

# **COLORADO CAPACITY DEVELOPMENT WORK PLAN 2005-2007**

## **INTRODUCTION**

The Drinking Water Program, under the management of the Water Quality Control Division (Division) of the Colorado Department of Public Health and Environment (CDPHE) is the state agency granted primary enforcement authority (primacy) for implementing the regulatory provisions of the Safe Drinking Water Act (SDWA). Section 1452-k of the 1996 amendments to Safe Drinking Water Act authorizes the primacy agency to utilize set-aside funds from the State Revolving Loan Fund (SRF) capitalization grant to implement a Capacity Development Program. The Colorado Capacity Development (CCD) Program will reserve up to \$1,373,770 of the federal FY2004 1452-k set-aside (and similar amounts from future years, as each is approved in the annual Intended Use Plan) from the SRF capitalization grant to fund capacity development projects. This is 10% of the FY 2004 capitalization grant received from EPA. The Colorado Drinking Water Program intends to use these funds to carry out its Capacity Development Strategy (Colorado Capacity Development Strategy 2005-2007, dated April 2004) that defines the short and long-term goals of the Capacity Development Program and the methods the program will use to achieve these goals. In past years, a portion of the grant funds set aside for the Capacity Development Program were not fully utilized. Some of these funds will now be utilized in the budgets for years 2005-2007. A total of \$1,989,917 will be spent in FY 2005 from set-asides from the FY 2004 and earlier capitalization grants. Table 1 shows the allocation of these funds to personnel, operations, and contracts for FY 2005 –2007.

The Capacity Development Program work plan parallels the organization of the Capacity Development Strategy and addresses specific activities within the following major outline of the strategy:

- Program Administration
- New Water Systems
- Existing Water Systems
  - Compliance Assistance
    - Response to public water systems questions
    - Informational materials preparation and dissemination
    - Sanitary Surveys for community and non-community public water systems
    - Consumer Confidence Report preparation
  - Public Water System Assessments
    - Operational assessments using Comprehensive Performance Evaluations by a Contractor
    - Technical, Managerial, and Financial assessments - Drinking Water Staff and Water System Staff
    - Technical, Managerial, and Financial onsite assessments by Contractor

- Source Water Assessment and Protection by Drinking Water Staff and Contractor
- Operator Training
  - Small System Technical Assistance funded training\*
  - State developed regulatory training
- Technical Assistance
  - Surface water Treatment Process control
  - Technical, Managerial, and Financial Toolbox
  - Radionuclide Disposal Options Toolbox
- Financial Assistance
  - SSTA Grants
  - Public Improvement District Formation Assistance for Privately Owned Public Water Systems
  - Disadvantaged Community Program loan subsidy reimbursement for State Revolving Fund Loans
  - Evaluation of the Capacity Development Workplan initiatives

\*Not funded by Capacity Development Set-Aside, but considered in development of Capacity Development Strategy

## **PROGRAM ADMINISTRATION AND STAFFING**

It is impossible to itemize each of the possible legitimate expenses during a three-year period for this Capacity Development Workplan. However, to the extent that specific costs can currently be predicted, they are outlined below. In the event that additional or substitute activities need to be conducted or equipment needs to be purchased, the work plan will be revised and resubmitted to EPA for approval if any one change exceeds \$20,000, or if individual additions to any category of expenditures in the aggregate exceed \$100,000 over the life of the work plan. Program administration, a required role to ensure an effective Capacity Development Program is implemented, will be paid for out of the 10% Set-Aside Program funds. It will include contract development, monitoring, and oversight, capacity program budget tracking and management, capacity program effectiveness review, and reporting.

