

STATE OF COLORADO



Colorado Department
of Public Health
and Environment

Annual Report to the Colorado Legislature and Water Quality Control Commission Fiscal Year 2008-2009

Submitted to the Colorado Legislature and Water Quality Control Commission
by the Water Quality Control Division
Colorado Department of Public Health and Environment
October 2009

FOREWORD

I am pleased to submit the Water Quality Control Division's (Division's) Annual Report to the Water Quality Control Commission (Commission) for the period from July 1, 2008 through June 30, 2009 (FY 2009). Pursuant to CRS Section 25-8-305, the Division is to file with the Commission, on an annual basis, a report on the effectiveness of its efforts under the state Water Quality Control Act. In particular, the Division is to:

Include in such report such recommendations as it may have with respect to any regulatory or legislative changes that may be needed or desired. Such report shall include the then current information that has been obtained pursuant to Section 25-8-303 [monitoring] and information concerning the status of the Division's implementation of the discharge permit program established in part 5 of this article.

Further, in accordance with the requirements of section 25-8-305 of the Colorado Water Quality Control Act, this report is also filed with the House Agriculture, Livestock, and Natural Resources Committee and the Senate Agriculture, Natural Resources and Energy Committee.

James B. Martin
Executive Director
Colorado Department of Public Health and Environment
October 2009

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I. NECESSARY LEGISLATIVE OR REGULATORY CHANGES

A. Legislative Changes

In 2009 the General Assembly passed the following water quality bills, which were all signed by the Governor: House Bill 1330, which allowed the Division to assess unpermitted Concentrated Animal Feeding Operations annual administrative fees to cover the direct and indirect costs associated with the Environmental Agriculture Program, including inspections, compliance assurance and assistance, and associated regulatory activities; Senate Bill 119, which clarified that nothing in the Colorado Water Quality Control Act inhibits the ability to enforce civil or criminal penalties for the discharge of hazardous substances or hazardous wastes into state waters or domestic wastewater treatment works; Senate Bill 141, which created the Fountain Creek Watershed, Flood Control, and Greenway District, and specified the authorities and duties of the district; Senate Bill 165, which caps the perpetual base account of the severance tax fund at \$50 million per year and transfers up to \$10 million per year above the \$50 million cap to the small communities water and wastewater grant funds. These funds would be used for planning, design, and construction of drinking water and wastewater treatment systems for communities with populations of less than or equal to 5,000 people.

Over the past several years, the Division has been challenged with both implementing new regulatory requirements and more stringent standards, coupled with continued growth in the size of the regulated community. The General Assembly did provide the Division with additional state funded positions in 2006 and 2007 (12 Clean Water FTE; 10 Drinking Water FTE). The Department's position is that additional staff resources are necessary to fully implement all water quality programs. Since 2007, the state budget long bill requires that on November 1 of each year, the Division submit a report to the General Assembly with a projection of the additional Division staffing needs for the next three year period in order to fulfill all of its regulatory obligations. Last year's report, referred to in the long bill as Footnote 55, projected a need of 53.5 additional FTE for the Division. Slightly over half of this projection is to address the needs of the Division's Clean Water programs.

B. Regulatory Changes

With reference to regulatory changes that may be needed or desired, the Commission is fully aware of the on-going efforts of the Division to address a variety of issues through collaborative work group processes, including those formed under the auspices of the Water Quality Forum. The stakeholder community is advancing many work group proposals. A recent status report on work group efforts is attached as Appendix A.

The Commission held several rulemaking hearings in FY 2009. Those regulations discussed were as follows:

1. July 2008 – Review of the antidegradation designation of five segments in the Arkansas River Basin (Regulation # 32).
2. November 2008 – Revisions of the site-specific phosphorus standard and chlorophyll goal for Chatfield Reservoir (Upper South Platte segment 6b, Regulation # 38) and

revision of the Chatfield Reservoir Control Regulation (Regulation # 73) to be consistent with these revised standards.

3. December 2008 - Annual Temporary Modifications hearing, Review of temporary modifications that were set to expire before February 28, 2011; 22 segments in the Arkansas and South Platte River Basins (Regulations #32 and #38).
4. January 2009 - Consideration of site-specific standards for uranium, gross alpha and gross beta for segments 4a, 4b, and 5 of Big Dry Creek (Regulation #38) on the Rocky Flats site.
5. March 2009 – Revision of the site-specific phosphorus standard for Cherry Creek Reservoir (Cherry Creek segment 5, Regulation # 38) and revision of the Cherry Creek Reservoir Control Regulation (Regulation # 72) to be consistent with these revised standards.
6. May 2009, Revision of the site-specific phosphorus standard for Bear Creek Reservoir (Bear Creek segment 1c, Regulation # 38).
7. June 2009 - Basin-wide review of the Classifications and Standards for the South Platte River Basin (Regulation # 38).

II. MONITORING ACTIVITIES

The Division's surface water monitoring activities for FY 2009 were grouped into four general types: (1) routine sampling; (2) special studies; (3) lake and reservoir monitoring; and (4) aquatic life and habitat studies.

