



**Minutes of
 March 10, 2010 Meeting
 at Littleton/Englewood WWTP**

In Attendance:

Bob Anastasov	City of Aurora
Dennis Stowe	Littleton/Englewood WWTP
Blair Corning	SACWSD
Amy Woodis	MWRD
Ginny Johnson	Colorado Springs Utilities
Bret Linenfelser	Boulder
Richard Leger	City of Aurora
Jim Wicklund	Monument San. Dst. & Upper Monument WQMA
Bill Burks	Tri-Lakes WWTF
Al Baker	Centennial
Jim Kendrick	Monument San. Dst. & Upper Monument WQMA
Donna Davis	WQCD
Dave Akers	WQCD
Steve Frank	RMWEA
Tad Foster	Law Office of Tad Foster
Craig Wolf	GEI
Karl Heil	City of Northglenn
Brenda Stansbery	BHCC Water & Sanitation District
Mike Bittner	Silverthorne/Dillon
Jim Dorsch	MWRD
Linda Boyle	Aurora
Charlie Stevens (via telephone)	Rifle
Nancy Keller (via telephone)	Pueblo
Colleen Young (via telephone)	Greeley
Paul Ferraro	CWWUC

- I. Update on Proposed Changes to the SRF and Projects (possible funding for nonpoint source and stormwater projects), Donna Davis and Dave Akers (CWQCD)**
- The Division is trying to use SRF funds for nonpoint source and stormwater projects.

- Increase of Federal funds for this year, an increase from \$5.3 to \$16.0 million.
- Starting a process to use SRF for nonpoint source and stormwater projects.
- Need to change State rules to allow nonpoint/stormwater projects to be funded by SRF. To WQCC by May 2010 and adopted by WQCC in October 2010 for funding projects beginning in January 2011.
- State has applied for an EPA grant to help rewrite their rules. April 2011 is set for major changes in the rule priorities. 2012 will be the effective date. Intended Use List.
- 2010 - \$16 million: 30% (\$2.5 million for disadvantaged loan forgiven. \$87 million available for loans this year, June 15 is the deadline for loan applications. There are more loan applications than money. Davis Bacon applies.
- Categories:
 1. Public Health Problems
 2. Out of Compliance
 3. In Compliance
 4. Stormwater Projects.
 5. Nonpoint Source Projects
- Major Changes as of April 11, 2011 to the WQCC Rules.
- Clean Projects set aside.
- Nonpoint Source Funding per year - \$2 million
- White Paper from Dave Akers is attached.

II. Nutrient Criteria Development update - Craig Wolf (GEI) and Jim Dorsch (Metro)

- Craig gave the Council a presentation entitled, "The Nitty Gritty Details of Colorado Nutrient Criteria Development." Click here to see a copy of his PowerPoint.
- Jim Dorsch shared MWRD's Nutrient Criteria Evaluation Outline. It is attached.
- \$7,500 is needed to develop a white paper which will summarize the issues related to nutrients. John Hall will prepare the paper.

Karl Heil moved, seconded by Jim Kendrick, that the Council approve \$1,000 for John Hall's white paper project. The motion was unanimously approved.

III. Public Relations Power / Is There a Role for WWUC with Respect to WET and Nutrients - Martha Hahn.

Martha was not available to make the presentation. It will be rescheduled.

IV. Developing a WWUC Report on Member Compliance Successes - Dennis Stowe.

This was postponed until April.

V. Open Discussion

- Next month the April 14, 2010 meeting will be changed to 9 AM to Noon. (this is the same day that Tim Moore is in Denver.)
- Dennis mentioned that the Council needs to have smaller groups (task force) for WET and Nutrients. The Council will solicit volunteers by email.
- Nancy introduced a discussion for having Tim Moore do a WET training session for the Council. He is available March 31, 2010 and this would be held in Metro's Board Room. The cost is reasonable, \$600 - \$1,000. Members agreed to have him and to invite others. However, the Council agreed not to invite the EPA. Nancy will contact the Workgroup and Council Members. Karl will contact RMWEA.

Meeting adjourned at 3:10 pm.