Prior Colorado Capacity Development Workplans approved by EPA identified 2.2 FTE to be used for capacity development efforts. Recent negotiations with the Colorado Water Resources and Power Development Authority will allow the Drinking Water Program to take the full amount allowed for its capacity development set-aside and increase the number of staff supported by the capacity development set-aside to 5.3 FTE. Although the implementation of the activities outlined in the workplan places demands on staff from the Drinking Water Program, it significantly reduces the cost of hiring outside assistance. The many projects and programs described below will include implementation by internal Drinking Water Program staff, as well as other staff of CDPHE, and numerous contracts with third parties. The Drinking Water Program staff effort will include the following:

<b>CAPACITY DEVELOPMENT LEVEL OF EFFORT</b>		
TECHNICAL SERVICES UNIT	Technical Assistance, Compliance Assistance, Training	3.2 FTE
COMPLIANCE ASSURANCE AND DATA MANANAGEMENT UNIT	Compliance Assistance, Training	0.3 FTE
DRINKING WATER PROGRAM	Training, TMF Assistance	0.9 FTE
OUTREACH AND ASSISTANCE UNIT	Source Water Assessment and Protection,	0.9 FTE
<b>TOTAL</b>		<b>5.3 FTE</b>

## **NEW PUBLIC WATER SYSTEMS**

New Water Systems must meet a set of technical, managerial, and financial capacity criteria described in the New System Capacity Planning Manual, which is available in hard-copy from the Drinking Water Program and on the Internet at:

[http://www.cdphe.state.co.us/wq/Drinking\\_Water/pdf/Capacity%20Development/newsystmanua1.pdf](http://www.cdphe.state.co.us/wq/Drinking_Water/pdf/Capacity%20Development/newsystmanua1.pdf). The New System Water Capacity Planning Manual is designed to help new community and non-transient non-community water systems comply with all applicable requirements and demonstrate present capacity and the ability to maintain that capacity. It provides the criteria the Drinking Water Program uses to evaluate the capacity of a new public water system. No significant revisions to existing requirements, procedures or references are currently anticipated. If significant revisions become necessary, this work plan will be revised to provide necessary resources to make the revisions.

## **EXISTING PUBLIC WATER SYSTEMS**

### **Compliance Assistance**

- Response to public water systems questions – The Capacity development Set-Aside provides funding to support staff assigned both to the Compliance Assurance and Data Management (CADM) and Technical Services (TSU) Units to directly assist Public Water Systems. Assigned staff responds to questions from public water systems concerning new regulations, compliance issues, appropriate treatment operations and technologies, and provides system representatives with system-specific technical assistance.
- Informational materials preparation and dissemination- Effective information dissemination is necessary to assist public water systems to achieve and maintain capacity. Timely information helps systems to comply with existing SDWA regulations, and to anticipate upcoming regulatory requirements. Projected activities include both preparation and delivery of written materials, and improvements and modifications to the drinking water database to provide the program the ability to provide information to public water systems. The total anticipated cost of these efforts is \$370,000 over the 3 years of this work plan, distributed to individual projects discussed below.

- Informational materials to be prepared include:
  - Regulatory guidance tailored to system type. To help water systems understand the primary drinking water regulations, Colorado is working with EPA to develop guidance materials that are system type specific. Guidance will be prepared for seven system types including: Community surface and ground, non-transient non-community surface and ground, transient non-community surface and ground and purchased water systems. This approach will allow systems to access information more tailored to their specific situation and not require that they sort out from all regulatory requirements those that apply to their system. Once the regulatory requirements applicable to each type of system are enumerated, a purchase order of up to \$50,000 will be executed to tailor one of the guidance documents to include Colorado-specific forms, and information. From this effort, the costs to complete the project for the remaining six system types will be developed. The work plan provides \$150,000 in funding to complete the effort in FY2006.
  - Data base improvements and modifications include:
    - ◆ PDA/SDWIS integration for data input, quality assurance and report generation. Currently, the State Drinking Water Information System (SDWIS) does not contain the necessary reporting fields and modules that would permit us to collect and analyze information provided by third party providers and Drinking Water Program staff through TMF evaluations, sanitary surveys, and inspections. However, the capacity development program intends to fund improvements that will allow the staff to better synthesize this valuable information and provide assistance to public water systems. These improvements will also include the ability to connect the Operator Certification Database to SDWIS; augment SDWIS to allow the Drinking Water Program to store public water system TMF capacity information not required for compliance activities and provide report generation modules to enable the staff to query information from SDWIS. The Drinking Water Program is also working with EPA on the Electronic Sanitary Survey Project and if it proves to be successful, field staff will be provided a hand-held computer preprogrammed with a “macro” detailing specific questions to be addressed on-site to meet the eight-part sanitary survey requirements. Additionally, the system would allow tracking of previously identified sanitary defects, and TMF capacity issues. Once the new field information is entered, the hand-held device would automatically send information to the bridge for quality assurance and upload to the central database. Only one type of system (considering PDA or Tablet PCs) will be chosen, based on costs, capabilities and ease of use, among other criteria. Once a system is selected, 10% Program Management Set-Aside funds will be used to purchase approximately 14 new field devices. In order to integrate information gathered by use of the field devices into SDWIS, additional