A. Routine Sampling

The Division uses a rotating basin approach for primary stream monitoring. The entire state is sampled on a five-year cycle that matches the Commission's schedule for triennial reviews of basin standards and classifications. For the purposes of conducting the triennial reviews, the state has been divided into four major river basins. Each of the four major river basins is sampled intensively once every five years. This allows the Division to concentrate its limited resources in one basin in order to provide a complete set of data in preparation for the triennial review scheduled for that basin. In every fifth year of the cycle, Regulation No. 31 (Basic Standards and Methodologies for Surface Water) is reviewed by the Commission and there is no need to intensively sample one of the major basins. For that year which was State FY 2009, sampling is more evenly allocated among the long-term trend sites in the four basins, special studies are conducted, specific data gaps may be filled, etc.

The number of sites and the number of times each site is sampled each year is controlled by the Division's fixed monitoring budget for laboratory analyses, which in FY 2009 was \$460,657. The samples collected are analyzed by the Department's Laboratory Services Division. Depending upon the amount of data sought for a particular site and the accessibility of the site, sites were visited on a regular schedule, such as monthly, bimonthly or when weather and road conditions allow access. In State FY 2009, routine water chemistry samples were collected from a network of 178 sampling sites located across the state. There was not a specific river basin focus in FY 2009. The Division concentrated 32 percent of the sampling in the South Platte River Basin, 29 percent located to the Colorado River Basin, 22 percent located Arkansas and Rio Grande Basins, and 17 percent located in the San Juan and Gunnison River Basins. This

sampling resulted in the collection of 809 sample sets. Samples were analyzed for a suite of constituents including metals, inorganics, nutrients and *E. coli*. Field parameters such as dissolved oxygen, pH, conductance, and temperature were also collected.

Sampling needs of other parts of the Division as well as citizen and performance partner demands for water quality sampling services exceed the fiscal and staff resources currently available to the Division. Increasing analytical costs and a relatively fixed budget have caused less water body locations to be sampled on annual basis, and will result in less information for future water quality management decisions.

B. Special Studies

Special studies monitoring includes synoptic sampling events for total maximum daily load determinations, fish tissue sampling, and other water quality investigations. Synoptic sampling events were conducted in FY 2009 for Gamble Gulch in the Boulder Creek basin (Cu, Zn, pH), Illinois Gulch in the Blue River basin (Zn), and Red Mountain Creek and the Uncompahgre River (Cd, Cu, Zn, Fe).

Sampling was initiated in the Yampa River basin in FY 2009, and is continuing in FY 2010. This includes selenium sampling on Dry Creek near the town of Hayden in Routt County. Additional sampling may be required, however, to meet minimum data requirements. Sampling conducted to characterize *E. coli* sources on the Elk River is ongoing.

Sampling was initiated on selected tributaries to the lower Arkansas River below John Martin Reservoir in June 2009. This sampling is intended to characterize selenium contributions associated with smaller tributaries that, for the most part, have not previously been sampled. Two additional rounds of sampling are anticipated during FY 2010.

Finally, the Division has initiated *E. coli* sampling on Big Dry Creek in the South Platte basin in preparation of TMDL development.

Fish tissue sampling to detect the presence of mercury was completed at 26 reservoirs across the state from July 1, 2008 through June 30, 2009. Of these 26 water bodies, five exceeded the action level for mercury and were candidates for issuance of a fish consumption advisory. As of July 1, 2009, there are 24 fish consumption advisories for lakes and reservoirs in Colorado.

Arsenic and selenium were also analyzed in fish tissues from these reservoirs. The Division is currently working with the CDPHE Disease Control and Environmental Epidemiology Division to determine action levels for selenium concentration in fish tissue. A risk assessment for arsenic in fish tissue will be performed in FY 2010.

C. Lake and Reservoir Monitoring

The Division continued its lake and reservoir sampling in FY 2009. Since the sampling efforts were not focused on a particular basin, the entire list of candidate lakes was examined. A total of 18 lakes were sampled during the growing season between July and September. Of these, 16 had not been previously sampled by the Division. Two lakes, Sweitzer and Ridgway, were selected based on their existing water quality issues and their favorable locations for inclusion on

extended sampling trips. At each lake, depth profiles of dissolved oxygen, pH, conductivity, and temperature were collected at one-meter intervals. Water quality samples were taken from near the surface and near the bottom. Samples were analyzed for a suite of chemical parameters including nutrients, metals, and inorganics. In addition, the surface sample was analyzed for the chlorophyll a content as a measure of trophic status and for the phytoplankton population to determine the algal species composition.

In cooperation with the WQCD, EPA collected and analyzed lakes information from ten lakes in the South Platte and Arkansas River Basins to assist the WQCD in their nutrient criteria development efforts. Sampling protocols were similar to the WQCD except that no bottom samples were collected.

D. Aquatic Life and Habitat Studies

Macroinvertebrate and habitat samples were collected at 49 sites across the state. At each of the habitat sites, water quality samples were taken and analyzed for a specific suite of constituents. These data, plus substrate measurements, habitat scores, and periphyton samples, will be used in the development of expected conditions and assessments of aquatic life.

