

Water Advisory Commission



La Plata County
Colorado

Date: June 11, 2015

Policy Bulletin # 1
Subject: Local Water Resources

Policy Question: Should La Plata County be concerned about our local water resources because of: (1) lack of water supplies, (2) lack of water infrastructure or (3) inefficiencies in the current water systems?

Background/Issue(s): The Commission undertook efforts to study La Plata County's current water resources to answer this question. They obtained information from the Colorado Division of Water Resources, Division 7 Engineer's Office about La Plata County's watersheds and water critical areas. They also spoke with representatives of Lake Durango Water Authority, La Plata West Water Authority and La Plata Archuleta Water District to learn about their current and planned development, as well as many of the issues these domestic water systems face in delivering water to La Plata County residents. In addition, the Commission reviewed information about the number of small water systems in the County, the number of permitted wells and the storage capacity of local reservoirs and lakes. Finally, the Commission considered various inefficiencies in the current water systems.

Based on this research, together with the Commission's own experience with water resources in La Plata County, the Commission believes that La Plata County should be concerned about all three of the issues identified in the policy question, as all three problems contribute to the water issues faced by La Plata County residents. However, to facilitate discussions on the greatest needs of La Plata County residents, the Commission believes the issues can be ranked in the following order of importance:

1. Lack of water infrastructure, particularly lack of interconnected water infrastructure;
2. Inefficiencies in the current water systems; and
3. Lack of water supplies.

Lack of Water Infrastructure

It is clear to the Commission that there is a lack of water infrastructure in La Plata County, thus the need for the creation and development of large domestic water systems such as La Plata Archuleta Water District and La Plata West Water Authority. The anticipated size of the service areas of these entities is a testament to the fact that there are very large areas of the County that do not have reliable water sources.

Instead, many residents must rely on unregulated community water systems and wells for their water supply or are forced to haul water. In the Commission's opinion, these unregulated systems and wells pose significant health risks to La Plata County residents, both because some

residents lack access to a clean, reliable source of water while others are at risk of running out of water due to lack of capacity and infrastructure in their systems.

According to the Colorado Division of Water Resources, as of 2014, there were over 8,900 completed water wells in the County. Anecdotally, the Division believes that approximately one-third of those wells are either dry or contaminated, although the Division has no authority over water quality issues related to the wells. Dry and/or contaminated wells, in turn, force residents to haul water. The WAC understands that water hauling is a current necessity for many residents, but believes that this is not a viable long-term solution for residents' needs and should be avoided when possible. Instead, the Commission recommends that, as part of obtaining a land use permit, the County continue to require residents to connect to domestic water systems whose lines are within 400 feet of their property boundaries. The Commission respects trepidations expressed by individuals over the cost of connecting to, and purchasing water from, such providers. However, in the Commission's judgment, the costs are outweighed by the need to ensure that residents have access to clean, safe drinking water from reliable sources.¹

Even when small water systems do exist, they face the greatest difficulties in providing safe drinking water to La Plata County residents. These systems are often designed to serve single developments or subdivisions and many lack long-term financial viability to maintain and upgrade their systems in a manner consistent with ever changing regulations. In addition, many of these systems were built with substandard materials, lack uniformity and cannot be easily repaired when problems occur.

The "cobbled" nature of their design also leads to lack of ability to have interconnected infrastructure in the County. As larger domestic water systems are asked to take over these failing smaller systems, problems frequently arise. For example, Lake Durango Water Authority is comprised of a conglomeration of several smaller water systems that have been "cobbled" together. When Lake Durango acquired responsibility for Rafter J's previous system, the structural components were not adequate for incorporating the system into Lake Durango's overall infrastructure and have created problems in delivering water. In addition, the Town of Bayfield has indicated that it may refuse requests to provide water to pre-existing smaller systems because the infrastructure and piping used in those systems is substandard, and Bayfield cannot afford to upgrade the infrastructure required to provide service.

This lack of interconnection and uniformity not only leads to lack of service when one system fails, but it is a prime example of inefficiencies in the use of small systems for each development or subdivision.

¹ The WAC considered whether or not the connection requirement should be expanded to include properties within 1,000 feet or more of existing water lines. Currently, the 400 foot requirement mirrors state law for sewer connections, and the WAC believes that a rational basis exists for establishing the corresponding parallel for water connections. However, the WAC was not able to articulate a legitimate basis for increasing the current connection requirement to any set distance (such as 1,000 feet).