programming, training and software maintenance will be required. These services will add approximately \$50,000 to the first year of operation (FY2005), and \$10,000 each subsequent year. If the EPA Electronic Sanitary Survey Project is successful, the \$50,000 for FY 2005 will be de-obligated and held in reserve by EPA for this effort. If it is necessary to choose an alternative system, these same funds will cover the cost of programming, training and software maintenance for that system.

- ◆ Web Page Improvements - The capacity development set-aside will fund efforts to continue improving and updating the Colorado Drinking Water web page. These improvements will help to keep regulated water utilities and the public abreast of information pertaining to public water system capacity. Information to be provided via web may include Consumer Confidence Reports, Sanitary Survey results, SWAP Reports, CPE Reports, etc. The Drinking Water Program Assistant will manage this effort, but a contractor will be hired for data manipulation and product format conversion where necessary to comply with ADA and other requirements. The Drinking Water Program anticipates spending up to \$25,000 annually for these services.
- Sanitary Surveys – community and non-community systems - Capacity development set-aside funds have been approved for and allocated to TSU staff and CPD efforts to conduct sanitary surveys. Capacity development set-aside funding supports sanitary surveys conducted by TSU for up to 38% of the contemporaneously recorded time (and other associated costs) required to perform sanitary surveys. This allocation represents the portion of new sanitary survey content requirements required for an eight-part survey mandated by the Interim Enhanced Surface Water Treatment Rule's primacy requirements and to provide technical assistance while on site. Examples of technical assistance include discussing sampling techniques, safety and security concerns, and calibration and proper use of equipment. Traditional time tracking procedures previously in use were not sufficiently robust to track the time spent on these activities. Beginning in the last quarter of state fiscal year 2004, TSU staff will have the tool to allow accurate time tracking.

Non-community ground water sanitary surveys are completed through a master contract with the Department's Consumer Protection Division (CPD). The CPD has entered into agreements with Local Health Departments, Colorado Rural Water Association, and counties for field evaluations of non-community ground water systems. The Capacity development set-aside funding is used to pay for these sanitary surveys. Where organized county health departments do not exist, or where existing counties desire not to participate in this effort, CPD staff and the Colorado Rural Water Association will perform the sanitary surveys. Due to the large number of non-community groundwater systems, the Water Quality Control Division has agreed to allow biannual sanitary surveys to occur at water systems considered most compliant and therefore the lowest

risk for a contamination outbreak. In addition, the CPD reviews contractor efforts for consistency and conformance with provisions of the agreements, and manages records of sanitary surveys to ensure timely tracking and follow-up to violations. They will also ensure that all relevant data are reported to the Drinking Water Program for entry into the Drinking Water Program's drinking water database. The Drinking Water Program anticipates that up to \$175,000 of capacity development set-aside funds will be required to implement this effort annually.

