



DEPARTMENT OF
**NATURAL
RESOURCES**

Strategic Plan Fiscal Year 2013-14

November 2012

COLORADO DEPARTMENT OF NATURAL RESOURCES
STRATEGIC PLAN – FISCAL YEAR 2010-11

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A Letter from Mike King, Executive Director of the Colorado Department of Natural Resources

As the Department of Natural Resources plans its FY 2013-14 budget, the worst of the State's General Fund shortfall appears to finally be in the past. That said, significant financial uncertainty remains and includes: (1) the fragile state of the national and worldwide economies; (2) the slow pace of economic recovery and General Fund growth in Colorado; (3) the structural imbalance in the Operational Account of the Severance Tax Trust Fund and the resultant proportional cuts which are projected for Tier 2 programs in FY 2012-13 and beyond; (4) attempts to reduce federal debt may result in reduced federal support of state programs; (5) mandatory and/or formulaic growth in K-12 funding, Medicaid, and other large Generally Funded programs may continue to outpace growth in the State's General Fund revenue stream, continuing the need for General Fund budget balancing in the future; (6) a long term decline in hunter participation and other factors are creating the need to reduce cash spending from the Wildlife Cash Fund to a more sustainable level. All of these pressures have led the Department to undertake a number of efforts to reduce spending, look for efficiencies, and focus spending on priority areas. More simply, the Department's goal is to do more with less. The most substantial efforts in this regard have included:

Executive Director's Office – Since taking over as Executive Director of the Department of Natural Resources, I have fully eliminated a net of three administrative positions within the Executive Director's Office. Partially reflecting this, the General Assembly reduced the Office's appropriation by 2.0 FTE as an offset to fund additional staff for the Oil and Gas Conservation Commission which are critically needed to better regulate the growing number of active oil and gas wells in Colorado.

Colorado Parks and Wildlife - On June 6, 2011, Governor Hickenlooper signed into law Senate Bill 11-208 which merged two DNR divisions, the Division of Parks and Outdoor Recreation and the Division of Wildlife, into the Division of Parks and Wildlife. Since then, a great deal of work has been undertaken to plan and implement the merger. The primary goal of the merger is to create more efficient and effective services through economies of scale and use of shared resources. As the Department moves toward completion of the merger, I am anticipating a reduction of at least 20.0 FTE as a result of the merger. The associated savings will measure in the multiple hundreds of thousands of dollars. As Colorado Parks and Wildlife emerges from the recent recession, two important things have changed. First, General Fund support of the State Park system has been eliminated entirely. Second, we have significantly less cash revenues to fund wildlife programs than we thought several years back and it now appears that spending from the Wildlife Cash Fund is structurally out-of-balance with projected future revenues. Implementing the efficiencies of the merger is not only the right thing to do, it is fundamentally necessary given the budget reality of both state parks and wildlife programs.

Operational Account Balancing – Given significant shortfalls in the Operational Account of the Severance Tax Trust Fund, the Department has been examining all of its Operational Account expenditures and is reducing or eliminating lower priority programs. In FY 2012-13, funding for the Species Conservation Trust Fund program was reduced by \$2.6 million in the first effort to reduce the shortfall between authorized expenditures and expected revenues. The reduction to the Species Conservation Trust Fund will still leave \$4.0 million for the most critical species protection projects in FY 2012-13, but also reflects savings associated with the State's complete pay down of its obligation for the Platte River Agreement. Similarly, the Department is analyzing a reduction of roughly

\$1.0 million in Operational Account support of the Colorado Geological Survey. The potential reduction would discontinue Operational Account support for activities such as mapping groundwater and updating maps of commercial mineral deposits. However, with the transfer of the Survey to the Colorado School of Mines, the Survey can leverage expertise of Mines faculty, researchers, and graduate students to expand external grant support and to potentially strengthen work in a wide variety of areas, including those that are losing severance tax support.

Colorado Geological Survey – In 2011, I approached the Colorado School of Mines to explore the potential interest in merging the Colorado Geological Survey into the School of Mines. I believe there are a number of potential benefits to such a merger. Over one-third of all state geological surveys are successfully located within state universities. The Colorado School of Mines’ relationship with industry, the National Science Foundation, and other foundations may broaden the potential funding base for the Survey. Further, the Survey can leverage the expertise of Mines faculty and students to expand potential grant support and create employment and research opportunities for Mines students. Under H.B. 12-1355, the transfer of the Colorado Geological Survey to the Colorado School of Mines is moving forward and the Department is currently working on a Memorandum of Understanding (MOU) to work through the details of how the transfer will work. The MOU still requires approval by the Colorado School of Mines’ Board of Trustees and the Department before the transfer is finalized.

LEAN Principles – “Lean” is the practice of analyzing all of the steps of a particular process, examining whether each step results in “value”, and targeting for elimination those steps which have little or no “value”. Reflecting the customer-oriented focus of Lean, “value” is defined as any action or result that a customer would be willing to pay for. With the help of Lean consultants, the Department has undertaken several Lean analyses, including an analysis of the out-of-state travel approval process and an examination of the purchasing process. By making some of these administrative processes more efficient, the Department hopes to be able to spend more time and resources on those natural resource programs which most benefit Colorado citizens.

Colorado is incredibly blessed with its natural resources. An important part of our identity as Coloradoans is our majestic mountains, our beautiful outdoor landscapes, and our diverse wildlife and terrains. Natural resources also play an integral role in Colorado’s economic wellbeing. Water is an essential input for agriculture and many other industries. Hunting, fishing, and wildlife viewing bring an estimate economic impact of \$2.5 billion (including secondary impacts) and support an estimated 33,800 jobs in Colorado. Outdoor recreation at state parks brings another \$571 million of economic impact to the local communities where the state parks are located. Finally, energy and mineral resources also play an important role in Colorado’s economy. In 2010, the mineral and energy industry produced over \$11.0 billion worth of oil and gas, coal, and other minerals. Similarly, in 2010, over 24,000 people were employed in the mining and logging industries in Colorado. To help sustain and improve upon these many benefits, the Department of Natural Resources is becoming more efficient, as outlined above. In limited cases, where more resources would assist the Department in better operating its programs, decision items have been submitted. In particular, more FTE are being requested for the Oil and Gas Conservation Commission to provide the resources necessary to regulate the growing number of active oil and gas wells in Colorado.

The FY 2013-14 Strategic Plan was developed consistent with the SMART Government Act (see H.B. 10-1119 or Section 2-7-201, C.R.S. for more details). The FY 2013-14 Strategic Plan was also written giving thorough consideration to both the general and specific comments received during the process of putting together and publishing of the Performance Audit on SMART Act implementation released by the State Auditor's Office in August of 2012. The Department considers its Strategic Plan process to be iterative and will continue to update and improve its strategic plan based on comments from the State Auditor, the General Assembly, state employees, interested groups, and citizens.

