

Colorado Wastewater Utility Council February 14, 2014

The Colorado Wastewater Utility Council provides these initial comments on Water Quality Issues to be considered in Colorado Water Plan. The Council may provide further comments to the Division and others as the Plan is further developed and issues arise. Thank you for the opportunity to provide these comments late in the Division's initial drafting of its chapter on Water Quality.

1. The role of wastewater plants in meeting the anticipated gap in water supply and in helping to meet the water demand for potable water is not much discussed but should be. Potential uses of wastewater treatment plants' effluents include:

- Reuse of wastewater for meeting drinking water needs by direct reuse or indirect reuse through blending with raw water supplies. Cases of direct and indirect purposeful reuse for drinking water supply should be provided. California and Texas have such examples.
- Discharge to streams meeting drinking water quality standards applied to surface streams enables downstream diversion. Such standards must protect the "domestic water supply" use along with "recreational uses," and "agricultural uses" including the Uses downstream. But uncontrolled nonpoint sources between the discharge and the diversion can foul the clean river water and necessitate repeated drinking water treatment. How to share the treatment costs is an ongoing controversy.
- Discharge to streams meeting aquatic life water quality standards more stringent than drinking water standards enables downstream drinking water diversion. It is important to emphasize that the standards for protecting aquatic life are generally far more stringent than those to protect the other uses just referenced, particularly drinking water uses. These stringent standards are driving more refined treatment levels that often result in the effluent quality being better than that quality in the stream to which it discharges. Wastewater plants are now a clean dilution of streams that could be more reuseable but for uncontrolled nonpoint sources.
- Reuse of non-potable water from treatment plants for landscape irrigation is increasing. Dual piping for lawn irrigation as distinct from potable domestic water supply to residential areas is technically feasible. Reuse of effluent for landscape irrigation of golf courses is more common. Reuse water for power plant cooling water is also increasing. Such reuse in essence expands the available potable water supply to meet the demand gap.

2. Point sources are required to meet more and more stringent standards per the Clean Water Act. This will automatically lead to the necessary tighter controls of nonpoint sources, including urban and agricultural runoff, storm water management systems and in rare cases water transfers.

3. The Colorado Water Plan is an opportunity for a holistic view of water quality and the relationships of point, nonpoint, natural conditions and other human activities impacting water quality of streams, rivers and watersheds.

4. This Plan has a significant role under the Federal Clean Water Act. As noted in EPA's "Agency Interpretation on Applicability of Section 402 of the Clean Water Act to Water Transfers" issued August 5, 2005, at page 8, water quality planning, water resource planning, and land use planning should be used to address multiple sources of water quality problems. Statutory provisions supporting this approach include Colorado Water Quality Act § 102(b) (reservoir planning); Clean Water Act § 208(b)(2)(F) (land use planning to reduce agricultural nonpoint sources of pollution; (2G) to reduce mining sources; (2H) construction related sources; (2J) all residual waste sources); and CWA § 401 (state certification of federally licensed projects).

5. A reduced and limited role of 208 planning remains in Colorado and should be expanded to return to the intended integration of point sources and nonpoint source controls. This could include management of water transfers. Current 208 planning remains in the areas where wastewater plants are willing to pay for the program. The Colorado Water Plan should incorporate greater funding, by all water users and others, of 208 planning efforts, so as to remove hurdles to water transfers and encourage water reuse.

6. Watershed based permitting and planning is emerging. A watershed can be as small as the Bear Creek watershed, or as large as the Upper Colorado River Basin, It should include 208 area-wide and basin planning and participation by all stakeholders, including nonpoint sources, stormwater dischargers, diverters, and agricultural activities. Watershed Basin Authorities similar to the Cherry Creek Basin Authority with local tax support for nonpoint source control and area-wide remediation programs are needed.