***Next meeting: April 14, 2010 at 9:00 AM at L/E WWTP
NOTE MEETING TIME CHANGE***

Water Quality Control Commission
**USE OF FEDERAL CLEAN WATER INFRASTRUCTURE FUNDING
TO PROTECT DESIGNATED USES OF COLORADO'S WATERS**

Issue Summary
March 10, 2010

Clean and safe water is critical for human and ecosystem health. The Commission protects Colorado's water resources, which serve as the source of drinking water for hundreds of communities and agricultural users and support aquatic life and recreation, through two major activities:

- Protecting all designated uses by maintaining the quality of streams and lakes where water quality standards are fully attained, and
- Restoring impaired water quality to attainable standards through reductions in pollutant loads from point and nonpoint sources of pollution.

History

From the inception of the program in 1987, Colorado has received grants from EPA under the Water Pollution Control Revolving Fund (WPCRF) that have been used to provide financing (loans) to municipal governments for wastewater treatment and transmission infrastructure projects. These projects have allowed many cities, towns, and special districts to build facilities necessary to replace aging infrastructure or to meet new water quality standards. These projects have improved the quality of the discharge to either prevent impairment of the receiving water body or restore an impaired water body to applicable water quality standards. Currently, loans to municipal or quasi-municipal entities totaling over \$200 million are in place.

In 2009 base WPCRF loans totaling approximately \$14 million for new wastewater treatment plants were committed to eleven communities across Colorado. Colorado also received an additional \$31.2 million in federal grants for wastewater infrastructure under the "American Recovery and Reinvestment Act" (ARRA). Colorado implemented an aggressive program to identify eligible projects to receive ARRA funds and executed loans with twelve entities.. As an aside, a similar program was implemented in 2009 to provide \$34.3 million in ARRA funding to 22 municipal drinking water projects. The Water Quality Control Division (WQCD) and the Colorado Water Resource and Power Development Authority (the Authority) estimate that the capacity for WPCRF project loans in 2010 is \$87 million.

WPCRF Funding Options

As the clean water program has evolved since 1987, EPA has recognized that other sources of pollution (stormwater and nonpoint) also require funding to implement projects to prevent or reduce pollution to ensure that water quality standards are met and classified uses are protected. However, to date only a small fraction (<1%) of WPCRF funds have been used to fund nonpoint source and stormwater pollution control projects. The WQCD has conducted surveys to identify needs for wastewater infrastructure and the latest figure shows a need of \$2.45 billion. Similar surveys have not been conducted to estimate the needs for nonpoint source and stormwater projects to reduce pollutant loads to restore impaired water bodies. Given the nearly 200 impaired water bodies in Colorado, the cost for projects to restore water bodies impaired by nonpoint sources alone would likely exceed \$1 billion, not to mention the cost of projects to alleviate impacts due to stormwater discharges.

The federal FY 2010 budget includes an increase in the amount of WPCRF funds for Colorado from the \$5.4 million provided in FFY 2009 to \$16.3 million. The availability of these additional funds presents an opportunity to evaluate options for funding nonpoint source and stormwater projects where such funding would maximize Colorado's ability to protect water quality. The WQCD proposes to evaluate the use of some of these additional funds to implement TMDLs on impaired water bodies where nonpoint or stormwater pollution is the principal source of the impairment.

As stated in the Commission's briefing paper on the 303(d) List of Impaired Waters and TMDL Status, Colorado has 148 TMDLs that EPA has approved. One hundred thirty-three (133), or 89% of the total, are related to legacy mining pollutants (zinc, copper, cadmium, lead, pH, iron, aluminum, and manganese). Very few of these legacy mining-related TMDLs have been implemented, primarily through voluntary projects funded by federal Clean Water Act Section 319 grant funds. These impaired waters are located at the headwaters of many of Colorado's most valued streams and would support fishing and other recreational activities if the impacts of historic mining activity were addressed. Also, Congress is considering "Good Samaritan" legislation that would bring third parties to the table, and additional WPCRF funds for voluntary projects could significantly leverage those resources.