The Department of Natural Resources' Strategic Plan contains performance measures for a wide variety of the programs implemented by the Department of Natural Resources. However, given the lengthy nature of this document (it is close to one hundred pages long), it is worth noting that the DNR Strategic Plan identifies seven "department level" objectives. These are, in essence, the seven highest priority objectives of the Department. As with all identified objectives, each department level objective will be accompanied by an associated performance measure as well as a narrative discussion of the Department's performance.

This Introduction to the Strategic Plan includes two more sections: (1) a recap of recent accomplishments of the Department, and; (2) a preview of the challenges the Department faces in the current fiscal year and future fiscal years.

SECTION 1: RECENT ACCOMPLISHMENTS

Colorado Oil & Gas Conservation Commission

- Under Executive Order B 2012-002, Governor Hickenlooper established a Task Force to develop cooperative strategies regarding the regulation of oil and gas development. The Task Force recommended a collaborative approach to oil and gas regulation between the State and local governments. To achieve this collaboration, the Task Force created a subcommittee that developed specific protocols for an expanded and improved Local Government Designee program.
- In February 2012, the Oil and Gas Conservation Commission initiated a setback stakeholder group to identify potential issues associated with the Commission existing setback rules. The "setback" rules determine how far oil and gas wells must be located away from buildings, schools, hospitals, and homes. A Commission rulemaking hearing on the setback issue is scheduled for November of 2012, with additional hearings as needed to complete rulemaking potentially occurring in December 2012 and January 2013.
- Concurrent with the setback rulemaking, the Commission will also be considering new rules for water well sampling. The Commission, through numerous orders, rules, and conditions of approval, has required water well sampling and monitoring for many years throughout various parts of the State. The proposed water well sampling rule would establish sampling and monitoring requirements on a consistent, statewide basis. The required data would, if approved, be used to verify that water

wells, ground and surface waters, and residents of producing basins are adequately protected and that impacts, should they occur, are quickly identified and mitigated.

- Collaborated with industry and environmental groups to adopt new hydraulic fracturing chemical disclosure rules that require oil and gas operators to publicly disclose all chemicals and their concentrations used in the hydraulic fracturing of oil and gas wells. The mandatory disclosure rules, which recognize and protect trade secrets, were effective April 1, 2012.
- Filled two new positions to serve as liaisons to local governments affected by oil and gas activity. Already, these new Local Government Liaisons (LGLs) have:
 - provided assistance to Local Government Designees (LGDs) to refine their understanding of evolving COGCC rules, policies, and processes;
 - facilitated LGD's use and understanding of the COGCC website and its online tools (COGIS, database, e-forms, etc.);
 - reached out to LGDs via e-mail, telephone calls, and face to face meetings;
 - provided assistance to numerous counties and municipalities regarding their oil and gas regulations and/or policies.
- Received 4,553 drilling permit applications during FY 2011-12, and approved 4,549 permits, with a median processing time of 28 days. During the same period, received 1,900 Oil and Gas Location Assessment forms and authorized 1,875 new Oil and Gas Locations in a median time of 28 days. Of the *locations* that were authorized as well sites, forty percent were for multi-well sites (*i.e.* drilling pads with more than one well). Seventy-four percent of the *wells* permitted were on multi-well sites. This demonstrates the effort to reduce cumulative ground disturbance by consolidating well locations. Colorado ended the fiscal year with 47,860 active wells, and is now ranked by the U.S. Energy Information Administration as ninth in the nation for oil production and fifth in gas production, up from tenth and sixth, respectively.
- Continued to review, analyze and update the field inspection program. In FY 2011-12, staff developed an eform that is being used for inspections to systematically collect detailed data on stormwater practices, final and interim reclamations, well status, and overall site conditions. The data is stored in a format that can be uploaded to a database for future use by staff, the oil and gas industry, and other stakeholders to evaluate compliance and surface impacts. The new eform, for example, contains 17 different fields for the inspector to complete during an interim reclamation inspection, whereas the previous form had a simple pass/fail option with a space to write comments. Furthermore, the new eform generates a PDF report that is emailed directly to the oil and gas operator to ensure rapid communication regarding site conditions and potential corrective actions.
- Developed and deployed a centralized enterprise database for environmental samples. The database currently contains thousands of groundwater samples that have been collected by COGCC, Operators, and others during baseline sampling and site investigation activities. Staff is currently working to improve the database and add new features. Users can access the data on the Internet through the GISOnline interactive map.

Division of Parks and Wildlife

- The Division successfully prepared a transition report for the merger of the two former Divisions (Colorado Division of Wildlife and the Colorado Division of Parks and Outdoor Recreation). The report was accepted and approved by the Colorado Parks and Wildlife Commission. The new organizational chart for the merged Division is contained on Page Department Overview-122 of this Strategic Plan.
- The CPW Commission has established three strategic priorities for the Division: Financial Sustainability, Recruitment and Retention, and Habitat Preservation and Improvement.
- Approximately 138,000 acres have been protected under the Habitat Stamp & Colorado Wildlife Habitat Partnership Program since 2007 including approximately 68,000 acres of public access for hunting and fishing.
- Between 2008 and 2012, the Habitat Partnership Program has awarded more than \$10.8 million in grants, leveraged an additional \$57.8 million in matching funds and in-kind contributions and had nearly 137,000 hours of time contributed by project partners for public and private land habitat improvement projects, fencing repairs and improvements, and other projects related to reducing big game/private landowner conflicts.
- Colorado Parks and Wildlife continued the aggressive statewide Aquatic Nuisance Species Program which has performed more than 1,700,000 watercraft inspections and educational contacts, and decontaminated more than 12,000 watercraft.
- Since 2007, awarded more than \$5.6 million in grants to 76 angling improvement projects across the state through the Fishing is Fun Program while leveraging more than \$4.0 million in additional local match funds to improve the habitat and access on more than 40 miles of rivers and streams, open or improve fishing at 50 ponds or lakes, and install more than 25 handicapped accessible fishing piers.
- Provided outdoor recreation, hunting and fishing opportunities for more than 12.3 million state park visitors, 284,495 licensed hunters and 662,617 licensed anglers.
- Repurposed Bonny Lake State Park into a State Wildlife Area. This move occurred after Bonnie Lake was drained of water to help the State of Colorado come into compliance with the Republican River Compact.