The aquatic life and habitat studies included a special transition zone study along Elkhead Creek, Cherry Creek, and La Plata River, which involved approximately 22 sites. The Division worked collaboratively with the Eagle River Water and Sanitation District by collecting macroinvertebrate samples from 15 sites around the Vail/Minturn/Avon area. The Division also provided the necessary sampling equipment for the Bear Creek Watershed Association to continue sampling macroinvertebrates at eight sentinel monitoring stations along Bear Creek and two additional sites further up in the watershed.

E. Nonpoint Source Monitoring Requirements

Grant requirements under the Clean Water Act Section 319 prescribe measurable results be reported for nonpoint source projects that pertain to on-the-ground restoration and remediation. EPA defines measurable results as “restoring waters to partial or full uses and standards, or as a minimum, reducing pollutant loads such as nutrients and sediment.” To accomplish this, existing nonpoint source impacts must be better quantified in order to provide a water quality baseline from which to measure improvements. Surrogate measures, such as a record of the best management practices installed, can be used to evaluate the total project effort, but do not provide data that equate to water quality improvements. Few nonpoint source project sponsors have the expertise needed to prepare an adequate sampling and analysis plan that can be used to assess changes in water quality. As a result, the Division modified its approach to monitoring and evaluating nonpoint source projects. Starting with the 2004-2005 Nonpoint Source Section 319 project cycle, sponsors are required to provide more definitive water quality baseline data and subsequent post-project data to substantiate project outcomes. This additional monitoring requirement was continued during FY 2009. These additional monitoring requirements result in additional staff workload to assess the collected data and determine the effectiveness of nonpoint source management activities. Additional staff data evaluation capacity is needed to meet this increasing federal grant requirement.

Nonpoint source management activities are implemented by using a focused watershed-based approach. This approach was initiated by synchronizing nonpoint source monitoring needs with the five-year, basin-monitoring schedule used to collect water quality data in support of the triennial review of basin classifications and standards. Water quality data was collected at 39 sites to determine whether there was measurable water quality improvement from non-point source project construction.

F. Cooperative Monitoring Activities

To ensure that the maximum amount of relevant data is assessed each year, the Division issues a “call for data” to numerous cooperators, including federal and state entities, basin authorities, dischargers, and watershed groups, as well as River Watch and nonpoint source management project sponsors. Through this mechanism, the Division accumulates a considerable amount of data beyond what it can directly sample and analyze.

As a charter member of the Colorado Water Quality Monitoring Council (Council), the topic of cooperative monitoring efforts has been discussed with other stakeholders. To facilitate data sharing, the Council has initiated a Data Sharing Network. The Data Sharing Network is a statewide, web-based, water quality database and interactive map. The water quality database and interactive map are housed on the Council’s website (www.coloradowaterquality.com). Anyone who would like to share water quality data can upload their data through a template on the Internet. This data can be accessed (read only) by anyone. Anyone accessing the map can zoom into a particular watershed and click on a monitoring site (dots on the map) to find out who is monitoring at that site and what parameters exist. If the monitoring entity has uploaded data, the data can be viewed and downloaded. The data that is uploaded must comply with the STORET (EPA national database) requirements so that it is in a standard format that is usable by EPA and the state. The water quality database and interactive map have been available through the Data Sharing Network since 2008.

A Clean Water Act Section 319 grant from the Division is funding this project and includes development of training materials, user training, and outreach to publicize the network and to seek out monitoring data to populate it. The Division is continually working on ways to build its capacity to gather water quality through partnerships with other agencies and citizen groups.

G. Augmented Monitoring Funds

In order to upgrade state monitoring efforts and encourage implementation of the Monitoring and Assessment Strategies for States, in Federal FY 2007 the EPA placed an additional \$17 million in the Clean Water Act Section 106 state grants dedicated to monitoring purposes. Colorado received \$374,000 of these “Monitoring Initiative” funds for a two-year period to facilitate the implementation of EPA’s 10 Elements document and to conduct a state-wide Probabilistic Survey of water quality as part of a national project. The Division has earmarked these funds for risk assessments for fish tissue analysis, additional monitoring of rivers and lakes, a USGS study of mercury methylation processes in lakes, additional monitoring equipment, increased data management capabilities, and ambient ground water monitoring. This program continues to fund Colorado’s effort to expand its monitoring and assessment capabilities.

III. PERMIT PROGRAM

A. Permit Backlog Reduction

In the time since the Division originally received approval from EPA of the backlog reduction plan in May of 2000, EPA's backlog reduction program has expanded to include individual stormwater permits and general process water permits. For 2008-2009, the Division continued its shift in backlog focus from primarily individual permits to both individual permits and general permits to keep pace with EPA's backlog reduction strategy. The Performance Partnership Agreement between the Department and EPA for Federal FY 2008 (October 2007 – October 2008) included a goal that 90 percent of the permits included in EPA's backlog reduction program would be current (10 percent backlogged). The Division's best estimate of backlog as of October 1, 2008 was 80 percent current, short of the 90 percent target. The PPA commitment for Federal FY 2009 (October 2008 – September 2009) is 82.5 percent current, and the Division anticipates that by the end of September 2009 between 82.5 and 85 percent of permits being current as defined by EPA. The Division has been able to meet this commitment despite its resource constraints largely because of the types of permits EPA had considered when determining what is "backlogged" and because the Division has shifted its permitting priorities to meet this goal. With the increase in the number and complexity of permits, the current resource limitations of the Division make it unlikely that it will be able to continue to meet the EPA expectation for permit backlog reduction.

