living document" which means that it will be continuously reviewed and modified in relation to new ideas, new technologies and new constraints and capabilities. The stretch conservation goal should not be made part of the CWP until the broader community of Colorado interests has had the opportunity to consider it.

In addition there will need to be a consensus about the means for each community's and each interest's contributions to achieve the target. The basin roundtables must be given the opportunity and time to evaluate their implementation plans to determine whether the stretch conservation goal nullifies their work. The conservation goals adopted as part of the implementation plans considered the contribution of passive and active conservation to reducing the basins' M&I Gap. Those goals can be considered to be achievable. There is no way to determine whether the stretch conservation goal is achievable. As important as the IPP's in each of the basin plans are, it must be noted that those IPP's do not represent or include 100% of the projects that will be undertaken in the basins. The entities that are implementing their own projects need to be afforded the opportunity to review the potential effects that the stretch conservation goal may have on those projects and plans.

No individual water supplier can plan for or commit resources to an undefined portion of a statewide target that is not grounded in public acceptance. Moreover, the consensus must be based on an equitable allocation of responsibility to realize the target. No local water provider should be given preference over any other provider. Nor should any local water provider be required to participate at a level in excess of an equitable allocation. It would be a perversion of the entire multi-year process if the CWP became responsible for levying a disproportionate share of the stretch conservation goal on smaller water providers that lack the financial and organizational resources of the larger providers.

Is the Stretch Conservation Goal Aspirational or a Mandate?

In our judgment, the essence of the issue is whether the stretch conservation goal is to be considered to be aspirational or whether it is a mandate that is in addition to all other conservation goals set forth in the CWP and the basin implementation plans. To see why this issue has become of concern, please review Chapter 10 on page 401 where it is included as an action item under "Critical Actions to Increase Conservation." That statement is consistent with the second bullet point in the narrative on page 164 that states that the stretch conservation goal would be achieved from a combination of elements including "new regulatory mandates." As written, the language concerning the stretch conservation goal leads inescapably to the conclusion that it is not an aspirational goal. Rather it is a mandate to be imposed upon the conservation goals developed and adopted by the roundtables as part of their respective basin implementation plans.

> **Recommendation: The PPRWA recommends that policymakers review the history of the development of the stretch conservation goal and whether it, as a matter of public policy, should be designated as aspirational or whether it is a mandate as an additional target above other conservation goals. This is a key policy decision for the policymakers to make as the final CWP is prepared.**

The importance of this policy decision cannot be overstated. The value of an aspirational goal is that it is a challenge to go further and do better even though it cannot be known at the outset if the goal is attainable. Attainability, while perhaps an indication of success, is less important than is the continual effort to achieve the goal. It is the effort that results in innovation and improvements in operations and behaviors.

If, however, the stretch conservation goal is cast as a targeted mandate then it is no longer aspirational whether or not it is attainable or achievable. Regulatory agencies are not invested with discretionary authorities. Regulatory agencies are subject to very distinct and bright lines related to whether an

activity under their jurisdiction did or did not occur. If the stretch conservation goal is cast as a targeted mandate, then there will be a high rate of failures simply because there is no way to know in advance whether the goal has any basis in the real world.

As structured and absent any clarification by policymakers, we believe that the stretch conservation goal is likely to become an *a priori* condition of permitting at both the state and federal level as well as a prequalification for any state or federal financial assistance for any water project. The net result of this dynamic will simply be to exacerbate an already problematic permitting process. Moreover we are concerned that this mandate will become a key element before the water court when the court is reviewing water rights issues and plans of augmentation. Without proper framing and guidance by the General Assembly, we believe that this mandate will become abused by opponents to water rights actions to include those that are designed as alternatives to agricultural dry ups.

The board strongly urges policymakers to make it crystal clear that the stretch conservation goal is an aspirational goal and it is not to be used as a criterion for the evaluation of local water conservation programs when reviews for regulatory, financial or legal purposes are made. The CWP as a consensus document should not advocate the use of the stretch conservation goal in any manner other than as an aspirational goal intended to encourage water providers to push the conservation envelope as far as practicable.