Unless and until La Plata Archuleta Water District and La Plata West Water Authority are able to overcome the problems they face with regard to cost and critical mass, many residents in these areas will continue to rely on inferior water systems and supplies. Reports from La Plata West Water Authority and La Plata Archuleta Water District indicate that construction of their service systems will be phased and full build-out will likely take 25+ years due to the costs of construction.

Inefficiencies in the Current Water Systems

The Commission has identified several types of inefficiencies in the current water systems operating in La Plata County. These include: (1) regulatory inefficiencies, (2) management inefficiencies, and (3) physical inefficiencies.

In the Commission's experience, regulatory, management and physical inefficiencies are interrelated issues that frustrate many "small" and "micro" water systems' operations. For purposes of the Commission's conversations, it considers water systems with less than 100 taps as "small" systems and systems exempt from the Safe Water Drinking Act as "micro" systems. Small systems often lack the economies of scale necessary to ensure compliance with state and federal regulations. Further, since the Safe Water Drinking Act does not regulate water systems that serve fewer than 25 people or that have less than 15 service connections, micro systems are exempt from all regulatory oversight and potential health issues from contaminants in the water are not necessarily addressed.

La Plata County currently does not regulate any domestic water systems.² In fact, there is no definition of a domestic water system in the La Plata County Code. Nonetheless, the Code incentivizes the proliferation of small and micro water systems by allowing subdivision developers to triple the density of their proposed projects when the development is served by a domestic water system regardless of the system's size.³

Lack of regulation means there is no operating or management structure for micro systems, and many small systems simply do not have the capital necessary to improve and sustain their systems in the long-term. Further, many micro and small systems' "operators" lack the tools and knowledge necessary to ensure that their water supplies are safe for their consumers to use. Poor management, in turn, leads to poor systems. Without proper management and oversight of these water systems, substandard infrastructure is installed and inadequate funds are set aside to maintain these systems as they age. When it comes to micro systems, there is currently no real information on the quality of water being produced despite the fact that a sizable amount of the

² Durango's 2007 Comprehensive Plan estimated that approximately 40% of La Plata County residents relied on some type of unregulated water system at that time.

³ Section 102-105(2) of the Code requires a minimum three-acre lot size for parcels served by individual water and sewage systems, but allows for a minimum one-acre lot size for parcels served by either a domestic water or sewer system.

County's population is served by such systems. The Commission has already discussed the consequences of physical inefficiencies in water systems in the County. Lack of infrastructure is a serious concern as these systems age and the County's population continues to grow.

Lack of Water Supplies – Municipal & Industrial Water

Based on its knowledge, the Commission is of the opinion that **if** proper infrastructure is built, La Plata County has enough water and storage capacity to supply its residents with municipal and industrial water in the near term. This opinion is based on the knowledge that “wet” water may currently be plentiful in La Plata County as a whole, but water providers lack the capability and infrastructure to supply water to water critical areas.⁴

However, this opinion is also made with the following caveat. In the long-term (in the next 50 to 100 years), the Commission is not able to predict if the County will have enough water to supply its residents. Factors such as population growth, climate change, interstate compacts, changes in state and federal law related to water use and barriers to using the current water supply for municipal and industrial uses could very well make lack of water supply the most critical issue in the future. Further, the Southwest SWSI 2010 Basin Report estimates that La Plata County's municipal and industrial water use consumption will nearly double between 2008 and 2050.⁵

The Commission believes that there are three ways to obtain water for a domestic water supply: (1) new appropriations of available “wet” water supply; (2) “buy and dry,” which generally requires court approval to change the water's intended use; and (3) dedication of existing stored water supplies, which have not already been devoted to a particular use, to municipal and industrial use. With respect to dedication of existing water supplies to municipal and industrial use, there are significant political and legal barriers which would need to be addressed.

⁴ Projections are that the municipal and industrial water allocations in Lake Nighthorse and other projects will be adequate to meet much, but not all, of La Plata County's M&I needs through 2050. See Southwest SWSI 2010 Basin Report, §§ 5.4.2.2 and 7.1 (“Part of the Southwest Basin's M&I gap [in 2050] can be addressed by growing into existing storage allocated to M&I such as Lake Nighthorse....”).