7. Clean Water Act §303(d) requires waters in non-attainment of standards be listed as impaired and a total maximum daily load developed. Impairment typically is due to both point and non-point sources; however, TMDL requirements are laid out differently for attainment for each. Non-attainment of standards is relevant to water diversion and transfer such that 401 Certification by the State of water diversion facilities may be denied or strongly conditioned. Thus setting priorities for the conduct of TMDLs should include consideration of anticipated water project permitting schedules.

Other TMDL **implementation** options not currently applied in Colorado need to be considered. The state needs to re-evaluate its TMDL program to determine if it is working: how long does it take waters to meet goals of the TMDL, which waters are incapable of meeting the TMDL, are the water uses classified correctly, are the data requirements for determining non-attainment appropriate, etc. As water quality standards in Colorado become more and more stringent, more waters are being classified in non-attainment. Is this a correct application and assessment of the water quality in Colorado? How will water transfers and water withdrawals be impacted in the future and (currently) due to more stringent standards?

8. Where 401 Certification of federally permitted projects raises water quality issues impacting water transfer as well as the point sources upstream or downstream of such transfer related activity, then state funding needs to be available to conduct planning and evaluation, via a 208 plan or watershed wide or cross watershed wide planning and mitigation measures.

9. Where local or county based implementation of “1041 permitting” on water or wastewater projects or related land use projects results in water quality standards driving the decisions by the 1041 permitting authority, the limitations of CRS 25-8-104 (1) must be explicitly affirmed. Similarly, 25-8-102(4) must be affirmed that the Water Quality Control Commission and the Division and other Implementing Agencies are the final authority in the administration of water pollution prevention, abatement and control. It must be recognized that local and county governments in the exercise of 1041 permitting powers are exercising powers of “statewide concern” similar to the Commission and Division, but are likely responsive to the needs of its own wastewater and stormwater entities at the expense of entities in other counties with a water diversion for use in other watersheds. In such cases, the role of the Commission as the truly final “statewide concern” authority should be maintained.

10. The role of wastewater plants in treating wastewater for groundwater recharge and storage for subsequent potable use is just emerging in Colorado. Only one new plant (Cherokee Metropolitan) has taken on the significant risks of such a venture. The policy of the Colorado Water Plan should be to support such technology development and should include using lengthy permit based compliance schedules in lieu of more onerous enforcement compliance schedules. Case studies and technology support may assist development of this method of reclaiming wastewater and its storage and reuse as potable water supply.

That the discharge is to groundwater and not surface water exempts the treatment process from CWA requirements. New wastewater treatment facilities using innovative technology when beginning startup must not be expected to be in immediate compliance.

The Total Dissolved Solids (TDS) standard for secondary drinking water standard protection should not easily prevent the development of such storage and water resource supply facilities.

11. The role of stormwater as a water supply should be understood. Treatment of stormwater to meet best management practices or even water quality standards prior to discharge will be so costly as to discourage the discharge to streams and will justify recapture and return to water supply systems, if water rights issues can be resolved.

12. Colorado needs to bring back major funding for water projects, be it upgrades to wastewater treatment facilities, non-point source improvements, storm water system upgrades, etc. The SRF has diminished to almost nothing. It was the intention of the EPA that as federal funds diminished states were to be positioning

themselves to pick up the slack. If the citizens of Colorado are truly “willing to pay” then we must develop a large fund for all kinds of water associated projects, i.e. small town wastewater treatment plant upgrades due to increasingly stringent water quality standards etc.

13. Nutrient standards, nitrogen and phosphorus, adopted in Colorado as interim values will cause a projected \$1.5 billion in wastewater treatment plant upgrades. Costs for nonpoint source control will increase. Funding must continue to be considered a statewide concern.

14. The EPA Partnership Agreement is an annual contract with the State to define water quality performance goals and tasks to be completed by the State with EPA funding. That process should be more transparent, subject to Legislative review, and utilized to support ways to overcome water quality hurdles to meeting water supply gaps.

If the Division has questions on these comments, please contact Tad Foster, counsel for the Council.