### **Public Water Systems Assessments**

- The Drinking Water Program is continuing a project started in year 2001 to conduct evaluations of surface water treatment plants based on the handbook developed by EPA titled, "Optimizing Water Treatment Plant Performance Using the Composite Correction Program." Comprehensive Performance Evaluations have been conducted in surface water plants not meeting the 3-log removal or inactivation requirement of the Surface Water Treatment Rule. Colorado has completed 85 Comprehensive Performance Evaluations and plans to continue providing Comprehensive Performance Evaluations to surface water systems requesting assistance and those systems that trigger the requirement for a CPE under the Interim Enhanced Surface Water Treatment Rule. The Drinking Water Program will be drafting a multi-year request for proposal and hiring a contractor to carry out these requirements in SFY 05. The Drinking Water Program anticipates that the effort will require up to \$100,000 annually of capacity development set-aside funds to implement.
- As part of the Systems of Concern project, the Drinking Water Program is planning to hire a contractor to conduct Technical, Managerial, and Financial (TMF) assessments of selected water systems targeted to receive assistance. The information gained from these TMF assessments will be used to identify the technical assistance that will be needed by the system to ensure it has sufficient capacity. The Drinking Water Program is planning to develop a request for proposal and hire a contractor to carry out this project. The Drinking Water Program anticipates that the effort will require up to \$100,000 annually of capacity development set-aside funds to implement.

### **Source Water Assessment and Protection (SWAP) Program**

- The initial source water assessments for all public water systems have been completed with funding from previous capitalization grants. However, provisions for continued activities have only been specifically identified for groundwater systems under the Wellhead Protection Program. The portion of the SWAP Program for surface water systems will be provided from the Capacity Development Set-Aside. Since the program is split between groundwater and surface water systems, we have proportioned the total SWAP expenditures between Wellhead Protection and Capacity Development based on the number of surface water and groundwater systems in Colorado.

Major activities to be conducted include: continuing source water assessments for new surface water sources; upon their request conducting "what if scenarios" for water systems, integrating the Wellhead Protection Program with the Source Water Protection Program, and encouraging water systems to implement protection plans. Program costs for staff, contractual services, operating and travel, and data system maintenance will be apportioned as described above. Capacity development set-aside funding up to \$154,000 annually will be used to support the SWAP program objectives for surface water systems. Program activities will be split across multiple positions and a total of 0.9 FTE will be supported for these activities by the capacity development set-aside.

## **Operator Training**

Training involves providing the means for public water system owners and operators to gain the knowledge, skills and abilities they need to properly maintain and operate a public water system to ensure continuous regulatory compliance and safe drinking water. Training may be conducted on the basic requirements of water system operation or may involve topics necessary to keep abreast of new treatment technologies and regulatory requirements. Various training programs provided by different training entities have existed in Colorado to address these needs for some time. Historically, many of these important training events have been supported by the SSTA set-aside.

In 2002, the Drinking Water Program received approval of the Operator Certification Reimbursement Grant. As a result, the STTA workgroup and the operator certification training workgroup were combined into one work group. The two funding sources support utilities serving populations under 10,000 with the Operator Certification Reimbursement Grant designated for utilities serving populations under 3,300. The Drinking Water Program has developed a work plan detailing the vision of the workgroup and the Drinking Water Program to fund renewable training activities and encourage additional certification of operators by increasing the availability of training and testing locations throughout the state.

The activities supported by the SSTA and the Operator Certification Reimbursement Grant are discussed in the paragraphs below as they are an important part of the Drinking Water Program's Capacity Development Strategy, even though they are not funded from the capacity development set-aside.

- Small System Technical Assistance Funded Training- Annually, the State has developed a work plan to use the Small System and Technical Assistance (SSTA) set-aside which is authorized by the 1996 amendments to the Safe Drinking Water Act to use up to 2% of the drinking water revolving fund capitalization grant. Training activities are conducted under contracts or memoranda of understanding with Colorado Rural Water Association, the Rocky Mountain Section of AWWA, the Boulder School and Leadville School. The Drinking Water Program anticipates that much of the required operator training for systems less than 10,000 population will continue to be supported under the 2% Small Systems Technical Assistance (SSTA) set-aside. A workgroup consisting of technical assistance providers, small systems

representatives, and the state operator certification program staff will continue to provide recommendations to the Drinking Water Program on planning and implementing the program. The Drinking Water Program has signed agreements for calendar year 2004 training events and is working with training providers to update a work plan to be implemented for calendar years 2005-06. The Capacity Development Program Leader coordinates these activities and develops the contracts annually.