However, the infrastructure needed to deliver ALP water to users does not yet exist. According to the Report, “[t]his includes water system construction planned by the La Plata Archuleta Water District and the La Plata West Water Authority. This water treatment and delivery infrastructure will be very expensive to construct. It will likely not be financially feasible to serve some unincorporated areas not served by water districts and water hauling is anticipated unless financial assistance is provided to develop the supplies and infrastructure.” *Id.* This lack of infrastructure is a noted municipal and industrial (“M&I”) “gap” that effects the region's water plan. Southwest Basin Roundtable, 2014 Basin Implementation Plan (draft), § 2.2.2 (July 2014).

⁵ As previously noted, water groups predict that the County's M&I needs through 2050 can be addressed through the use of existing storage facilities if water distribution infrastructure is developed. Southwest Basin Roundtable, 2014 Basin Implementation Plan (draft), § 2 (July 2014); Colorado's Water Plan: Southwest Basin Implementation Plan Fact Sheet (April 2014).

Below are a few examples of the issues to be faced in dedicating water to municipal and industrial use. First, although Lake Nighthorse is located in La Plata County, most of the ALP water is not committed for use in La Plata County. For example, the State's allocated share of ALP could potentially be used to satisfy compact calls in the future. In addition, both political and legal factors will influence the use of this water. Further, only limited portions of the water supplies in Lemon Reservoir and Vallecito Reservoir have been allocated for municipal and industrial uses.

Lack of Water Supplies – Agricultural Water

The Commission is aware that increasing municipal and industrial demands for water, both on the Western Slope and the Front Range, and continued growth and development are increasingly in conflict with agricultural uses for water in La Plata County. However, the Commission believes that it is crucial for the County to work towards balancing agricultural land use with growth and development to ensure that adequate water supplies will exist for agricultural purposes in the County. Alternatives to “buy and dry” transfers of water uses should be explored and the County should adopt regulations to oversee proposed large-scale agricultural dry-ups.

Conclusion(s)/Recommendation(s): Based on the Commission's belief that all three issues are important, and recognizing the current priorities they place on those issues, the subsequent policy memos will focus on recommendations for addressing these issues, given limited resources. For now, the Commission makes the following recommendations:

1. The County needs to adopt construction standards applicable to all new and modified domestic water systems. The standards should require uniformity/redundancy to decrease many of the infrastructure and interconnectivity problems faced by small water systems. Standards, such as those adopted by the American Water Works Association (“AWWA”), which regulate issues such as, but not limited to, backfill, restraints, pipes, and tracer wire, should be adopted. These standards should be tailored to the community's needs. Further, the Commission recommends that these standards be applied to all new water systems, as well as new additions, extensions, major repairs or upgrades to existing water systems.⁶
2. Understanding that a lack of infrastructure is the largest hurdle the County currently faces, the WAC has received and reviewed information from County staff regarding various public funding options available to increase infrastructure development. Based on this information, the WAC endorses the County's creation of voter-approved public improvement districts (“PIDs”), special districts and other financial incentives as the primary means for County support of water infrastructure development in the County. PIDs offer several advantages for

⁶ The WAC is aware that non-conforming systems will exist, which will be insulated and “grandfathered” from having to make the required upgrades until they expand and/or perform upgrades above and beyond a certain threshold. In the WAC's view, this threshold should define a “major” upgrade. This recommendation comes, in part, from the recognition that emergency repairs to systems will be required by many systems at some future point. These repairs should not be delayed or hampered based on the systems' inability to comply with the new rules.

development including: (1) the citizens' ability to prioritize the importance of water systems in their locations, by choosing to tax themselves or not; (2) reliable streams of revenue created through property taxes; and (3) the increased ability to apply for and obtain grants only available to governmental entities. The WAC recommends that the County use these mechanisms to assist La Plata West Water Authority and La Plata Archuleta Water District, as necessary, in meeting their infrastructure needs.