> **Recommendation: The PPRWA recommends that the General Assembly prohibit state agencies from using the stretch conservation goal as a factor in any review of a local water provider's proposed projects, application for permits, requests for state (or federal) financial assistance or in any proceeding before a water court.**

Integrated Water Resource Planning

Following the discussion of the stretch conservation goal in the CWP, the narrative introduces the concept of "integrated water resource planning" (page 165). Integrated water resource planning is directly tied to the stretch conservation goal and the two must be read and considered together. The narrative that discusses integrated water resource planning makes it crystal clear that those who incorporated the stretch conservation goal into the plan meant that it would be a direct mandate and not an aspirational goal. That motivation and intent is unmistakably clear as the following extract from the provision on implementation clearly sets forth:

> "**Accountability**: For the goal to be successful, water providers will be encouraged to do comprehensive integrated water resource planning geared toward implementing the best practices at the higher customer participation levels. This will be part of the necessary requirements to achieve state endorsement of projects and financial assistance."

There is no way to misinterpret that provision or to conclude that it is anything other than an imposition of command, compel and control mandates on local governments.

The CWP does not provide any discussion or information to determine exactly what is meant by "integrated water resource planning" or what would be required of local governments to develop it. Such an omission from the CWP creates a huge void in the CWP and how it should be used by local governments. While the CWP uses the word "planning" it seems that a proper reading of the narrative

shows that the word should be "management." In fact a simple Internet scan for the terms displays many entries that refer to management rather than planning.

Integrated water resource planning is best understood as a process that considers multiple viewpoints of how water resources should be utilized given various constraints such as environmental, legal and institutional. Options are identified and considered in order to optimize the use of scarce water resources. The scope can range from being very local to encompassing an entire river basin. In fact, the entire basin roundtable process was an exercise in integrated water resource planning.

The members of the PPRWA have been involved in multiple integrated water resource planning projects and efforts over the past several years. In some cases local financing and resource commitments were matched or augmented by state funds committed by the CWCB. Most recently a PPRWA regional infrastructure engineering study was completed and released. The study conducted by Forsgren Associates was released in April, 2015. The following excerpt from the study is provided to demonstrate that integrated water resource planning is being accomplished today:

> "Some of those members have now joined others in the PPRWA to support a more focused effort to quantify future participant demands and capacity needs for a larger regional system, develop specific facility needs to meet the demand, explore current or planned infrastructure that could support the overall project purpose, develop conceptual costs for these facilities, and point toward a governance structure and implementation plan to move forward."

This regional infrastructure study follows an earlier Water Infrastructure Planning Study (WIPS) that was conducted in 2008. The WIPS was commissioned to take a comprehensive review of alternatives that were potentials for using Denver Basin groundwater resources more efficiently and to develop new renewable water supplies to the northern portions of El Paso County. The just completed regional infrastructure study was the next phase of the work accomplished in WIPS.

With these two studies having been completed, the next phase will focus on the development of a phased approach to the completion of the regional infrastructure system, initiating the framework for the governance of the project and to identify and begin the process of securing funding for the project.

For the past decade and continuing on into the future, the PPRWA has been involved in conducting a comprehensive and professional integrated water resource planning process.

The imposition of the stretch conservation goal is a complete refutation of integrated water resource planning because it overrides the legitimate process and it works backward from an arbitrarily imposed end result that is designed to preclude the identification and evaluation of other options.

> **Recommendation: PPRWA recommends that in the absence of a definitive framework for integrated water supply planning that a local water supply provider that has undertaken a project or program that is consistent with its respective basin implementation plan be presumed to have met the requirement for integrated water supply planning set forth in the CWP.**

6.3.2 – Reuse

The board was pleased that the CWP recognizes reuse as an essential element to the water system supply management. However, Section 6.3.2 encourages direct potable reuse of municipal wastewater

but fundamentally misunderstands the issues and the law regarding direct potable reuse. As written, the plan suggests the only health and regulatory issue with direct potable reuse is brine disposal (page 174). For example, the draft plan states (on page 175), "---there are no regulations prohibiting or limiting a utility's pursuit of" direct potable reuse. That is not accurate – direct potable reuse is not permitted; it is, in fact, prohibited.

The Water Quality Control Commission's Regulation 84 prohibits direct potable reuse in Colorado. The plan suggests (page 174) the regulation only addresses non-potable uses. That assertion misses the main point of the regulation. That is that Regulation 84's silence does not mean direct potable reuse is unregulated. To reach that conclusion, a quantum leap in faulty logic must be accomplished. The Regulation is properly interpreted as holding that direct potable reuse is unauthorized. Only that direct reuse of wastewater expressly authorized by Regulation 84 is allowed. Any form of direct reuse not expressly authorized is prohibited. Section 84.6.c holds:

> "Treaters and users planning to use reclaimed water shall have or obtain a Notice of Authorization from the Division prior to any use of reclaimed water."