Operators are required to submit an application for a permit at least 180 days before a renewal permit expires and at least 180 days in advance of a proposed new discharge. EPA considers a renewal application "backlogged" if it is not acted upon by the Division for 180 days after the expiration date. Applications for new permits are considered "backlogged" if they have not been acted on in 365 days. The Division has approximately 1600 permit renewal applications that are included in EPA's backlog count (another 5400 stormwater authorizations are not included in EPA's count but are current). Of these 1600, approximately 80% are covered by general permits and the remaining 20%, or approximately 320, are individual permits. Individual permits are significantly more resource intensive to issue than general permits, and they have the greatest potential to impact water quality. Expired permits are generally administratively extended under the existing terms and conditions of the expired permit. By delaying the issuance of a new permit, any new water quality standards and the associated environmental protections are also delayed.

The Division expects that the number of individual permits will grow by 35-50 permits in the next two years due to the restructuring of available general permits. The conversion of these general permit authorizations to individual permits, however, has been delayed due to the need to focus on EPA targets and to meet PPA commitments.

Another important element of EPA's backlog reduction efforts is priority permits. EPA considers any expired permit for which a renewal application has been submitted and which has been administratively extended for two years or more, or any application for a new permit that has not been acted upon for two years or more, to be a priority permit. As part of the Performance Partnership Agreement between the Department and EPA, EPA now requires 100 percent of the number of priority permits identified by the state to be issued during the following federal fiscal year. As of September 30, 2008, the Division was successful in issuing all 18 of

its priority permits. For Federal FY 2009, the Division has 24 priority permits and it issued all 24 by September 30, 2009. However, the Division anticipates that the number of identified priority permits will be substantially larger in the next couple of years (35 to 50) due to spikes in the number of expiring permits and due to an increased complexity in permit terms and conditions. At the present time, the Division does not have sufficient staff in the Permits Section to sustain the 100% priority permits issuance rate.

The Colorado Discharge Permit System Regulations require discharges from domestic sewage systems to groundwater to obtain a permit. This is a state-only permit program. The Division estimates that there are approximately 200 facilities that should be permitted, however many of these facilities do not have current permits. The Division has been implementing a process to ensure that these facilities obtain appropriate permits. This process is resource intensive because most facilities (believed to be over 80%) without appropriate permit coverage need to upgrade their level of treatment. To assist these facilities, the Division is working with them to upgrade their systems prior to issuing new permits. Progress has been slow due to the lack of adequate compliance assistance resources to spend working with these small businesses (e.g., campgrounds, lodges) and towns. In addition, the engineering work to review and approve the required facility treatment upgrades was not anticipated and will exceed the Division's capacity to complete reviews within a reasonable time.

While the challenges that exist today are large, these are expected to grow in the coming years for several reasons. Many of the general permits will be due for renewal in 2011 and 2012. These renewals will be resource intensive due to the large number of discharges covered under the general permit, and the fact that increasingly complex regulatory requirements must be met. This will require more analysis by the Division and increased contact with permittees. The Division must also implement new water quality standards adopted by the Commission, which requires additional analysis to issue the permits. Engineering reviews are required for new wastewater treatment facilities needed to meet discharge limits based on the new standards and compliance assistance/assurance resources are needed to work with permittees, most of which are smaller municipalities. In addition, EPA is requiring the Division to implement additional permit requirements for whole effluent toxicity, a complicated and resource intensive work area for which expertise that does not exist in the Division will be required. Finally, due to a court ruling requiring permits for pesticide application, the Division expects that regulated universe of permitted entities to increase by several hundred entities by mid-2011.

B. Stormwater and Process Water General Permit Compliance Efforts

The Division's compliance assurance strategy for stormwater discharges implements both compliance assistance and inspection/enforcement to enhance water quality protection. A variety of educational materials is available and the Division staff conducted approximately 44 presentations for stakeholder groups. The Division's stormwater inspection program continued to implement its stormwater inspection plan. A total of 150 compliance evaluation inspections of facilities/sites were conducted for compliance with the construction and industrial stormwater requirements. In addition, 231 screening inspections and 8 oversight inspections of 11 different MS4 permittees were conducted during 2008-2009.

As shown above, the permitted universe for stormwater is extremely large relative to the level of resources that the Division has available to apply to the program. At the present time, the Division is only able to sustain a compliance oversight rate of only 5% of the permitted universe.

The Division has been continuing to study ways to increase compliance oversight for process water general permits. Some efficiencies may be able to be realized by conducting inspections for process water discharges at the time a stormwater inspection is conducted (e.g., construction dewatering, sand and gravel). However, approximately 900 facilities covered by process water general permits receive no routine inspection, and have an overall inspection rate of approximately one-half percent.

C. Biosolids and Reuse Permitting and Compliance

Biosolids and reuse are state-only components of the Division's Water Pollution Control Program. Biosolids and reuse are unique in that facilities obtain legal coverage through a Notice of Authorization (NOA), rather than through a discharge permit. Other important aspects of the administration of the authorization are that the NOA does not expire and administrative processing of NOAs is different than permitting both in terms of timeframes and how "interested parties" are involved in the process.