Colorado Water Conservation Board

- The CWCB worked closely with numerous stakeholders to monitor and respond to the substantial drought situation that has impacted all of the state during 2012 so far. Colorado's robust Drought Mitigation and Response Plan served as a state-of-the-art planning tool. Further, a comprehensive drought conference (September 19-20, 2012) was planned and implemented by the CWCB to highlight advances in drought monitoring, mitigation and impact assessment, as well as discussing drought preparedness innovations.
- In FY 2012, the CWCB's borrowers completed the construction of \$12 million worth of water projects. This alone created or preserved over 3,500 acre-foot of water storage. The CWCB approved \$42 million in new loans in FY 2012.
- Developed a work plan to begin implementing 16 key recommendations endorsed by the IBCC and CWCB that resulted from the 2010 Statewide Water Supply Initiative (SWSI).
- Continued support for the "Colorado Water for the 21st Century Act" by assessing various water portfolios (combinations of water conservation, reuse, agricultural transfers, and new supply development) developed by the Basin Roundtables, and began a scenario planning process to look at different water "futures" for Colorado.
- Also, in 2011-12, CWCB filed water court applications for 11 new instream flow water rights, including instream flow water rights on the Colorado River between Kremmling and Dotsero as a key element of the Upper Colorado Stakeholder Group Wild and Scenic Management Plan Alternative.
- Facilitated and supported the execution of three Minutes to the 1944 Water Treaty between the U.S. and Mexico, which has provided a foundation for bi-national discussions between the United States, Mexico, and the basin states to explore water management opportunities to better meet water needs in the future for both countries.
- Worked with Denver Water, Grand County and other participants in the Colorado River Cooperative Agreement process to establish a mechanism by which the CWCB will accept and protect water provided to it and Grand County for instream flow use. Denver Water, Grand County and the CWCB filed a joint water court application to implement that mechanism and other aspects of the Colorado River Cooperative Agreement.

- Worked with the Bureau of Reclamation and the basin states to issue Interim Report No. 1 of the Colorado River Basin Study, which explores the water supplies and the water demands within the entire Colorado River basin, for the first time.
- Promulgated revised rules and regulations in order to increase public safety and to better define requirements for weather modification activities, including cloud seeding and hail suppression. .
- Leveraged State funds with millions of dollars of non-State funds and partnered with stakeholders to complete hazard mapping, watershed restoration, and Decision Support Systems.

Colorado State Forest Service/Division of Forestry

- After the Lower North Fork Wildfire, provided support in the passage of H.B. 12-1283, which created the Division of Fire Prevention and Control within the Department of Public Safety. The bill consolidated wildfire-related powers and duties within this new division. Previously, many of these functions had been housed in the State Forest Service (which is part of the Colorado State University).
- Also related to the Lower North Fork Wildfire, the Department of Natural Resources commissioned a third party review of the prescribed fire that ultimately ignited a wildfire outside of the controlled burn unit. The review include background on controlled burns, a description of the specific event in the Lower North Fork area, lessons learned, and recommendations on how to improve the safety of prescribed burns.
- The Department of Natural Resources was the lead state agencies to support the Forest Health Summit in October of 2012. The Summit was held at the History Colorado Center in Denver and brought together the forestry industry, local communities, non-profit groups, conservation groups, and policy makers to determine how to improve forest health and reduce the risk of catastrophic wildfires. Several prominent state and federal officials spoke at the event, which attracted an estimated 200 participants.

Note: The Department of Natural Resources is not appropriated any funding or staff for forestry-related issues. In Colorado, funding for these issues is located in the State Forest Services (for issues related to forestry research and on-the-ground forest work) and within the newly created Division of Fire Prevention and Control (for wildfire-related issues). The Department of Natural Resources works cooperatively with both agencies on forestry issues. Because the Colorado State Forest Service is currently looking to fill its State Forester position, the Department of Natural Resources has been assisting the State Forest Service both in the hiring process for the State Forester position and in policy/legislative matters until a new State Forester is

hired. The successes described above are being included here to document the collaborative effort of the Department of Natural Resources on forestry issues.

State Land Board

- Revenues in the period from 2008 through fiscal year end in 2012 represent the highest revenue years on record, with total annual revenues exceeding \$146 million in FY 2011-12. This performance is due to strong demand for oil and gas leases that has resulted in record per acre “bonus” amounts paid at lease auctions.
- In FY 2011-12, the State Land Board acquired several small but important properties that provide access to and added significant value to existing state trust parcels. The State Land Board disposed of several large parcels that had minimal revenue potential.
- The State Land Board auctioned the 26,000 acre Lowry Range property for oil and gas development using a cutting edge lease that took more than year to develop in conjunction with numerous stakeholders, and resulted in a careful balance between protecting the extensive natural values of the property, while still providing access to the oil and gas resources. The State Land Board efforts resulted in what was at the time the highest per acre bid to date for the State Land Board; \$6,500 per acre.

Division of Water Resources

- The DWR promulgated well measurement rules for tributary water in the South Platte Basin (Water Division No. 1) with the Division No.1 Water Court on December 31, 2011. These rules are still pending final action by the Water Court. There were several objectors to the rules and the DWR is currently working on stipulations with those objectors, in order to avoid a costly trial. These rules will improve efficiency and compliment the metering requirements already in place in the Republican River Basin.
- Work continues on achieving compliance with the Republican River Compact by constructing the Compact Compliance Pipeline (“CCP”) in the Republican River Basin. Construction of the CCP was completed in August 2012. Water will not be delivered for compliance purposes until a settlement is negotiated with Kansas. Concurrent with these efforts a trial on

'Kansas v Nebraska and Colorado' litigation (i.e., Kansas damage claims and Nebraska modeling issues) was held in August 2012 in front of a Special Master in Portland, Maine. A ruling on these specific issues is anticipated by the end of 2012.

- In the Arkansas Basin (Water Division No. 2), the Lower Arkansas Valley Water Conservancy District filed an application with the State Engineer seeking approval for a rotational fallowing pilot program ("Super Ditch") in April, 2012. The State Engineer approved the plan with terms and conditions on May 2, 2012.
- In the Rio Grande Basin (Water Division No. 3), the DWR continues to work with water users and concerned citizens on an Advisory Committee to draft Ground Water Use Rules. The Ground Water Use Rules are anticipated to be promulgated in late 2012. Concurrent with the rulemaking, the Subdistrict No.1 of the Rio Grande Water Conservation District filed an Annual Replacement Plan with the State Engineer on April 13, 2012. The State Engineer held a public hearing to hear comments and approved the Annual Replacement Plan on May 1, 2012. On May 14, 2012 opponents filed an appeal in court and trial is scheduled for October 2012 in Alamosa.
- In the Colorado River Basin (Water Division No. 5), negotiations between Denver Water and several west slope water interests on an agreement ("the Colorado River Cooperative Agreement") continues to make progress. As part of this agreement, a water rights application was filed in water court by Denver Water, the CWCB and Grand County as co-applicants for a storage right in Gross Reservoir and to provide water by substitution and exchange for environmental flows in Grand County.
- In the San Juan/Dolores Basin (Water Division 7), construction began in July 2012 on Long Hollow Reservoir, with an anticipated completion date of late 2013. Some of the 5,400 AF of water to be stored will help Colorado meet its compact obligations to New Mexico under the La Plata River Compact.

Colorado Geological Survey

- The Colorado Geological Survey helped wildfire victims by quickly providing online maps of areas that may be subject to post-fire flash flooding, landslides, debris flows, and rockfall.
- Three significant recent reports, completed by CGS, on ground water in the Denver Basin provide the most detailed information yet on the varied distribution of groundwater in the Denver Basin and show the location and depth of the most productive aquifers. The reports are used by oil and gas producers, regulators, local officials, developers and planners to protect water supplies and to better understand the variability of water productivity in the Denver Basin, a major source of water supply for populous regions south of Denver.