Small System Technical Assistance (SSTA) workgroup members and additional interested parties have discussed and agreed to use a portion of the SSTA set-aside for planning and/or design grants and, if needed, other technical assistance. These efforts will give preference to disadvantaged communities. A further discussion on the design grant effort is included under the financial assistance heading.

- State Developed Regulatory Training - During SFY03, the capacity development staff developed a Request for Proposals and hired consultants to develop and deliver training on the Disinfectants, Disinfection Byproduct Rule, Interim Enhanced Surface Water Treatment Rule, and Laboratory Quality Control and Quality Assurance using funding from the capacity development set-asides. The success of these programs encourages the Drinking Water Program to continue contracting with third party providers to conduct additional training workshops on the Disinfectant, Disinfection Byproduct Rule, Interim Enhanced Surface Water Treatment Rule, and Laboratory Quality Control and Quality Assurance. In addition, the Drinking Water Program plans to continue to work with these and other third party providers to develop training and to sponsor training workshops covering appropriate topics, which may include understanding new rules, developing and following a monitoring plan, record keeping and reporting, sampling, sample handling and chain of custody, as well as other appropriate topics on water system operation, management or financing as needed throughout the state through SFY07. The Drinking Water Program anticipates that this training effort will require up to \$100,000 annually of capacity development set-aside funds to implement.
- One activity outlined in the Drinking Water Program's earlier capacity development work plans was to investigate and, if feasible, make training material available to operators through the Internet. This would save systems time and resources by making appropriate training available to operators at all times of the day or night and in the remote areas of the state. However, limited staffing resources did not permit the Drinking Water Program to fully evaluate the possibility of Internet training. Since that time, the Expense Reimbursement Grant (ERG) workplan has been approved that will allow the Drinking Water Program to use ERG funding to implement internet-based training for operators serving water systems of 3,300 or less. The Drinking Water Program's intention is to find a partner with technical and programmatic expertise and to support their efforts rather than to try to develop a separate system on its own.



Capacity development funds will be combined with the ERG funding to provide Internet-based training to water system operators in Colorado at a reduced cost. The funding will be split between the two funding sources based on the percentage of public water systems in the state serving populations under 3,300 vs. water systems serving populations of more than 3,300 but less than 10,000. This split is approximately 10:1. Currently, the Drinking Water Program is working with certification and training organizations to define need-to-know information to guide development of Internet training modules. The development of the Internet training program will proceed once the curricula are developed based on this need to know information. The Internet courses will focus on those skills that can most effectively be taught via self-paced learning using remote training technology. Other skills will be reserved for classroom training through the conventional providers such as CRWA, AWWA Action Now, short schools and community colleges. The Drinking Water Program has earmarked up to \$10,000 annually of capacity development set-aside funds for this Internet training effort.

- Another activity that the Drinking Water Program is investigating is the use of ERG and capacity development funds to provide certification exams on the Internet. Preliminary meetings have occurred with the Operator Certification Program Office to investigate the costs of providing certification exams online. This activity will complement other initiatives aimed at helping small system operators obtain certification. The approach will include planning and program development using a stakeholder group to assist in creating a system that is truly useful and effective for the operators. This initiative is in the early planning stages, but the Drinking Water Program is allocating up to \$50,000 annually to get this project started.

### **Technical Assistance**

Technical assistance is facility-specific advice, information, and/or problem solving designed to enable a particular system to achieve compliance, remedy a problem, or improve operations. The assistance provided to the public water system may address site-specific management, financial, technical, or programmatic concerns. Programmatic assistance, for example, may include providing water systems with organized sample result information that can be directly incorporated into their of consumer confidence reports. Technical assistance for example, might address filter surveillance techniques, proper backwashing procedures, or ensuring sufficient disinfection is achieved under all flow conditions. Technical, managerial, financial and programmatic assistance will require considerably more staff efforts than in the past, since the Systems of Concern process being implemented will require unique solutions to system problems, but this approach will result in lower rates of violations and Will reduce the incidence of sanitary defects and other conditions resulting in public health concerns at drinking water systems.