In 2009 resources were reduced in both biosolids and reuse, which caused the Division to have to consolidate the administration of NOAs for both program areas into one position and to reduce compliance oversight for these regulated activities. The Division has 1 FTE dedicated to the administration of NOAs for biosolids and reuse, and is generally able to keep up with the current demand. However, this position is not able to support other aspects of program implementation such as regulatory change and compliance oversight. The Division continues to be able to realize some efficiencies in compliance oversight of facilities that generate biosolids by utilizing the district engineers to conduct biosolids inspections at domestic wastewater treatment facilities. However, this oversight is limited to approximately 12 facilities per year of a universe over 600, which results in an oversight rate of approximately 2%. The Division has experienced good success in contracting with local health departments to conduct compliance oversight of biosolids land application sites. However, the amount of funding available to support this program has remained flat and funds approximately 90 inspections per year. With a total number of authorized sites around 2,400, this results in an oversight rate of about 4%. The Division utilizes some in-house FTE (20% of 1 FTE) to coordinate the inspection program, manage rulemaking hearings, and work with the biosolids committee on programmatic issues. For reuse, Division resources are inadequate to conduct any routine compliance oversight. The Division does a limited amount of compliance work by responding to complaints.

D. Permitting for Environmental Results

The Permitting for Environmental Results (PER) initiative is a multi-year effort by EPA and the states to improve the overall integrity and performance of the National Pollution Discharge Elimination System (NPDES) permitting program. The initial effort was completed in 2004 which culminated in EPA's assessment of the Division's permitting program, documented in a report, *NPDES profile: Colorado and Indian Country*. This is available on EPA's website at: (http://www.epa.gov/npdes/pubs/colorado_final_profile.pdf). EPA's purpose in preparing these

state profiles is to develop an information base for EPA's identification of NPDES program strengths and opportunities for enhancement.

Another effort under PER was a comprehensive review of each state's legal authority for its permitting and compliance programs. EPA contractors conducted this effort with assistance from each state. EPA identified several aspects of Colorado's permitting regulations (Colorado Discharge Permit System (CDPS)) that were not as stringent as the corresponding federal requirement, which needed to be addressed in order for Colorado to maintain delegation of the federal NPDES permitting program. The Division convened a stakeholder group in the fall of 2006 to consider changes to the regulation, as well as the Colorado Water Quality Control Act (CWQCA), necessary to meet the requirement for federal delegation. The stakeholder group also identified several areas where the regulation could be improved. The group recommended a two-phase approach to the Water Quality Control Commission (Commission) to adopt changes to the regulation that did not require a statutory change in 2008 and to hold a second hearing to adopt changes based on anticipated revisions to the statute. The Commission agreed and, in March of 2008, the Commission adopted several changes to the CDPS regulations that addressed WPA issues as well as recommended changes to improve the regulations. The two issues that required revisions to the CWQCA were adopted by the General Assembly in HB 08-1099. Conforming changes to the CDPS regulations to address those issues, as well as additional recommended changes to improve the CDPS regulations, were adopted by the Commission in a February 2009 rulemaking hearing.

E. Environmental Agriculture Program

The Environmental Agriculture Program (Ag Program) is a sector-based program housed under the Office of Environmental Integration & Sustainability that administers the Department's regulatory, permitting, compliance assistance and compliance assurance activities for animal feeding, concentrated animal feeding (i.e., dairies, feedlots, poultry facilities) and housed commercial swine feeding operations. The Ag Program is comprised of 3.0 FTE from the Water Quality Control Division, two 0.5 FTEs from the Air Pollution Control Division, and 0.3 FTE from the Office of Environmental Integration & Sustainability. The goal of the Ag Program is to approach environmental issues in a way that takes into account the interaction and environmental impact of air, water and waste together prior to making regulatory and policy decisions.

Water Quality Control Commission Regulation No. 61, the Colorado Discharge Permit System Regulations, and Regulation No. 81, the Animal Feeding Operations Control Regulation contains the permitting and control requirements for Colorado's animal feeding operations. During FY 2009, the Ag Program certified 14 new CAFOs under the general permit, for a total of 56 permitted CAFOs. In addition, the program completed 40 CAFO inspections and 20 follow-up inspections; completed a rulemaking on Regulation No. 61 to incorporate new and revised CAFO and HCSFO fees as adopted by the General Assembly in House Bill 09-1330; implemented a new registration program for all non-permitted CAFOs resulting in 125 CAFOs registering with the Department; responded to 40 CAFO and AFO complaints, including 11 site visits; and updated the state CAFO inventory to include 184 CAFOs in Colorado.

Along with CAFOs, the program regulates housed commercial swine feeding operations. These facilities are capable of housing 800,000 pounds or more of swine at any one time and are more stringently regulated than CAFOs due to a citizen referendum passed by Colorado voters in

1998. The Department has issued 11 individual permits to swine operations and actively works with producers to assure compliance with their permits. There are 92 permitted swine facilities in Colorado that are inspected twice a year by personnel from three local health departments. Program staff meets quarterly with the local health departments on matters pertaining to swine facility inspections and related compliance assurance matters.