- CGS is investigating the subsidence potential in areas that have been undermined by historic coal mines in the Tri-Towns area (Firestone, Frederick, and Dacono) of southern Weld County. The Tri-Towns area was actively mined for coal during the late 1800s to mid 1900s. Roughly 35 known coal mines are located in the project study area. Old underground mine workings can collapse and create deformation at the ground surface. Local officials and developers will use the information to avoid hazards. Oil and gas producers use such information to ensure that aquifers are protected against contamination from subsidence-damaged wells.
- CGS mapped geologic hazards on over 220,000 acres of land, concentrating on areas with some of the highest growth rates in Colorado. Local, state and federal governments, developers, and oil and gas producers use this information to protect public safety and reduce economic losses.
- CGS is evaluating over 2,000,000 acres of land for potential water quality and quantity problems. This included looking at potential contamination to water supply wells. Focus is placed in counties where renewable water is scarce and development pressures are straining groundwater resources.
- The Colorado Geological Survey produced a key inventory of Colorado's geothermal resources. Temperature data for more than 50,000 oil and gas wells was collected and mapped. This resource is used in geothermal, oil and gas exploration.
- CGS identified and evaluated key mineral and energy resources on over 200,000 acres of land. This included evaluation of coal, construction materials, metallic minerals, coal bed methane, carbon sequestration potential, and oil and gas resources. This information is used by local governments for land use planning and by the industry for resource development.
- Working closely with local governments, CGS reviewed over 13,000 acres of proposed land developments for geological hazards.

Division of Reclamation, Mining and Safety

- An initiative to ensure that all uranium operations are in compliance with new rules adopted in 2010 has been implemented. DRMS sent out notices to all uranium mining operations requiring them to submit Environmental Protection Plans (EPP's) to their permits by October 1, 2012. Approximately two-thirds of the permitted uranium mines have submitted their EPP's and over one-third have received approval for their EPP's as of July 1, 2012. There were 24 Notices of Intent to Conduct Prospecting submitted in fiscal year 2011-12. Of those, public comments were submitted for 6 of the notices. To date, the Division has not received an application for an in-situ leach uranium mine.

- Maintained oversight on 1,411 construction material mines, 117 hard rock/metal mines and 239 prospecting sites, including approximately 182,000 acres under permit. Conducted 683 inspections and managed 663 permitting actions.
- Conducted ongoing regulation of 41 coal mine permits (including 10 actively producing operations) and 125 exploration sites, covering 172,000 acres. Conducted 443 inspections and 246 permitting actions.
- During the past five years 15,086 acres have been released from Phase I of the Coal Program's bonding process and 14,703 acres have been released from Phase II, and 13,592 acres from Phase III (completion of all phases can take up to 10 years to conclude). These releases make Colorado the leader among western states in achieving successful bond releases.
- Last year the Inactive Mines Reclamation Program infused \$7.2 million into the state's heavy civil construction and technical consulting business economy through a distribution of 130 federally funded abandoned mine safeguarding/reclamation contracts. The work included safeguarding 455 hazardous mine openings and reclaiming 220 acres of mining-disturbed lands.

SECTION 2: FY 2012-13 AND BEYOND - PREVIEW AND KEY BUDGET CHALLENGES

As we look to the future, I believe there are key challenges facing the Department of Natural Resources and the State of Colorado:

Challenge #1: Water Supply – The Colorado Water Conservation Board completed a comprehensive update to the Statewide Water Supply Initiative (SWSI 2010), which examined Colorado’s projected water supplies and water demands. SWSI 2010 concluded that Colorado faces a shortage of water for meeting the state’s consumptive and nonconsumptive water needs. SWSI 2010 also concluded that in order to meet Colorado’s water needs, a mix of local water projects, conservation, reuse, agricultural transfers, and the development of new water supplies should be pursued concurrently. SWSI 2010 also found that Colorado’s municipal and industrial water supply need continue to grow and that Colorado will need an additional 600,000 to 1 million acre feet of municipal and industrial water by the year 2050. Funding the infrastructure to meet these water needs will cost billions of dollars. Additional moneys will be needed to develop, study, and design projects and solutions to meet these water needs.

A total of \$173 million was transferred from CWCB cash funds to the General Fund in FY 2008-09, FY 2009-10, FY 2010-11, and FY 2011-12. The State of Colorado and the Department of Natural Resources face a major challenge in meeting future water supply demands in light of dwindling funding for water programs. The CWCB has over \$100 million in water projects identified in its loan prospect summary report. These projects are needed in the near future to meet projected water supply needs of municipalities, industry, and agriculture. This is not a future problem that the State can defer in solving until after the budget problems are solved. It can take years to plan, permit, and construct major water projects. As an extreme example, the Animas-La Plata water project was first approved as part of the 1988 Colorado Ute Indian Water Settlement Act. The reservoir was finally filled in July of 2011, over twenty years later, providing a new source of water to Southwest Colorado. Given the required lead time to implement solutions, failure to adequately address water supply issues today will almost assuredly lead to water supply problems in the near future and implementation of more expensive solutions. Water shortages, implementation of more expensive solutions, additional drying up of agricultural lands, potential violations of interstate water compacts, and/or further depletions of groundwater are all possible results of Colorado not proactively planning for and addressing its future water supply needs. On the positive side, it is estimated that a total of \$55 million to \$75 million would be available for water project loans from the Perpetual Base Account in FY 2012-13 and FY 2013-14.

Challenge #2: Efficiently Operating the Colorado Division of Parks and Wildlife –S.B. 11-208 set in motion the merger of the Division of Wildlife and the Division of Parks and Outdoor Recreation. Due to the significant overlap in core elements of these two former agencies, the merger provides a unique opportunity to operate more efficiently. The recommendations of the Working Groups, Division managers, stakeholders, and the Transition Team resulted in a Colorado Parks and Wildlife Transition Report that identified opportunities to explore and also a wide variety of ideas to help improve the financial standing and operation of both parks and wildlife programs. The Parks and Wildlife Commission accepted and approved the Transition Report. Looking forward, population growth, forest health issues, and numerous other social, economic, and natural factors are constantly presenting new challenges to the successful operation of park and wildlife programs. To successfully address these challenges, park and wildlife programs must

operate more efficiently. As we change the way we operate, we must be mindful of: (1) the 12 million people each year that visit state parks; (2) the 285,000 licensed hunters each year that hunt in Colorado; (3) the roughly 660,000 licensed anglers each year that fish in Colorado; (4) the numerous citizens and visitors alike who enjoy viewing Colorado's wildlife, and; (5) the significant impact that park and wildlife programs have on local economies. By improving the way we operate, Colorado's state park and wildlife programs can better address current challenges, continue to be an important part of Colorado's economy, and remain a treasured asset that helps to make Colorado such a special place for residents and visitors alike.