Stormwater discharges are becoming of increasing concern in urban and urbanizing areas due to the discharge of pollutants associated with urban land uses such as bacteria, metals, sediments, and toxic chemicals. Also, greater stormwater flow rates and volume due to increased impervious surface areas can degrade water quality due to scouring of stream beds, impacts to stream banks and riparian zones, and habitat degradation. Traditional flood control practices that address peak flows from large storms are not effective at reducing water quality and channel degradation impacts that result from small, frequent storms and associated runoff volume increases. For example, such impacts have been seen in Fountain Creek between Colorado Springs and Pueblo and they are common in watersheds with urban land uses. Additional stormwater infrastructure funding will be necessary to address the impacts to water quality in the future. Increased funding could be especially useful in demonstrating the use of green infrastructure and other low impact development practices. Low impact development practices that increase effective permeability in the built environment are the best strategy to control both urban stormwater pollution and impacts from increased flow rates and volumes.

MWRD Nutrient Criteria Evaluation Outline

- I. Statistical Evaluation
 - a. Request steps taken to develop and evaluate the Nutrient Criteria Model
 1. Variance in input variables (means vs medians)
 2. Correlation
 1. Is the MMI correlated with nutrients?
 2. Is TP correlated with TN?
 3. Are nutrients correlated with habitat measures?
 4. Is the MMI correlated with habitat measures?
 3. Checking model assumptions (based on the data, which statistical tests are appropriate?)
 4. Examine model error
 5. Recommend improvements
 - b. Examine the difference in model when large streams are used and when large streams are removed.
- II. Biological Evaluation (Biological Condition Theory and MMI)
 - a. Confounding Factors
 1. Habitat
 2. Flow
 3. Other water quality characteristics....
 4. Large stream versus small stream (Majority of reference sites on plains are small streams and not comparable to larger systems)
 - b. Utilize MWRD data to evaluate the biological condition
 1. Biological Condition truly represented by macroinvertebrates alone (Weight of Evidence)
 2. Evaluate macroinvertebrate community for preferred habitat based taxonomic list
 3. Evaluate relationship between fish and macroinvertebrate communities (preferred food of fish species....)
 4. Reiterate some of the previous concerns expressed in August 2009 MMI Comments
 5. Evaluate the logic of MMI methodology
 1. Utilization of only kick-net data versus data using other sampling methods. (MWRD data can demonstrate that part of the macroinvertebrate community is missed when using only kick-net data)
 2. Recommendation: use kick-net data for calibration of MMI but use all available data for site evaluation.
 3. Request that data removed from model building be used for an examination of within-site variance of the model. (Only the most recent kick-net sample was evaluated – all previous values should be examined to see if there is a difference with a different sample).
 6. Evaluate possible urban MMI score goals and urbanization reality

7. Use MWRD data to examine variance in possible MMI scores between methods, dates, and sites. Preliminary results indicate that MMI values in Segment 15 vary from 4.71 to 64.13 depending on the location, sampling method and date sampled. Note: a pattern in the median values do show a decrease after MWRD effluent.
8. Recommend addition of tools to draw a more holistic picture (Bring Back O/E, Fish, WERF "Tool For Managing Aquatic Life Uses for Urban Streams".....)

III. Other Steps

- a. Utilize MWRD data to evaluate true nutrient levels leaving the Colorado via South Platte
- b. Evaluate denitrification rate in South Platte
- c. Evaluate dissolved organic nitrogen availability
- d. Nitrogen control through current standards (Nitrate, 1999 & 2009 EPA Ammonia Criteria) until the effect of TP reductions on aquatic community can be evaluated. (Basically push off TN until after TP may find TN not necessary)

IV. Goals of these Evaluations

- a. Not to fight with the Division but to work with the Division to initiate improvement and/or alternative tool proposals. We aim to provide more of a peer review. The Division is stuck and must come up with something but hopefully by working with them it will a reasonable solution can be developed. We hope to gain acknowledgement of the variability that exists within natural systems to allow for continued refinement of the nutrient/aquatic life relationship.
- b. Not to argue whether proposed TP and TN numbers are right or wrong but to evaluate each independently through a staged implementation (i.e. implement TP first then determine the need of TN criteria and if needed implement TN criteria). We believe that by reducing TP (which is unregulated at this time), an acceptable change in biological condition will occur and a TN criterion may not be necessary.
- c. The true battle will be won through implementation and policy. However, the implementation and policy battle can not be fought or won without strong scientific evaluations and improvement recommendations.

NOTE: This is a continuously evolving evaluation that will change as the process moves forward.