3. The Commission believes that conservation measures, community outreach and ongoing dialogue with, and periodic reporting by, current water systems are needed to solve La Plata County's water issues. While issues of securing water supply will be considered in more detail in other policy bulletins, the Commission is aware that many members of the community believe that water supply is the most crucial issue facing La Plata County. Commission members are confident that current water supplies are sufficient to meet existing needs, if infrastructure is made available. However, to address future population growth, possible compact calls and trans-basin diversions, the Commission believes that the County should review available water resources once every five (5) years and should explore potential new water sources any time such resources are made available.
4. It is the Commission's understanding that other Colorado counties have utilized 1041 powers to address impacts of agricultural dry-up and to regulate projects where irrigation water is permanently removed from land that has been historically irrigated. The WAC recommends that the Board of County Commissioners consider whether similar regulations could be useful in La Plata County. This issue is an important question that should be subject to further investigation and study, as the Board of County Commissioners directs.
5. Finally, although the Commission has not been asked to review sewer and septic issues in the County, the WAC firmly believes that the County needs to address these issues in the near future and consider regulations for uniformity in these systems; provided, that any such regulations are not duplicative of existing state regulations or those imposed by the San Juan Basin Health Department. Without question, wastewater treatment, infrastructure and cross-contamination issues are vitally linked to providing safe drinking water to residents of La Plata County.

Water Advisory Commission



La Plata County
Colorado

Policy Bulletin # 2

Date: June 11, 2015

Subject: County Regulation of Water Projects / Systems

Revised Policy Question: Concerning “proof of water,” should the La Plata County Code be minimally amended to conform with State statutes or should it be amended to require more than the minimum requirements established by State statutes?

Background/Issue(s): In approaching this policy issue, the Commission first determined that its focus should not be on “central water providers” alone, but should instead center on the “proof of water” issues that are critical to all water projects in La Plata County regardless of source. The Commission believes this approach is more judicious, in part, due to its concerns about lack of infrastructure, inefficiencies in current systems and the potential future water supply issues in La Plata County that affect all citizens, not just domestic water systems and their customers. *See Policy Bulletin #1.*

In considering what regulations are prudent for various types of water projects in La Plata County, the Commission studied State law and current La Plata County regulations, as well as tools available to the County in setting parameters for all water projects. Based on this review, the Commission determined that there are five (5) core areas of concern with regard to water regulation / “proof of water” in the County: (1) proof of “paper” water; (2) proof of “wet” water; (3) water quality; (4) operation and maintenance of water systems, and (5) conservation of water resources.

Core Areas of Concern / Proof of Water

With regard to the core areas of concern identified by the WAC, the Commission believes that the County needs to consider the following questions when addressing what regulations are appropriate in the water context:

1. Proof of Paper Water – How does the County ensure that an applicant obtains the appropriate well permits, water rights and augmentation plans for its proposed project?
2. Proof of Wet Water – How does the County ensure that an applicant’s proposed water source reliably produces a sufficient quantity of water?
3. Water Quality – How does the County ensure an applicant’s proposed water source produces safe drinking water?
4. Operation and Maintenance of Water Systems – How does the County ensure that the proposed water system will be properly operated and managed?

5. Conservation of Water Resources – How does the County ensure that an applicant’s proposed water source is efficiently and appropriately utilized to conserve water resources?

Simply stated, without adequate water, project applicants should not be allowed to pursue development. As such, applicants should be required to “prove up” their water, in accordance with the recommendations contained in the Policy Bulletin, before the planning commission reviews a project’s compatibility with its surrounding neighborhood. In the WAC’s view, proof of an adequate water supply is critical to showing that a proposed project fits the needs of its community.

Conclusion(s)/Recommendation(s): After learning about the various types of planning projects in the County and while being cognizant about the cost of additional regulations on the County, its staff and, most importantly, applicants, the Commission believes that many of the County’s regulations should be amended to require more stringent “proof of water” for proposed subdivision and commercial projects. Considering the impacts these projects have on La Plata County and its citizens, the Commission believes that taking measures to ensure that an adequate, clean and safe water supply is available to serve a project’s constituents is vital to addressing the County’s water resource issues, now and in the future. At the same time, the Commission believes that applicants whose projects require minimal review should only be subject to nominal additional regulations.

Below is a basic outline of the type of regulations recommended by the Commission to address each of the five (5) core areas of concern for each of the County’s various basic planning project types.

Projects Requiring Minimal Planning Review

The Commission recognizes that the water sources proposed by applicants seeking minimal land use review, such as Administrative or Class I review under the current code, typically serve only the applicant and his/her family (and not the larger community). Although the Commission is concerned about all of La Plata County’s citizens having access to reliable sources of clean, safe water, it also understands that the applicants have a significant self-interest in ensuring that their water supply and quality is adequate.