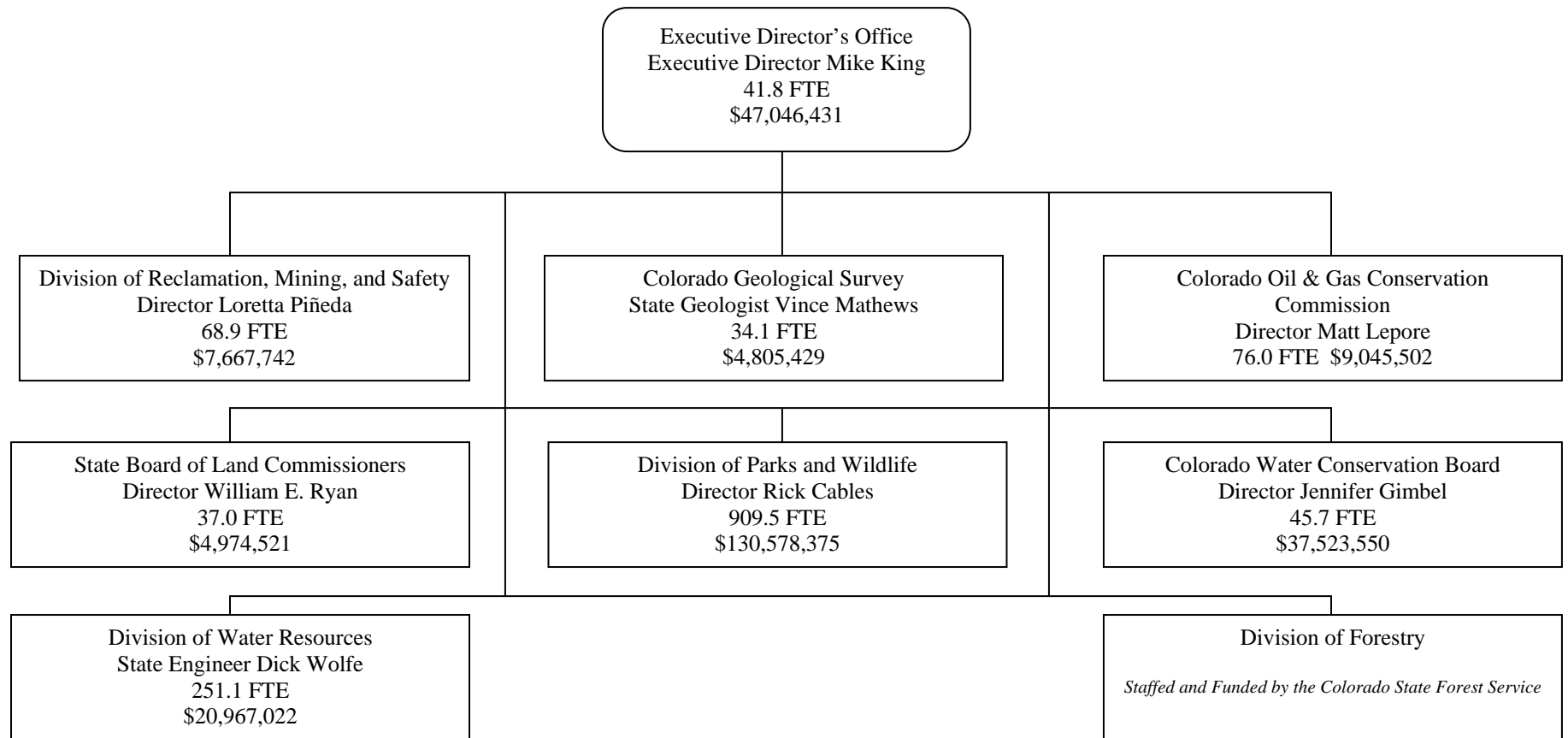
Challenge #3: Finding Alternative Revenue Sources for Parks and Wildlife Programs – The Colorado Parks and Wildlife Commission has identified Financial Sustainability and Recruitment and Retention as Strategic Priorities for the Division. During FY 2011-12, General Fund support of State Parks was completely eliminated; in the early 1990's General Fund support of State Parks exceeded 30 percent. While severance tax support has backfilled some of this loss, severance tax support of State Parks is also declining and over-reliance on this volatile revenue stream is not prudent. Similarly, Wildlife programs face two significant financial challenges. First, the Division must address the on-going health of the Wildlife Cash Fund to ensure long-term viability of the fund. Second, there is a national trend whereby the total number of people hunting across the United States is declining. Hunting revenues comprise a majority of the agency's revenues and subsidize fishing and non-game species protection programs. As such, potential reductions in hunting license sales have the potential to significantly affect all of the Division's wildlife programs. Given all of these challenges, the successful and sustainable operation of park and wildlife programs over the long-term will likely require Colorado Parks and Wildlife to seek alternative sources of revenue.

Challenge #4: Balancing the Development of Natural Resources with Conservation – Natural resource policy should emphasize a thoughtful and appropriate balance between developing and beneficially using natural resources and preserving such resources for current and future generations. Nowhere is achieving the right balance more important than with oil and gas development. On the one hand, it is vital that we protect human health and safety, safeguard wildlife and wildlife habitats, and prevent our State's precious water supplies from being impacted by oil and gas development. On the other hand, oil and gas are significant contributors to the State economy, providing thousands of jobs to Colorado residents as well as tax revenues to state and local governments. Of particular interest is working constructively with local governments to ensure that local issues are addressed in the State's regulatory process and procedures. By improving its working relationship with local governments, the Department hopes to work cooperatively to achieve an appropriate balance that protects the public interest while preserving the immense economic benefits the industry provides.



Mike King
Executive Director, Colorado Department of Natural Resources

Colorado Department of Natural Resources



1,464.1 FTE

\$262,617,572 Total Funds

\$23,740,163 GF \$209,496,335 CF \$8,636,648 RF \$20,744,426 FF

Colorado Department of Natural Resources

Strategic Plan

The Colorado Department of Natural Resources (DNR) is responsible for the management of the water, land, wildlife, minerals/energy/geology and outdoor recreation resources of the State. Its mission is to develop, preserve and enhance Colorado's natural resources for the benefit and enjoyment of current and future citizens and visitors. The Department of Natural Resources consists of eight divisions plus an Executive Director's Office. Collectively, these divisions carry out the Department's responsibilities for natural resources management, which includes use or access to some resources, promotion of the development of select resources, and the protection or preservation of other resources.

Mission Statement

Colorado is blessed with a wealth of natural resources, including beautiful landscapes, abundant energy and mineral resources, diverse wildlife, and unique geology. The State's high quality natural resources play a significant role in the high standard of living enjoyed by Coloradans. Out-of-state visitors and Coloradans alike enjoy hunting, fishing, outdoor recreation, and visiting Colorado's public lands. Wise use of the state's many high quality natural resource have a variety of positive impacts on Colorado's economy.

With these benefits comes the responsibility of good stewardship. As people move to Colorado to enjoy all that the state has to offer, stresses have been placed on resources such as water supply and wildlife habitat. Mineral and energy development must be undertaken in a responsible manner that protects the quality of Colorado's water and wildlife habitat resources. The Colorado Department of Natural Resources acts as a leader in coordinating the protection of natural resources with the federal government, other state agencies, local governments, businesses, and private citizens. By soundly managing Colorado's natural resources, future generations of Coloradans will enjoy the same high standard of living enjoyed today. The Department's mission also includes the promotion of outdoor recreation as well as natural resources education.