Future goals of the Ag Program include completion of an enforcement initiative for outstanding compliance requirements related to impoundment liner certification and manure clean-out procedures; completing the review and approval of Financial Assurance Plans for HCSFOs, including finalizing the Department's Financial Test and Guarantee Guidance, and exploring innovative ways to address compliance issues such as record keeping deficiencies and monitoring requirements.

F. Water Quality Information Systems Improvement Projects

Consistent with the Department's strategic plan and the goals of the National Environmental Information Exchange Network, the Division has undertaken a major modernization effort. Investment in database improvements have focused on replacing multiple legacy systems and providing an integrated system which includes the EPA-required modernized national NPDES database (ICIS), and investigating and preparing technical solutions to conduct business via the internet.

Phase 1 of the project has been completed and is currently in production. This phase includes data conversion to the new ICIS system (completed in August of 2008); modernization of permit application forms and enforcement forms (completed in August 2008); deployment of an initial permit workflow and document tracking system (completed in August 2008); continuing upgrades to the permitting tracking system including stormwater permitting (in production spring 2009), CAFO/HCSFO (in production summer 2009), reuse, pretreatment and biosolids tracking (in production fall 2009). The planning and tracking of facility inspections and inspection follow-ups has also been completed (spring 2009). Deployment of a simplified, integrated billing system (completed in March of 2009) with all 2009 billing being processed through the new system.

Phase 2 will focus on issuing all permits out of the new system (currently only construction stormwater are issued directly), online permitting and electronic data collection using netDMR. This phase will kick-off next fiscal year (2010).

Additionally, EPA requires that states maintain a local database for environmental information that has the ability to upload information into the EPA national database. EPA has provided this database in the past, but will no longer provide this support to the states in the future. Colorado has acquired a new system to manage this data (EQUIS). In addition to meeting EPA needs, this system will provide much more capability to manage data internally, to have third parties submit information for WQCD use, and to make our information available to the public in a variety of forms. This system should move to production in late State FY 2009 or in early State FY 2010. The identification of all of system requirements has been completed; database design and initial testing are currently underway. Database development and deployment is an extremely resource intensive effort, and timely support of all of the Division's programs' information management needs continues to be a significant problem.

IV. WASTEWATER INFRASTRUCTURE FINANCING PROGRAMS

A. Water Quality Improvement Fund

In 2006 the Colorado General Assembly created the Water Quality Improvement Fund (WQIF) codified in section 25-8-608, C.R.S., of the Colorado Water Quality Control Act (Act). The purpose of the Fund is to improve water quality in Colorado by providing grant funds for water quality improvement projects using civil penalties from water quality violations. The WQIF Rules (Regulation #55) were adopted and made effective July 30, 2007 by the Water Quality Control Commission.

Funding is dependent upon annual appropriations of the Colorado General Assembly and is based on violations that were committed on or after May 26, 2006. The resulting penalties collected by the Division are transmitted to the state treasurer for deposit to the credit of the Fund. However, annual spending authority (\$117,196) provided to the Division by the Colorado General Assembly is limited. In FY 2009, the General Assembly appropriated \$700,000.00 from the WQIF to balance the budget.

Since the inception of the WQIF, \$496,273.93 in penalties has been paid into the fund. The following grants have been awarded:

Category	Entity	Original Project Description	Total Project Cost	Award Date	WQIF Grant Award
2008-2009 Awards					
1	Commerce City, City of	This project will allow Commerce City stormwater staff to have close coordination with permitted industrial dischargers through the creation of a spatial database. This database will allow Commerce City staff to begin identifying pollutants associated with specific outfalls within their jurisdiction. This will allow the City to focus water quality mitigation activities on specific pollutant issues and at specific stormwater outfalls.	\$38,000.00	9/18/2008	\$36,072.02
2	Idalia Sanitation District	Minimization of increasing levels of nitrates in the Ogallala groundwater which have been increasing in the vicinity of the current wastewater lagoon.	\$396,868.60	9/2/2008	\$27,054.02
3	League of Women Voters of Colorado Education Fund	The project will print the "Understanding Water Quality Activities Book" which will be used in many elementary and middle schools classrooms as its text book on water. This book will also compliment many of the science kits being used in elementary schools. The objective of the book is beginning the education on pollution runoff and its prevention	\$60,000.00	04/07/09	\$30,335.00

B. American Recovery and Reinvestment Act

On August 25, 2009 the Governor certified nineteen drinking water and twelve wastewater American Recovery and Reinvestment Act (ARRA) projects. The ARRA wastewater projects total \$30,093,792 with a minimum of 50% of the funds being distributed by way of loan

forgiveness (\$15,673,850) and the remaining funds distributed with 20 year, 0% loans interest loans (\$14,419,942). The ARRA drinking water projects total \$32,290,880 with a minimum of 50% of the funds being distributed by way of loan forgiveness (\$17,176,000) and the remaining funds distributed with 20 year, 0% loans interest loans (\$15,114,880). It is anticipated that projects will begin construction by September 30, 2009.