- **Paper Water** – The Commission believes that the County’s current regulations, which require either (1) a letter of intent from a water provider of their ability and intent to serve the proposed project; (2) a tap reservation or purchase; or (3) verification that the applicant has an approved well permit and/or water rights, are sufficient for demonstrating adequate legal water rights for projects submitted for minimal land use review. For projects served by surface water systems, the Commission agrees that an applicant need only provide documentation of sufficient water rights. For projects served by an exempt well, an applicant need only provide the appropriate well permit. For projects served by a non-exempt well, applicants should be required to provide both the appropriate well permit and documentation of sufficient water rights supporting the applicant’s use of the well. To the limited extent that

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commercial projects may be subject to minimal planning review, the Commission believes that the paper water requirements should be the same as those for residential projects.

- **Wet Water** – The WAC believes that it is crucial that all projects have adequate water supplies and safe, clean water for their projects. As such, the Commission recommends that County regulations require all applicants proposing to use a new well or an existing well in which water demand will increase to complete an 8-hour pump test. While the WAC understands that this test provides a measurement at a single point in time, it ensures that applicants must actually drill permitted wells instead of merely obtaining a permit and then hauling water. Currently, the County does not require any water tests.
- **Water Quality** – As expressed in its first Policy Bulletin, the Commission believes that safe, clean water is of critical importance in all projects. Thus, the WAC believes that all projects relying on wells should be required, at a minimum,¹ to perform a one-time, up-front test for basic contaminants such as nitrates, nitrites, and total coliform before a land use permit is issued. Based on current laboratory costs, these tests would cost applicants a total of \$100.00.² When compared to the costs of drilling wells and the benefits of determining if an applicant’s water supply is safe at the start of its use, the WAC believes the cost of the test is minimal.

Further, the WAC is of the opinion that the County should adopt rules (to the extent possible) that require all property owners with an existing well to test the well for primary EPA maximum contaminant levels (“MCLs”) when the property is being sold to a third party. The WAC believes that potential buyers of property should understand the quality of the water source they will be using.

- **Operations & Maintenance** – The commission believes that current requirements in the La Plata County Code for creation of a legal entity to administer and operate the water supply of a project submitted to minimal land use review are too stringent. Thus, the Commission believes that the County’s Code should be amended to clarify that no such requirement is necessary in these situations. Instead, applicants who will not be obtaining water from a third-party water system should be required, as a condition of land use approval, to develop a system maintenance plan and identify a responsible party for carrying out the plan. Such plans must include basic criteria established by the County, which should include, but not necessarily be limited to:

- Access to and ownership of equipment and system infrastructure;

¹ A minority of WAC members believe that periodic well tests should be required on all projects to ensure that an applicant’s water is safe for consumption. Further, they would require that the data from such tests be maintained by the County for future use.

² The San Juan Basin Health Department charges \$25.00 to perform a coliform bacteria test. In addition, Green Analytical Laboratories charges \$24.00 to perform a nitrate/nitrite test; however, the lab has a minimum charge of \$75.00 for testing, meaning that residents can test other contaminants as part of the \$75.00 minimum.

- A list of equipment, parts and supplies needed to ensure mechanical functioning of the system; and
- A description of the proposed general operation and maintenance of the system.
- **Conservation** – While the WAC believes that the County should promote good water stewardship³ through the use of incentives and by raising public awareness, the majority of WAC members do not believe that the County should impose any regulations related to conservation on individuals applying for a land use permit requiring minimal review.⁴ It is the majority view that either the applicant’s own need for conservation of his water supply or the third-party water system’s own rules and policies are adequate to address conservation concerns on this limited scale.⁵

Typical Planning Review Projects

Under Colorado law, subdivision approval is conditioned upon adequate evidence that establishes that a “definite provision has been made for a water supply that is sufficient in terms of *quantity, dependability, and quality* to provide an appropriate supply of water for the type of subdivision proposed...” C.R.S. § 30-28-133(6)(a) (emphasis added). The Commission is aware that the most stringent State law applies to both residential and commercial projects where the water use is estimated to amount to more than that used by 50 single-family equivalents. C.R.S. § 29-20-301 *et seq.* However, the law also allows local governments to set a lower threshold and the WAC believes that more stringent requirements with regard to proof of water quantity, water quality, operations and maintenance and conservation should be required of **all** major projects, such as commercial Class II projects and subdivisions, to satisfy the Commission’s concerns about safe, clean drinking water and future water supplies for all residents of the unincorporated County.