The Drinking Water Program currently anticipates three new technical assistance initiatives as described below:

- Performance based training tied to plant-specific process control procedures development and deployment by participants (similar to the U.S. EPA AWOP program, but less resource intensive). This program will be an education and technical assistance effort, delivered by experienced professional trainers, assisted by a cadre of trained water supply professionals gathered from the ranks of existing system operators and managers, technical assistance providers, and educators, who will be available for on-site proctoring of training sessions delivered via the Internet, video conferencing, and/or webcasts, as appropriate. For electronically delivered events, the on-site assistants will respond to local questions and problems, and will assist students in the hands-on portions of the program. It is expected this effort will require a series of about 12 sessions spanning approximately one year. Drinking water systems participants will be expected to commit to the full program, which should cover nearly all treatment processes employed at conventional surface water treatment systems. The Drinking Water Program expects this effort to require up to \$ 125,000 annually to implement.
- The second planned technical assistance activity would provide one-on-one TMF assistance for water systems that need to improve their individual capacity, by providing direct and individualized assistance. Building capacity would unfold in a two-step process: first identifying capacity needs and then developing individualized assistance projects. The first step of determining system capacity weaknesses will provide an assessment of the system's technical, managerial and financial capacity, using a contractor to collect data on the capacity of all eligible and interested drinking water systems, assessing their capacity, and prioritizing the systems based on system needs, program capabilities and resources, and potential for effecting change. The S of C process will provide significant information for this assessment process. A separate contractor (to avoid conflict of interest) will then work with Drinking Water Program staff and system representatives to develop a customized assistance program to address the previously identified capacity weaknesses. Guidance materials developed in prior years will be made available to the contractor and the drinking water systems to assist in this effort. The Drinking Water Program will allocate \$200,000 of capacity development set-aside funds for these efforts each year.
- The third planned technical assistance activity would address a problem with which many Colorado drinking water systems are struggling. The consequences of existing and proposed radionuclide regulations, particularly related to the issues of disposal of concentrated waste streams from water treatment processes have presented perplexing problems for both small and large systems, their consultants, and the regulators approving design plans. While these systems and their related problems are each unique, there are many common issues these systems face. We propose to develop a study, similar to the COSTAR program used to help identify and begin to resolve arsenic issues in Colorado, developing a contract to study five or more systems that represent the range of individual conditions these systems face. The study would develop a toolbox consisting of preliminary treatment design for each type of system, identify and characterize the waste streams from the systems, and identify potential disposal options. These options would be discussed with the CDPHE Hazardous

Materials and Waste Disposal Division, the group responsible for radioactive waste disposal regulations in Colorado, to develop generic guidelines that systems could follow in developing their unique solution to their radionuclide removal issues. The Drinking Water Program anticipates this effort will require \$200,000 of capacity development set-aside funds to implement.

## **Financial Assistance**

Planning and Design Grants- Some of the water systems identified on the Systems of Concern list may require considerable modifications to their treatment facilities. Those with inadequate financial capacity may require financial assistance just to investigate the problem. With this in mind, the Small Systems Technical Assistance (SSTA) set-aside workplan was revised. The new SSTA workplan will allow small systems access to funding for planning and design grants. These grants will be provided to priority water systems with populations of 10,000 or less. The Drinking Water Program is planning to use SSTA funding of up to \$150,000 annually for the next three years to implement the planning and design grants effort that will address the backlog of systems with violations that need infrastructure improvements. The Drinking Water Program is developing a set of technical criteria that must be followed by recipients of these grants to ensure that water systems and the Drinking Water Program benefit from the engineering work. This work will not require Capacity development set-aside funds for implementation, but is described here to provide a more complete view of the capacity development activities.