Vision Statement

Under the leadership of the Department of Natural Resources, Colorado will:

- **Water** - Provide for the long-term municipal, industrial, and agricultural water needs of the State in a way that recognizes and provides for the instream flow needs of fish, wildlife, and recreation. Through the Roundtables and Interbasin Compact Committee processes, Colorado's river basins work to find ways to share water in ways that generate win/win results for all parties. Colorado achieves greater efficiencies in water use through conservation, reuse, conjunctive use, and exploration of water projects that benefit all parties. The State finds alternatives to the permanent transfer of water from agricultural use to municipal use, thereby avoiding the permanent loss of irrigated agricultural lands and associated benefits.

- **State Parks** - Maintain a system of parks across the State that offers diverse outdoor recreation opportunities, protects high quality landscapes for current and future generations, and fosters natural resource education. Colorado State Parks remain affordable to all Coloradans, provide excellent customer service to visitors, and maintain safe, high-quality park facilities.
- **Energy** - Promote responsible and sustainable development of Colorado's energy and mineral resources in a manner that is consistent with environmental protection, maintenance of Colorado's quality of life, and protection of Colorado's diverse economic base.
- **Wildlife** - Manage and conserve healthy and sustainable wildlife populations for the benefit of current and future Coloradans.
- **State Lands** – Manage state school lands held in a perpetual, inter-generational trust for the benefit and support of public schools. Through prudent and strategic management, the Department will protect the long term value of these trust assets. Recognizing that the long term economic productivity of all lands held in public trust is dependent upon sound stewardship, the Department will protect and enhance the beauty, natural values, open spaces, and wildlife habitat on trust properties.

With a diverse mission, the employees, volunteers, and partners of the Colorado Department of Natural Resources will be highly motivated, knowledgeable, and committed to finding creative, thoughtful, innovative, and cost-effective solutions to Colorado's many natural resource issues. Educating the public and engaging younger generations will be a key part of the long-term effort to protect Colorado's natural resources. The Department is passionate about and committed to its duty to the wise management and conservation of Colorado's incredible natural resource portfolio.

DEPARTMENT OF NATURAL RESOURCES PERFORMANCE MEASURES

Each division in the Department of Natural Resource has contributed to the Department's Strategic Plan. It should be noted that many of the Department's divisions have their own strategic plans, which will provide more detailed information than is contained in this Strategic Plan. This document intends only to summarize performance related to a select few of the Department's highest priority objectives.

Given the diverse statutory missions and programs of the Department's eight divisions, the Department's 1,500+ FTE, seasonal employees, temporaries, and volunteers work every day on a wide variety of Department objectives. Below, the Department has chosen seven key performance measures to be used in measuring the Department's success in meeting high priority objectives. While accepting these measures as the highest profile measurement of the Department's performance, the Department cautions readers that performance evaluation should start, but not finish with, an evaluation of the performance measures. Measuring performance for natural resource programs is complex and often multi-dimensional. For example, good management of the State's water resources might involve: (1) protecting water quality; (2) enhancing municipal, industrial, and agricultural water supply; (3) ensuring water is put to beneficial use; (4) ensuring the delivery of water to other states and countries in accordance with interstate water compacts; (5) regulating water use to be sure water is consumed only by legally entitled users; (6) ensuring water is flowing through rivers and streams at the appropriate amounts and proper times to enhance wildlife and wildlife habitats; and (7) analyzing groundwater resources to be sure that such use is sustainable. In this regard, the Department's management of water resources is not easily measured by a single metric. Further, it is important to recognize that "Mother Nature" has a significant impact on the Department's ability to achieve desired outcomes. External factors which can affect natural resource related outcomes include drought, forest fires, heavy snowfall / inclement weather, social and economic trends, and outbreaks of wildlife disease. With these difficulties in mind, the Department will attempt to provide narrative clarification and background to help analyze performance.

DNR-1. Species Conservation

Objective: Protect the diversity of Colorado's wildlife resources

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Number of species on the "Species of Greatest Conservation Need" list	Benchmark	210	210	210	210
	Actual	210	210	Unknown	Unknown

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Number of species listed under the Federal Endangered Species Act / Prevented-State-Federal Listing (Cumulative)	Benchmark	15/20	15/20	18/20 ¹	21 ² /20
	Actual	15/20	15/20	18/20 ¹	Unknown

Strategy:

Maintaining healthy wildlife populations and ecosystems is one of the major components of DPW's mission. Succeeding in this mission means, among other things, preventing the decline of populations to the point where listing under the federal Endangered Species Act is warranted. The listing of a species (or avoidance of listing) is the end result of many factors and reflects the success of DPW's efforts to protect and maintain wildlife habitat, to manage wildlife populations, to discover, generate, and provide scientific information about the status of species, and to expand scientific understanding of the factors influencing wildlife populations, among other activities. This measure focuses on a relatively small number of species, most of which are in peril, and are therefore of extreme importance to DPW and receive considerable management attention.

Evaluation of Prior Year Performance:

No new species were listed either federally or through the State of Colorado during FY 2011-12. The US Fish and Wildlife Service made a positive 90 day finding on two Colorado species, the white-tailed ptarmigan and desert massasauga during FY 2012-13. These two species will be added to the federal candidate list, but no additional work toward listing will occur until after September 30, 2015 when the US Fish and Wildlife Service has addressed their court mandated Multi District Litigation work plan.

In September 2011, the US Fish and Wildlife Service, through a court mandated work plan (Multi District Litigation), was directed to make listing decisions on 9 Federal Candidate Species occurring in Colorado. These species include Lesser Prairie Chicken, Gunnison Sage Grouse, Greater Sage Grouse, Western Yellow-billed Cuckoo, Rio Grande Cutthroat Trout, Arkansas Darter, New Mexico Jumping Mouse, Wolverine, and Gunnison's Prairie Dog. Listing decisions for all species except Greater Sage Grouse and Rio Grande Cutthroat will be made during either the Federal Fiscal Year 2012 or 2013. The decision for Rio Grande Cutthroat will be made in the Federal Fiscal Year 2014 and for Greater Sage Grouse in Federal Fiscal Year 2015.

The fifteen wildlife species currently listed under the federal Endangered Species Act are: Whooping Crane, Least Tern, SW Willow Flycatcher, Piping Plover, Mexican Spotted Owl, Bonytail chub, Razorback Sucker, Humpback Chub, Pikeminnow, GC Trout, Gray Wolf, Black-footed Ferret, Grizzly Bear, Preble's Meadow Jumping Mouse, and Lynx.