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Bill Ritter, Jr.
Governor

August 25, 2009

Administrator Lisa P. Jackson
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Re: ARRA Section 1511 Certification

Dear Administrator Jackson:

Pursuant to Title XV, Subtitle A, section 1511 of the American Recovery and Reinvestment Act (Pub. L. 11-5) ("ARRA"), I hereby certify that the attached drinking water infrastructure investments totaling \$32,290,880 and wastewater infrastructure totaling \$30,093,792, both appropriated by the ARRA under the heading "State Revolving Fund" to the United States Environmental Protection Agency, have received the full review and vetting required by law and that I accept responsibility that such investments are an appropriate use of taxpayer dollars. I further certify that the specific information required by section 1511 concerning each such investment—a description of the investment, the estimated total cost, and the amount of ARRA funds to be used—is provided in the Colorado Drinking Water State Revolving Fund Intended Use Plan and the Water Pollution Control Revolving Fund Intended Use Plan ARRA Addendum #1 and is available to the public at: <http://www.cdph.state.co.us/wq/FinancialSolutions/ARRA.html> and linked to recovery.gov.

I understand that my state may not receive ARRA infrastructure investment funding unless this certification is made and posted.

Sincerely,

A handwritten signature in blue ink that reads "Bill Ritter, Jr." with a stylized flourish at the end.

Bill Ritter, Jr.
Governor

Enclosures

**AMERICAN RECOVERY AND REINVESTMENT ACT
STATE OF COLORADO
STATE REVOLVING FUND**

ARRA Grant	\$34,352,000
4% Set Aside	\$1,374,080
2% Other Set-Asides	\$687,040
Infrastructure ARRA Funds	\$32,290,880
50% Subsidy	\$17,176,000
ARRA Funds for Loans	\$15,114,880
<small>*All loans are 0% interest rates</small>	

DRINKING WATER PROJECTS

Assistance Recipient	County	Service Area Population	Project Description	*Loan Amount	Principal Forgiveness
Hi-Land Acres WSD	Adams	350	Water Distribution System Upgrades	\$ -	\$ 1,200,000
Hot Sulphur Springs, Town of	Grand	614	Water Treatment Facility Upgrades	\$ 1,300,000	\$ 2,000,000
Colorado City Metro District	Pueblo	2,041	Water Treatment Facility Upgrades	\$ -	\$ 1,780,000
Brighton, City of	Adams	33,397	Water Treatment Facility Upgrades	\$ -	\$ 1,044,000
Kit Carson, Town of	Cheyenne	214	Water Treatment Facility Upgrades	\$ -	\$ 392,000
Norwood, Town of	San Miguel	1,740	Water Treatment Facility Upgrades; Water Storage Upgrades	\$ -	\$ 540,150
Rocky Ford, City of	Otero	4,277	Consolidation of Hancock Water System	\$ -	\$ 945,337
Siebert, Town of	Kit Carson	182	Water Storage Upgrades; Water Distribution System Upgrades	\$ -	\$ 1,719,500
Cheyenne Wells, Town of	Cheyenne	985	Water Distribution System Upgrades	\$ -	\$ 1,732,517
Kremmling, Town of	Grand	1,570	Water Distribution System Upgrades	\$ -	\$ 2,000,000
Arabian Acres Metro District	Teller	620	Water Supply Facility Upgrades; Water Distribution System Upgrades	\$ -	\$ 287,440
Blanca, Town of	Costilla	400	Water Meters	\$ -	\$ 50,000
Fraser, Town of	Grand	996	Water Treatment Facility Upgrades	\$ -	\$ 751,060
Georgetown, Town of	Clear Creek	1,088	Water Treatment Facility Upgrades	\$ 1,340,000	\$ 2,000,000
Manitou Springs, City of	El Paso	4,980	Water Treatment Facility Upgrades; Water Distribution System Upgrades	\$ 7,006,004	\$ 733,996
La Junta, City of	Otero	7,857	Water Storage Upgrades	\$ 1,830,000	\$ -
Florence, City of	Fremont	9,359	Water Treatment Facility Upgrades	\$ 3,025,930	\$ -
Divide MPC	Teller	198	Water Treatment Facility Upgrades	\$ 145,930	\$ -
Ridgway, Town of	Ouray	1,036	Water Distribution System Upgrades	\$ 467,016	\$ -
				\$ 15,114,880	\$ 17,176,000

ARRA Grant	\$31,347,700
4% Set Aside	\$1,253,908
Infrastructure ARRA Funds	\$30,093,792