- **Paper Water** – The WAC believes that the County’s current tools for verification of legal water rights (as discussed under minimal review above) is the appropriate starting point for all major applicants – large residential subdivisions, commercial projects and industrial operations. However, given the Commission’s concerns over ensuring that sufficient water supply exists to serve a proposed project into perpetuity, the WAC cautions that if an

³ In this regard, the WAC endorses SB 2015-008, sponsored by Senator Ellen Roberts, which advocates training for land use planners on topics of best management practices for water demand management, water efficiency and water conservation. The WAC believes that such training is crucial to the County’s need to promote water stewardship and conservation.

⁴ The Commission believes that low-flow fixtures should be required for such projects, but is of the understanding that new state laws, which became effective in 2015, will prohibit the sale of any fixtures which are not low-flow fixtures.

⁵ A minority of WAC members believes that conservation is key in all projects and would like to see conservation measures addressed in all projects considered by the County.

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applicant's paper water portfolio does not satisfy the necessary "wet" water prerequisites described below, additional water rights will need to be obtained. Commercial and industrial projects should be required to meet the same requirements as residential projects, unless exceptional circumstances exist that would allow them to obtain a variance.

- **Wet Water** – The WAC recognizes that the legal right to obtain water (either through court adjudication, well permit or a tap commitment) does not necessarily translate into ample and sufficient water supply for any proposed project. As such, the Commission fervently supports the need for completion of a safe yield analysis⁶ for **all** Class II projects and subdivisions that are not served by a third-party supplier who has a current safe yield analysis on file with the planning department.
- **Water Quality** – At a minimum, all Class II projects and subdivision applicants should be obligated to complete the same water quality tests required of applicants seeking minimal review (as set forth above). Further, periodic water quality testing is recommended. In the WAC's opinion, testing for nitrates, nitrites and total coliform should be completed once every 12 months by all subdivision and Class II projects. The results of the tests should be mailed to all of the system's users, the La Plata County planning department and San Juan Basin Health Department, and the data should be maintained in a database by the County. If periodic testing is not required, the Commission urges the County to require water quality tests to be performed whenever property is sold if a test from the previous 12 months is not available.

In addition, if any Class II project or proposed subdivision has the potential for ultimate regulation by the Colorado Department of Public Health and Environment ("CDPHE"),⁷ then the Commission urges the County to adopt regulations that ensure the project is capable of complying with CDPHE standards regarding water quality and operations and maintenance in the project's future. Such regulations may necessitate that the applicant design and obtain CDPHE's preliminary approval of the requisite future water treatment plant, install the water distribution system components pursuant to any applicable County pipe and design standards, and include plat notes to inform lot purchasers that a subdivision's small water system will subsequently require treatment and CDPHE oversight.

⁶ The Commission believes that the requirements currently set forth in Section 82-186(f) of the La Plata County Code should be the baseline prerequisites required for all such analyses, while recognizing that a "safe yield analysis" – as traditionally defined in the engineering field – may require additional testing and/or reports.

⁷ The Safe Drinking Water Act does not protect private wells or small water systems. It only applies to "public drinking water systems," which are defined as "government or privately run companies supplying water to 25 people or 15 service connections for at least 60 days of the year." Individual well owners and small system providers are responsible for the safety of their water supplies and do not have to comply with federal and state regulations for frequent analysis, testing, and reporting of results. CDPHE, *Wells and Aquifers (Groundwater)*, available at <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251596876659> (last accessed July 30, 2014).