Additionally, Table 84-8 (approved uses for which the Division will issue a Notice of Authorization) does not include potable use. It is clear that potable reuse is currently illegal in Colorado.

Direct potable use will likely be authorized some day, and PPRWA encourages that result. As it stands, the draft plan espouses reliance on an illegal activity without acknowledging that it is illegal. The plan should recognize this fact and recommend funding, research and plans to develop standards and processes to allow direct potable reuse to be part of the state's water supply solution, recognizing the important role of the Water Quality Control Commission in maintaining public health and vetting proposals to authorize direct potable reuse. Subject to that threshold issue, the plan can encourage direct potable reuse where the Commission allows it.

Indirect reuse and nonpotable reuse are lawful alternatives available today and should not be discounted. The bulk of the conservation measures discussed in the plan address outdoor municipal uses. Nonpotable reuse is a viable means to satisfy most outdoor demands and is every bit as effective a demand management tool.

6.3.3 – Land Use

This section includes some very useful information. However, there are two issues which are not addressed in the narrative that we believe are important to note.

The first of these issues concerns the jurisdictional authority of local governments to make or influence land use decisions. This is less of an issue for home rule or statutory municipalities that have powers related to subdivisions, zoning, building codes and other land use matters than it is for Title 32 special districts. A Title 32 district does not generally have subdivision controls. Title 32 districts provide services to the unincorporated areas of a county and the county holds the regulatory control over subdivisions. As such, Title 32 districts are the recipients of the land use plans and decisions made by the county and must provide service to the areas and uses that are within their service areas.

Potentially this bright line of authority could become a problem as the concept of integrated water resource planning is implemented. A local government should not be penalized for not doing something that it has no legal authority to do.

The second of these land use matters involves densification. By densification we mean the integration of residential and commercial uses of land with higher numbers of people being located in closer proximity to each other than may have been the earlier custom. There are many economic advantages to densification and it is clear that the market is already adjusting to take advantage of the economies of scale and scope that result from densification.

For a local water provider densification brings some additional adjustments that should be recognized. The design of the water supply infrastructure will change to accommodate the new demands for water volume and water pressure needed to adequately serve the more densely populated neighborhoods. However the bigger issue is that of a changing mix of the uses of water. Through densification the size of lots generally decreases. That usually reduces the percentage of the lot that is committed to lawns which, in turn, relieves the residential customer from having to irrigate the lot.

As densification reduces the expanse of residential lawns, new designs will have to incorporate newer and larger green areas and opens spaces to accommodate the needs of the neighborhood. Children need play areas ranging from small pocket parks to soccer fields and other larger expanses of land and those areas must be in close proximity to where the children live. Adults also need the ability to walk, recreate, socialize and congregate in open areas that are well designed and maintained. These uses will place a greater responsibility on the local water provider because the water committed to the uses will be a public good rather than a retail commodity sold to individual customers.

> **Recommendation: PPRWA recommends that the CWP recognize these changing dynamics and to identify policies that insulate local water providers from being punished for not doing something they are legally not allowed to do. PPRWA further recommends that such policies be designed to hold the local water providers harmless from sanctions that would disqualify them from financial assistance.**

6.4 – Alternative Agriculture Transfers

We note that the discussion often portrays the dynamic between municipal uses and agricultural uses as being a zero-sum trade-off. We do not believe that is valid. We see many opportunities for municipalities and agricultural interests to be long term mutually supportive partners. One such opportunity might be joint efforts between municipalities and irrigators to establish and operate water storage that could be used by the parties in a balanced and economically productive manner.

The section provides a wealth of examples where interests other than municipal have successfully used ATM's to accomplish mutually beneficial goals. There is inherently no reason why only two partners can use an ATM. It may be more complicated but structuring a multi-party ATM might provide even greater benefits than a two-party agreement.

The PPRWA has been a strong supporter of ATM use for many years. We have participated in many working groups and committed organizational resources to the development of ATM concepts. In fact, two of our members, the City of Fountain and Security Water & Sanitation District, are current participants in an approved pilot project with the Lower Arkansas Valley Water Conservancy District and the Super Ditch that is delivering water for the first time this summer.

Since the drought of 2002 the General Assembly has enacted several pieces of legislation that were intended to further cooperative water sharing arrangements between agricultural and urban users.

Unfortunately those pieces of legislation have not resulted in much activity. Water banks, for example, have not been created. Interruptible water supply agreements largely remain unused. Rotational crop fallowing-municipal leases have only a single pilot project that just began delivering water this summer. Each holds promise yet each has proved to be unattractive to both the agricultural interests and also the municipal interests.