50% Subsidy	\$15,673,850
ARRA Funds for Loans	\$14,419,942

*All loans are 0% interest rates

WASTEWATER PROJECTS

Assistance Recipient	County	Service Area Population	Project Description	*Loan Amount	Principal Forgiveness
Gunnison County	Gunnison	100	Sewer line extentions to connect HOA	\$ -	\$ 474,019
Fremont County W&S Dist/North Canon	Fremont	440	Eliminate Individual Septic Dosposal Systems	\$ -	\$ 2,000,000
Red Cliff, Town of	Eagle	350	New Wastewater Treatment Facility	\$ -	\$ 2,000,000
Rye, Town of	Pueblo	202	Sewer line extentions to connect to Colorado City	\$ -	\$ 1,968,000
Manitou Springs, City of	El Paso	4,755	Sewer Collection Rehabilitation	\$ 1,900,000	\$ 2,000,000
Monument Sanitation District	El Paso	2,772	Eliminate Individual Septic Dosposal Systems	\$ 418,000	\$ 2,000,000
Widefield WSD	El Paso	17,272	Wastewater Treatment Facility Upgrades	\$ -	\$ 1,728,593
Bayfield, Town of	La Plata	329	Consolidation of two Wastewater Facilities	\$ -	\$ 193,956
Georgetown, Town of	Clear Creek	1,314	Wastewater Treatment Facility Upgrades	\$ 3,800,000	\$ 2,000,000
Pagosa Area WSD	Archuleta	8,132	Wastewater Treatment Facility Upgrades	\$ 4,801,942	\$ 1,309,282
Pueblo, City of	Pueblo	105,000	Solar Panels installed to existing treatment facility	\$ 1,500,000	\$ -
Erie, Town Of	Weld	17,000	Reuse Facility	\$ 2,000,000	\$ -
				\$ 14,419,942	\$ 15,673,850

V. CONCLUSION

The Division continues to plan and implement improvements to its critical monitoring and permitting programs. In the face of increasing expectations in these and other programs, the Division continues to explore innovative ways to improve its efficiency and performance so that the need for additional resources to meet program requirements is minimized while continuing to ensure that public health and the environment is protected.

APPENDIX A
Water Quality Forum Work Groups Status
 Last Updated September 3, 2009

Work Group	Chair/Coordinator/ WQCC Contact	Next Meeting(s)	Status
1. Standards Framework	Paul Frohardt (303-692-3468)/Amy Woodis (303-286-3240)/ Andrew Todd	September 21, 2009 9:00 a.m. Metro Wastewater October 19, 2009 November 16, 2009 December 16, 2009	Work group to address issues for potential consideration in 2010 Basic Standards rulemaking and/or for revised interpretation of existing Basic Standards provisions. Issues to be addressed at the two meetings prior to the November 9 Issues Formulation Hearing includes antidegradation, temperature criteria, economic reasonableness, lake DO and metals, and discharger specific variances.
2. Nutrient Criteria	Jim Saunders [lakes] (x3572)/Blake Beyea [streams] (x3656) (co-chairs)/Mary Fabisiak (303-658-2187)/ Andrew Todd	None scheduled. Updates at Standards Framework work group meetings.	For streams nutrient criteria, the Division is developing use-based thresholds by examining the linkage between nutrient concentrations and aquatic macroinvertebrate community conditions via the newly recalibrated multimetric index (MMI). For lakes and reservoirs nutrient criteria, the Division is determining chlorophyll and nutrient levels consistent with uses and has been working closely with CDOW to balance those levels with what is needed to sustain fishery productivity. Separate proposal being considered for direct use water supply reservoirs.
3. Aquatic Life Classification	Chris Theel (x3558)/Blair Corning (720-206-0463)/ Andrew Todd	None scheduled. Updates at Standards Framework work group meetings.	The MMI macroinvertebrate bioassessment tool has been successfully integrated into CO-EDAS and work has begun on using the tool to investigate setting impairment thresholds. Focus for fall 2009 is to examine how the MMI tool performs for wadeable streams, what other tools can be used to assess aquatic life in non-wadeable streams, how auxiliary metrics can be utilized for assessment, and how the results can inform the policy decisions about impairment thresholds.
4. Practical Quantitation Limits Guidance	Dave Akers (x3591)/Sharon Davis (303-286-3360)/ Andrew Todd	Full Group Meeting TBD Technical Subcomm. TBD	Guidance for organic chemicals finalized. Subcommittee has developed a survey of laboratories to gather data on detection levels/methods for inorganic parameters and metals to support development of PQLs for those parameters. The survey will also request the above information for organic parameters so that PQLs for organic parameters can be reevaluated at the same time. The survey results should be analyzed by the end of July and proposed

			PQLs presented to the work group in August.
5. Discharge Permit Implementation	Christine Johnston (720-497-2156)/ Chris Wiant	September 22, 2009 1:30 p.m. Metro Wastewater	The prioritized issues list was provided at the Water Quality Forum retreat in July. The group is now working on a proposal to present to the Division for consideration of its top two issues.
6. E. coli Issues	Jim McCarthy (720-898-7765)/ Chris Wiant	October 22, 2009 9:00 a.m. UDFCD	The group's focus is finalizing the Healthy Rivers Grant report; synopsis of regulatory background, cases studies in Colorado identified as impaired due to E. coli, sources, monitoring and assessment, BMPs and unresolved issues.
7. Site Application Guidance (Regulation #22)	Jennifer Miller (x3507) /Connie O'Neill (970-962-2785)/ John Klomp	October 20, 2009 9:30 a.m. CDPHE, HFD Training Room	The goal for the work group is to update the Regulation #22 Guidance Document and associated Policies, to implement the recently-approved revisions to Regulation #22.
8. Onsite Wastewater System Management	Dave Akers (x3591)/Barbara Dallemand (x2366)/ Chris Wiant	October 7, 2009 1:30 P.M. Location TBD	First meeting of the stakeholder group to prioritize issues identified in response to a Division solicitation. Draft list of issues to be provided at least one week in advance of the meeting.