- **Operations & Maintenance** – Due to the infrastructure and efficiency concerns previously expressed by the WAC, especially with regard to small, currently unregulated systems, the Commission again recommends that **all** new systems and **all** existing systems planning major repairs or expansion be required to comply with designated pipe and design standards to be established by the County. Further, all systems should be compelled to prepare an operations and maintenance plan for the system that includes the same criteria discussed above and to designate a responsible party or licensed operator.
- **Conservation** – Since the Commission feels that an application for a Class II project or subdivision, no matter how small, has significantly different implications from an application for an additional dwelling unit or the like, conservation requirements should be imposed as a condition of all such project approvals. With regard to conservation efforts, the County needs to raise public awareness, educate the citizens of La Plata County about water conservation and promote water stewardship through various means, including but not limited to: education campaigns and certifications for professional horticulturalists, landscapers and other landscape architects in the County, planning incentives for developers, water demand planning and mitigation efforts.

To that end, lot owners within new subdivisions should have access to information, in the form of a conservation plan, which promotes efficient water usage. All applicants should be required to prepare a conservation plan,⁸ which could be recorded and cross-referenced as part of a plat notice, for the subdivision. Conservation plans must provide individuals and homeowners' associations with strategies and incentives for reducing water consumption, reducing the loss or waste of water and improving and maintaining the efficient use of water. These strategies should be aimed towards meeting the water consumption goals identified within the plans. Criteria for conservation plans should, at a minimum, include the following:

- A description of total lot consumption goals for the project, together with an explanation of how the project's design meets those goals;
- A description of any drought mitigation tools or steps used in the design, together with an estimate of the amount of water to be saved based on implementation of these tools;
- Tiered rate structures or other incentives to reduce water demand and consumption;
- Details on plans to educate lot owners on water conservation;
- Details of the water system and maintenance information;
- Requirements that conservation information be contained in subdivision covenants;
- Xeriscaping or dry-scaping requirements or information; and
- Requirements or information on use of low-flow fixtures.

⁸ Commission members have reviewed water conservation regulations imposed by various other governmental entities, such as Castle Rock, Colorado. The Commission believes that the regulations and philosophies adopted by Castle Rock in its water conservation master plan and landscaping and irrigation regulations may provide guidance to the County in establishing its own water conservation principles and rules.

In addition, when the proposed development will have a homeowners' association, the association should be required to send an annual notice to the lot owners relative to the achievement of established water consumption goals.

Further, metered taps should be required for all subdivision projects. Finally, in addition to existing provisions in the County's current regulations, members of the WAC believe that further incentives for consideration of indoor versus outdoor use (such as xeriscaping, etc.) be offered to applicants.

Exceptions / Additional Requirements for Projects Served by Domestic Water Systems

The Commission strongly believes that the best way to permit water projects served by domestic water systems⁹ is to directly ensure proper operation of the water provider, rather than enforcing standards by regulating the systems through conditions placed on individual applicants. This belief comes, in part, from the WAC's view that the system's own water quality standards must be relied upon for ensuring the applicant's access to a safe water supply.

It is the Commission's recommendation that various tools be adopted that will allow the County to permit all new water systems, as well as existing water projects which seek to upgrade or modify their current systems. In particular, to ensure that future infrastructure and efficiency goals are met and to help protect limited water resources, the Commission believes that proposed water systems/providers and providers seeking major modifications or upgrades should be required, at a minimum, to address all of the following issues:

- The proposed project's anticipated effect on adjacent communities and well users;
- Discussion of how the proposed project will compete with or duplicate the services of other existing municipal and industrial water projects in the vicinity, including reasons for and against consolidation/hooks into the preexisting facilities;
- The proposed project's plans for operation and maintenance of the proposed system, including a financial analysis of its proposed viability;
- The proposed project's effect on the design of existing storm water and sanitation systems; and
- The number of total taps the domestic water systems can serve, as set forth in an approved water supply plan.¹⁰

⁹ The Commission's recommendations are not meant to apply to municipalities in the County – i.e., Bayfield and Durango.

¹⁰ If a domestic water system has an approved water supply plan, the County should be able to confidently accept some form of tap commitment from an applicant, rather than forcing the applicant to submit data on behalf of the domestic water system. See C.R.S. § 29-20-304(2).

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If the operation of domestic water systems is better secured, the WAC is reasonably comfortable in continuing to rely on the system's commitment to provide water to an applicant (based on a letter of intent or proof of a tap reservation or purchase) as satisfaction of their concerns regarding proof of "paper" and "wet" water.

In addition, although not within the WAC's assigned tasks, the Commission strongly believes that the Board of County Commissioners should also look at regulating sewer/septic systems in La Plata County (to the extent possible) since water and sewer systems are interrelated.