¹Multi District Litigation (MDL) Candidate species expected to be federally listed in FY 12-13: Lesser Prairie Chicken – 29 Nov 2012, Gunnison Sage Grouse – 31 Dec 2012, Wolverine – 31 Jan 2013²MDL Candidate species with potential to be federally listed in FY 13-14: Western Yellow-billed Cuckoo, Gunnison Prairie Dog, , New Mexico Jumping Mouse prior to 30 Sep 2013 (Federal Fiscal Year 13)

DNR-2. Outdoor Recreation

Objective: Provide and promote a variety of outdoor recreational opportunities for citizens and visitors.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Annual Visitation to State Parks *	Benchmark	12,480,000	12,387,874	12,600,000	12,750,000
	Actual	12,338,520	12,233,271	Unknown	Unknown

* Note: The Division is in the process of installing Entrance Automation stations at pilot parks throughout the Parks system. This number may be adjusted depending on the outcome of this project.

Strategy:

The total number of visitors to Colorado’s 43 state parks has grown over the past five years, due in part to expanding the number of state parks and the recreational opportunities within the parks. Another factor contributing to this increase in visitation is the growth in Colorado’s population over the past five years. The desired outcome for this performance measure is an annual increase in total visitation to state parks, and is consistent with the Division-wide Marketing Goal which states that State Parks will: “*Retain current and acquire new customers through exceptional service and by improving State Parks’ visibility with innovative marketing.*” This will be carried out by broadening the Agency’s visibility, maintaining high-quality recreation opportunities for existing visitors, and expanding in-state and regional marketing efforts to attract additional visitors. As we move forward, the Department’s performance in this area will have to be considered in light of the overall budget available to the Division.

Evaluation of Prior Year Performance:

Visitation has slightly decreased by 0.9% in FY 2011-12 over FY 2010-11. This is mostly attributable to the weather conditions in the spring/summer months of 2012 along with persistent drought impacting water recreation at state parks. Additionally, wildfires close to several state parks negatively impacted visitation.

DNR-3. Compact Compliance

Objective: Maximize efficient use of Colorado's water resources in compliance with interstate compacts

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Overall compliance with interstate water compacts (expressed as a percentage)	Benchmark	100%	100%	100%	100%
	Actual	88%	88%	Unknown	Unknown

Strategy:

It is critical that the State of Colorado meet its contractual water delivery obligations for each of its nine compacts, two United States Supreme Court decrees, a U.S. Treaty, and interstate water allocation agreements, while simultaneously protecting the right of Colorado to develop its full interstate compact apportionment. Each compact, agreement, and decree has different compliance components that must be met. This performance measure demonstrates whether Colorado is in compliance overall with respect to each of these. Compliance is measured by water accounting for each compact, agreement, and decree. The performance measure will assess the overall compliance based on each respective accounting method.

Cost Savings to State of Colorado

Savings and benefits directly related to this performance measure include avoided litigation costs as well as damage/settlements costs. For example, several years ago Colorado was ordered to pay the State of Kansas over \$34 million by the U.S. Supreme Court for violating the Arkansas River Compact. Upholding our compact obligations and avoiding costly legal battles is of utmost importance.

Evaluation of Prior Year Performance:

For FY 2010-11, the State of Colorado was in compliance with both U.S. Supreme Court Decrees, all agreements, and eight (with the one exception noted below) of its nine compacts (the State was not in compliance with the Republican River Compact). The Animas-La Plata Project (component of the Animas-La Plata Compact) came on-line in FY 2010-11; with the filing of Lake Nighthorse, compact deliveries began in FY 2011-12. The La Plata River Compact is not considered in this analysis due to unresolved accounting issues. Operational issues for the compacts and percentage of compliance follow:

1922 Colorado River Compact	100%
1922 La Plata River Compact	100%

1923 South Platte River Compact	100%
1938 Rio Grande River Compact	100%
1942 Republican River Compact 2002 Final Settlement Stipulation	0%
1948 Upper Colorado River Compact	100%
1949 Arkansas River Compact	100%
1963 Amended Costilla Creek Compact	100%
1969 Animas-La Plata Project Compact	100%

Colorado River (Colorado River Compact and Upper Colorado River Compact)

Colorado is subject to the Colorado River Compact and the Upper Colorado River Compact. These compacts allocate a portion of the flows in the Colorado River Basin to Colorado’s use. With uncertain future climatic conditions and growing demand for water from this system, Colorado is considering how compact obligations can be met in the event insufficient water is available to meet our obligations. The DWR is working with the Colorado Water Conservation Board (CWCB) to complete studies to determine current needs and depletions in the Colorado River Basin and to assist in developing strategies as to how water rights would be administered on the Colorado River and its tributaries in the event Colorado could not meet its obligations under the compacts.

La Plata River Compact

To assure compliance with the La Plata River Compact, DWR supported the La Plata Water Conservancy District, the Southwestern Water Conservation District, and the Colorado Water Resources and Power Development Authority’s construction of Long Hollow Reservoir, which will include a pool of water to assist Colorado in meeting her obligations under the La Plata River Compact. The Colorado Water Resources and Power Development Authority funded the dam design and construction from set-aside Animas-La Plata settlement funds with the Indian tribes in the area. Construction began in July 2012 on Long Hollow Reservoir, with an anticipated completion date of late 2013.

South Platte River Compact

Colorado is in full compliance with this compact.

Rio Grande River Compact

In the Rio Grande Basin, an advisory committee was formed in 2009 to assist the State Engineer in drafting rules to address injurious depletions caused by ground water use, sustainability of aquifers, setting of an irrigation season, developing ground water subdistricts and ground water management plans to prevent injury to senior water rights, and avoiding interference with the Rio Grande Compact. The Rules Governing the Withdrawal of Ground Water in Water Division No. 3 (Well Use Rules) are anticipated to be completed and submitted to the Water Court in late 2012. Concurrent with the rulemaking, the Subdistrict No.1 of the Rio Grande Water Conservation District filed an Annual Replacement Plan with the State Engineer on April 13, 2012. The State Engineer held a public hearing to hear comments and approved the Annual Replacement Plan on May 1, 2012. On May 14, 2012 opponents filed an appeal in court under retained jurisdiction alleging the approval was arbitrary and capricious. Opponents also filed for an injunction requesting that the Annual Replacement Plan approval be revoked by the court. Such revocation could require shutdown of approximately 3,500 irrigation wells. Trial on the appeal of the Annual Replacement Plan approval is scheduled for October 2012 in Alamosa. Work continues on a Conservation Reserve Enhancement Program (CREP) application for the Rio Grande Basin for retirement of approximately 40,000 acres in the Rio Grande Water Conservation District's Subdistrict No.1, as part of their Ground Water Management Plan. The required Programmatic Environmental Assessment was completed in July of 2012 and a Finding of No Significant Impact was issued on August 9, 2012.