- Improved Access to SRF Loan Program - Because privately owned public water systems in Colorado are unable to receive SRF funding because of Colorado statutory limitations not contained in the federal SDWA, the Drinking Water Program is investigating the feasibility of providing financial assistance for public water systems to create Public Improvement Districts (PID). This approach would enable private water systems to change their ownership structure be eligible to participate in the SRF loan process. Historically, these water systems have had a significant number of violations and have insufficient TMF capacity. The Drinking Water Program is interested in providing financial assistance to these systems to help them through the process of forming a PID that would then enable them to apply for a SRF loan. Pending EPA approval of this approach, the Drinking Water Program plans to develop a pilot program to evaluate this approach and develop a template for systems to use. The Drinking Water Program will allocate \$30,000 annually to encourage private water systems to restructure to become a Public Improvement District.
- Disadvantaged Communities Project- The Drinking Water Program is also investigating the feasibility of using capacity development funds to reimburse the SRF loan pool for losses that would occur if low interest or zero interest loans or principal forgiveness are provided to disadvantaged communities. Many disadvantaged communities have significant infrastructure needs, but financing capital projects many times proves to be too costly. Colorado has put together a stakeholders group to study the problem and develop a program for disadvantaged

communities. The group has agreed that a low interest or zero interest loan program would be beneficial for these communities. The Drinking Water Program is investigating with EPA the feasibility of using capacity development set-aside funds to offset the lost loan capacity to the SRF loan pool for any interest reduction or principal forgiveness.

Finally, we recognize that many emerging issues occur every year, due to unanticipated changes in economic status, technical developments, and system capability shortfalls. These issues demand resources, including staff time, financial assistance, and contractor support, none of which are available without some contingency planning. We have reserved \$150,000 annually of capacity development funds to meet these unanticipated demands. Prior to any project implementation and commitment of these funds, the Drinking Water Program will consult with and obtain the approval of EPA to resolve these difficulties through the use of this contingency fund. This contingency is less than 8% of the total annual budget for the Capacity Development Program.

## **MEASUREMENT OF EFFECTIVENESS**

Measuring the effectiveness of the capacity development program will be a challenge. The activities undertaken as part of Section 1420 of the SDWA are a small portion of the activities being pursued by the Colorado Public Water System Supervision (PWSS) program. The Water Quality Control Division is actively integrating capacity development activities into the overall Drinking Water Program activities. One such example is requiring a review of the Comprehensive Performance Evaluation A and B level performance-limiting factors as part of the sanitary survey. Another example is the development and implementation of the Systems of Concern Process, where staff from all parts of the Drinking Water Program work together to help resolve problems with systems that have trouble continuously achieving compliance, regardless of whether they are under enforcement orders, an administrative order, on the Significant Non-Compliance list, or just having difficulty achieving TMF Capacity.

As each contract or memoranda of understanding is developed to implement this Capacity Development Program, we will identify specific objectives and performance measures against which we will determine the effectiveness of the specific project.

**Table 1**  
**Capacity Development Budget**

<b>Assumptions</b>	
Inflation	5.0%
Onsite Indirect	16.4%
Offsite Indirect	10.9%
Flowthrough Indirect	0.7%

	<b>Prior Remaining Yrs (as of 4/04)</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Annual Allocation of Funds & Prior Yrs Remaining	2,081,856	1,373,770	1,373,770	1,373,770
Total Annual Expenditures*	150,000	1,952,683	1,832,201	1,798,103
Remaining Available Funds	1,931,856	1,352,943	894,512	470,179