> **Recommendation: PPRWA recommends that policymakers undertake a review of the legislation that has been adopted in the years following the 2002 drought to determine what rigidities and barriers have been embedded in statute that have had a chilling effect on the use of the ATM options.**

6.5 – Municipal, Industrial & Agricultural Infrastructure

The PPRWA has been a longtime advocate of aquifer storage and this section of the chapter had many important observations and recommendations. We note that the CWP cites the Upper Black Squirrel Basin project for aquifer storage sponsored by Cherokee Metropolitan District which is one of the PPRWA members. Even though the narrative in the CWP is very well done, we note that it could be strengthened by an examination of the limitations on using the designated basins that is inherent in the governance structure of those basins.

The PPRWA has geographic proximity to several of the designated basins and some of our members have developed wells in selected areas of the basins. However the legal structure that establishes the governance of the basins is not conducive to using the basins for storage or for operating wells. The basins were never contemplated to serve such needs and are simply not designed to perform in ways that would enable aquifer storage.

> **Recommendation: PPRWA recommends that the General Assembly begin the process of reviewing the potential for use of the designated basins for storage as a drought response strategy.**

Chapter 9: Alignment of State Resources and Policies

This chapter is very well done and comprehensive and we commend those involved in its drafting. The chapter addresses several different issues, but we will limit our comments to Section 9.2 (Economics and Funding).

Section 9.2 – Economics and Funding

In many ways the CWP's preceding chapters all lead to this one section. It is not hyperbole to note that the success or failure of the CWP rests almost exclusively on the parties engaged in implementing the plan being able to meet their financial commitments to the plan and to each other. If the elements of the plan cannot be executed because there is insufficient fiscal and financial capacity throughout the state, then the plan will become little more than a notebook on the shelf.

Only the General Assembly and the voters can establish a financial and fiscal infrastructure that generates the monies needed to implement the plan. The provision of a sustainable and optimum allocation of water resources is a multi-generational commitment. The financial infrastructure must be multi-generational as well. We cannot finance and maintain the achievements envisioned in the plan if

we rely on year-to-year "pay-as-you-go" budgeting. We must look not only at multi-year financing of projects, we must recognize that many of them are multi-decadal as well.

The General Assembly and the voters must adopt financing streams that are exclusively dedicated to the achievement of the goals in the plan. Committed funding streams cannot be subjected to being cherry picked to divert resources to other purposes no matter how important or meritorious those purposes might be. Committed funding streams must be structured for the life of the project to be financed – they cannot be committed and administered on an ad hoc, episodic and minimalist manner. Committed funding streams cannot be made subject to budget competition - these funding streams should not be made vulnerable to the demands of K-12 education, Medicaid or highway needs. As a complementary policy, water funding needs should not be simply added to the list of programs and projects that are financed by longstanding budgetary practices. Too many straws in the soda rapidly depletes the soda and fails to satisfy any of the withdrawals.

We recognize that the State has many critically important program needs. Water has long been considered a secondary need with the hope that the water community could handle the demands and financing. To the extent that such a belief was ever valid, it is no longer. Water must become a very high priority and resources must be committed to it. As an unfortunate example of the way water has been viewed and prioritized in the past, we need only look at the history of distributions to water needs from the severance tax. Just as irrigation water should not be viewed as the default water supply for the future, revenues committed to water programs and projects should not be viewed as a default cash flow for other budgetary needs no matter how important those needs might be.

Even though we are an organization of local governments, our observations concerning the fiscal infrastructure of the state are not limited to local government finance or the state budget. Many parties will be participating in the commitment of resources to the plan and they must all have sound financial foundations in order to generate the monies that will be needed. Any kind of joint effort or multiple party participation is only as viable and strong as its weakest financial partner. We should endeavor to make sure that all parties have the financial capacity to be effective partners.

A significant issue in the plan is the improvement of agricultural efficiencies in water use. Yet we cannot expect the farmer to assume a financial responsibility that he or she cannot meet. Recreation is becoming an increasingly important economic sector and while many of the businesses that are engaged in providing recreational opportunities to customers demonstrate solid finances, not every such business is capable of pulling much of a financial load.

> **Recommendation: PPRWA recommends that the General Assembly start the process of analyzing the financial needs, the financial capacity in the system and how the plan can be financed.**

Section 9.2 includes a representative sample of potential financing strategies that might be employed to meet the needs of the plan. At this point in the development of the plan, it is premature to focus on one or a subset of the identified financial strategies. Each has merit but each does not have useful application to every type of financial need that is identified in the plan.

Recommendation: PPRWA recommends that the policymakers view this list as being representative rather than exhaustive and seek to develop additional potential revenue sources.

Recommendation: PPRWA also recommends that the policymakers have professional staff develop a set of criteria by which identified potential revenue sources can be evaluated to determine which would likely be the most productive for long term financing needs and to align each potential revenue source with component parts of the plan.

Although it probably does not need to be emphasized, it is important to note that many of the identified potential financing concepts would be subject to TABOR limitations. Again the severance tax provides a useful example. The severance tax generates revenues which go to the general fund for subsequent appropriation to various needs. The severance tax revenues are subject to TABOR. By way of contrast mineral lease payments are exempt from TABOR scrutiny because they are federal dollars that are transferred to the State of Colorado. The two are comparable in their application and purposes yet each is treated differently under TABOR.

The presence and application of TABOR effects local governments as well as the state government. Any financing structure that relies on local governments to be significant partners will need to be designed within the parameters established by TABOR.

As a closing note to these comments, it is important for policymakers to understand that local public water supplies are predominantly funded by fees rather than taxes. Fees are only generated when the supplier sells water to its various customers. For many, many years this was a very successful financing structure – the more water sold, the more income generated. Rate structures were designed with incentives for the customer to buy more water.

Contemporary times have altered that basic philosophy. Now more sales are not viewed as being as desirable as is efficient use and conservation. Rate structures have been revamped to incorporate disincentives for the customer to buy more water or to develop new uses for water. The result is that total revenue for the water supplier has often decreased because of rate increases. That has led to even more rate increases in order to recover the lost total revenue – which, in turn, had a dampening effect on customer sales.

Recommendation: PPRWA recommends that policymakers take a fresh look at the financing of local water suppliers in general and seek solutions to better align revenues with the operational requirements, capital requirements and the state plan requirements for the commitment of monies.

Permitting Efficiencies

The Governor's executive order strongly emphasized streamlining the permitting process for water projects. The CWP echoes that emphasis throughout its narrative and recommendations. PPRWA suggested specific actions in comments made to the first draft of the plan.

There seems to be a perspective that has been incorporated in Draft 2 that it may be beyond the scope of the plan to endorse specific concrete streamlining steps. We believe that including action items related to developing specific and concrete further actions to eliminate duplication of regulation by

state agencies of areas where another state agency has primary authority, redundant requirements for study and analysis of issues, and other specific steps. The plan's call for early state involvement in federal permitting will allow the State to help define the scope of studies and analyses prepared for federal permitting, which then can (and should) be used by state agencies without requiring separate analyses.

There should also be further clarification about what benefits will follow from state endorsement of a project.

> **Recommendation: The PPRWA recommends that the sections of the CWP that address permitting procedures be revisited and revised to reflect the Governor's call for streamlining.**

Conceptual Framework

In general, we do not have any specific comments regarding the conceptual framework as it would be applied to future transmountain diversions. We recognize that the conceptual framework is the product of an extraordinary process of collaboration and negotiation among the parties most directly at interest with respect to any future transmountain diversions.

We note that this process has largely been conducted among those stakeholders with a very specific goal in mind. This process was highlighted extensively during the Roundtable Summit last spring. The closing presentations were almost exclusively dedicated to the conceptual framework and its essential principles. It was praised as being a complete paradigm shift for interests on both sides of the Continental Divide to move forward for evaluation of any proposed future transmountain diversions.

Recently, there have been conversations that the points of agreement might be extended and imposed upon municipal water projects that have no relationship to the transmountain diversion of water. This is a very ill-conceived notion and we urge policymakers to totally reject such an application. As with the stretch conservation goal, this is a new and significant shift in policy recommendations. This is an issue that was not discussed at the statewide summit. No foundation or rationale has been put forward that would justify such a change.

The conceptual framework simply will not work for routine municipal water projects. Such an application of the framework would almost certainly have a chilling effect on projects designed to improve water supply sustainability and to better manage water supplies. As an example, if these conditions were imposed upon a proposal to establish a rotational crop fallowing to municipal lease with the goal of stabilizing the water supply for the municipality in times of need, the overburden of mandates might make the project infeasible. The undesirable consequence might be to forgo the fallow-leasing project and to take us back to the least desirable option – to permanently dry up the land.

> **Recommendation: PPRWA strongly urges policymakers to make it clear that the conceptual framework is expressly limited and to be applied to future transmountain diversions.**