	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>FTE</b>			
<b>Onsite</b>			
0.4 DW, Program Asst I (DW Prog Asst Pos 228)	\$ 16,128	\$ 16,934	\$ 17,781
0.5 DW, EPS II (Cap Dev. Leader Pos 177)	\$ 35,338	\$ 37,105	\$ 38,960
0.1 CADM, EPS II (Rule Mgr DBPs Pos 1292)	\$ 7,525	\$ 7,901	\$ 8,296
0.1 CADM, EPS II (Rule Mgr Phase II, As Pos 192)	\$ 7,370	\$ 7,739	\$ 8,125
0.1 CADM, EPS II (Rule Mgr Tot. Coli Pos TBA)	\$ 6,384	\$ 6,703	\$ 7,038
0.4 TSU, EIT III (DW Engr Pos 209)	\$ 28,426	\$ 29,847	\$ 31,340
0.9 SWAP			
0.3 EPS III (Watershed Coordinator)	\$ 26,779	\$ 28,118	\$ 29,524
0.3 EPS II (SWAP Coord. Pos TBA)	\$ 23,425	\$ 24,596	\$ 25,826
0.3 PSR I (Data Pos 2280)	\$ 20,457	\$ 21,480	\$ 22,554
2 TSU, EIT (Can promote to PE) (Pos TBA)	\$ 143,366	\$ 150,535	\$ 192,122
<b>Total Onsite FTE Expenses</b>	\$ 315,199	\$ 330,959	\$ 381,567
Onsite Indirect Expenses	\$ 51,693	\$ 54,277	\$ 62,577
<b>Total FTE &amp; Indirect, Onsite</b>	\$ 366,891	\$ 385,236	\$ 444,144
<b>Offsite</b>			
0.4 TSU, EIT III (DW Engr Pos 207)	\$ 33,278	\$ 34,942	\$ 36,689
0.4 TSU, EIT III (DW Engr Pos 208)	\$ 20,890	\$ 21,935	\$ 23,031
<b>Total Offsite FTE Expenses</b>	\$ 54,168	\$ 56,877	\$ 59,721
Offsite Indirect Expenses	\$ 5,904	\$ 6,200	\$ 6,510
<b>Total FTE &amp; Indirect, Offsite</b>	\$ 60,073	\$ 63,076	\$ 66,230
<b>TOTAL FTE &amp; Indirect</b>	\$ 426,964	\$ 448,312	\$ 510,374

<b>Operating &amp; Travel</b>				
Disadvantaged Communities Project	\$	60,000	\$ 60,000	\$ 60,000
Staff Travel - Annual Cap Dev Conference & Training	\$	2,500	\$ 2,500	\$ 2,500
SWAP Operating and Travel Expenses	\$	5,250	\$ 4,520	\$ 4,700
<b>Total Operating &amp; Travel Expenses</b>	\$	<b>67,750</b>	<b>\$ 67,020</b>	<b>\$ 67,200</b>
Onsite Indirect Expenses	\$	11,111	\$ 10,991	\$ 11,021
<b>Total Op &amp; Travel &amp; Indirect</b>	\$	<b>78,861</b>	<b>\$ 78,011</b>	<b>\$ 78,221</b>

<b>Contracts</b>				
Reg guidance tailored by system type	\$	50,000	\$ 150,000	
Database software maintenance and support	\$	50,000	\$ 10,000	\$ 10,000
Webpage improvements	\$	25,000	\$ 25,000	\$ 25,000
Sanitary surveys w/ CPD	\$	175,000	\$ 175,000	\$ 175,000
CPEs	\$	100,000	\$ 100,000	\$ 100,000
TMF Assessments	\$	100,000	\$ 100,000	\$ 100,000
SWAP software support and maintenance	\$	71,800	\$ 71,800	\$ 126,100
State funded reg training	\$	100,000	\$ 100,000	\$ 100,000
Internet training	\$	10,000	\$ 10,000	\$ 10,000
Certification exams on Internet	\$	50,000	\$ 50,000	\$ 50,000
Education & Tech Assistance	\$	125,000	\$ 125,000	\$ 125,000
PWS TMF Assistance	\$	200,000	\$ 200,000	\$ 200,000
Radionuclide Disposal Study	\$	200,000		
Encourage Formation of Public Improv. Dists.	\$	30,000	\$ 30,000	\$ 30,000
Contingency Contract for Emerging Issues	\$	150,000	\$ 150,000	\$ 150,000
<b>Total Contract Expenses</b>	\$	<b>1,436,800</b>	<b>\$ 1,296,800</b>	<b>\$ 1,201,100</b>
Indirect Expenses for Contract work	\$	10,058	\$ 9,078	\$ 8,408
<b>Total Contract &amp; Indirect Expenses</b>	\$	<b>1,446,858</b>	<b>\$ 1,305,878</b>	<b>\$ 1,209,508</b>
<b>Total Expenditures</b>	\$	<b>1,952,683</b>	<b>\$ 1,832,201</b>	<b>\$ 1,798,103</b>

\* Estimated remaining billing for FY 2004