Republican River Compact

Numerous actions have been taken by the Colorado State Engineer in the Republican River Basin over the past fiscal year to assist Colorado to achieve compliance with her obligations in relation to the Republican River Compact. Principally, Colorado formally proposed the idea of a Compact Compliance Pipeline (CCP) to Kansas and Nebraska for compliance with the Republican River Compact; Nebraska supports approval of the CCP, while Kansas does not. Colorado continues to work with Kansas and Nebraska to develop an amicable resolution for approval of the proposed CCP. Construction of the CCP was completed and a dedication ceremony was held by the Republican River Water Conservation District on August 17, 2012. Water will not be delivered for compliance purposes until a settlement is negotiated with Kansas. Concurrent with these efforts a trial on 'Kansas v. Nebraska and Colorado' litigation (i.e., Kansas damage claims and Nebraska modeling issues) is scheduled for August 2012 in front of a Supreme Court Special Master in Portland, Maine. Major federal conservation programs such as the Conservation Reserve Enhancement Program (CREP), Environmental Quality Incentives Program (EQIP), and the Agricultural Water Enhancement Program (AWEP) have been extremely successful in retiring irrigated acreage in the Republican River Basin in Colorado. As of FY 2011-12, the cumulative annual total number of acres participating in land conservation programs (temporary and permanent), to which the DWR is a technical or regulatory participant, was approximately 33,000 acres.

Arkansas River Compact

In an effort to avoid potential future violations of the Arkansas River Compact, the Colorado State Engineer formed a special advisory committee to assist in developing rules that dealt with irrigation improvements made in the Arkansas River Basin to surface water irrigation systems. These improvements are subject to the Arkansas River Compact under certain circumstances. After over two years of work by the committee, the Irrigation Improvement Rules were promulgated and delivered to the Water Court for Water

Division No. 2 for approval in September 2009. Over 20 objections to the rules were filed; however DWR was able to settle with all the objectors and the Water Court issued a decree approving the rules in November 2010. The Irrigation Improvement Rules became effective in 2011; as of July 1, 2011 the State Engineer approved the first Compact Compliance Plan under the Rules. Colorado continues to be in full compliance with this compact.

Amended Costilla Creek Compact

Colorado is in full compliance with this compact.

Animas-La Plata Compact

Under the Animas-La Plata Compact and federal authorization, the Ridges Basin Dam pumping plant and pipeline were constructed. The Animas-La Plata Project came on-line in FY 2010-11 with the filing of Lake Nighthorse. Colorado continues to work with New Mexico and the other project water users in developing an administrative protocol for project water delivery to the users in both states including tribal nations.

DNR-4. Wildlife Recreation

Objective: Provide hunting and fishing recreation opportunities for citizens and visitors to Colorado

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Number of Licensed Hunters in Colorado (Based on Calendar Year)	Benchmark	305,000	305,000	305,000	305,000
	Actual	286,363	284,495	Unknown	Unknown

Strategy:

Providing hunting recreation opportunities is one of the major components of the DPW mission. Hunting recreation produces substantial economic benefits for Coloradans, particularly those in small rural communities. The number of people who actually hunt in Colorado is the outcome of many factors and reflects the success of the DPW’s attempts to manage big-game populations, to provide public access, to recruit new hunters to the sport, to provide a quality experience that causes hunters to return year after year to hunt in Colorado, and to inform and educate the public about hunting opportunities. Nationally, demographic trends suggest that the

number of hunters in the United States will decline in the coming years. In Colorado, continued pressure on wildlife habitat may reduce big game populations. Maintaining the current number of hunters in spite of these trends will be a challenge. The Division has marketed hunting in Colorado through various methods, including use of a predictive modeling system to identify potential customers combined with magazine and television advertising, to increase the number of hunting license applicants. The Division also participates in national hunting trade shows to promote Colorado hunting and has hired hunt planners to assist customers with planning their hunt, and who contact lapsed hunters and encourage them to hunt again in Colorado. The Division continues to analyze these issues and is exploring a variety of programs and initiatives, including communicating with other state fish & wildlife agencies, to develop strategies that increase hunter participation.

Evaluation of Prior Year Performance:

In FY 2010-11, the actual number of hunters was 93.9% of the benchmark target. In FY2011-12, the actual number of hunters was 93.3% of the benchmark target. The Division continues to see a decrease in number of licensed hunters in Colorado. This decrease is related to many biological, social, and economic variables such as the economy, hunter satisfaction, game management objectives, and demographics. The DPW is aware of these issues and the corresponding negative impact on Division revenue, budget prioritization, and planning for future years. The DPW will continue to monitor and take steps to provide hunting recreation opportunities for citizens and visitors to Colorado.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Number of Licensed Anglers in Colorado (Based on Calendar Year)	Benchmark	690,000	685,000	685,000	685,000
	Actual	674,775	662,617	Unknown	Unknown

Strategy:

Providing fishing recreation opportunities is another major component of the DPW mission. The number of people who actually fish in Colorado is the outcome of many factors and reflects the success of DPW’s attempts to manage sportfish populations, including maintaining stream and lake water quality and quantity, augmenting sportfish populations through fish production at hatcheries, providing public access to fishing waters, managing the detrimental impacts of diseases and invasive species, recruiting new anglers to the sport, providing a quality experience that causes anglers to return year after year to fish in Colorado, and informing and educating the public about angling opportunities.

Evaluation of Prior Year Performance:

In FY 2010-11, the actual number of licensed anglers was 97.8% of the benchmark. In FY2011-12, the actual number of anglers was 96.7% of the benchmark target. This decrease is related to many biological, social, and economic variables such as the economy, recruitment and retention, and demographics. The DPW is aware of these issues and the corresponding negative impact on Division revenue, budget prioritization, and planning for future years. The DPW will continue to monitor and take steps to provide fishing recreation opportunities for citizens and visitors to Colorado through the strategies outlined above.

DNR-5. Water Supply

Objective: Meet the current and future water supply needs of the State.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Increase water storage to meet long term water supply needs.	Benchmark	122,265 ac ft.	36,455 ac ft.	5,740 ac ft.	5,740 ac ft
	Actual	75,802 ac ft	3,500 ac ft	Unknown	Unknown

Strategy:

In 2003, the General Assembly approved funding to complete the Statewide Water Supply Initiative (SWSI) to examine, on a basin by basin basis, Colorado’s projected water supplies and water demands. One of SWSI’s major findings was that projects and water planning by local water providers have the ability to meet about 80 percent of Colorado’s municipal and industrial water needs through 2030. CWCB will work to help local entities meet their demands by managing the Construction Fund and the Severance Tax Trust Fund Perpetual Base Account and other grants funds to provide low-interest financing for water infrastructure and grants for water related planning, programs and project implementation. The CWCB has estimated that by the year 2050, Colorado will need an additional 750,000 to 1,100,000 ac ft of water supply.

Evaluation of Prior Year Performance:

The CWCB financed and completed four water storage projects in FY 2011-12, resulting in approximately 3,500 ac. ft. of additional or preserved water storage. Twelve other new storage or rehabilitation projects, financed by the CWCB, are currently either in the design or construction phase and are expected to be completed within the next two to four years. The resulting total increase in water

storage for these projects is approximately 14,000 ac. ft. In FY 2011-12, CWCB completed 10 projects, involving over \$11.5 million in loan funds. Typically, the CWCB Loan Program completes between 10-15 projects per year, involving a wide range of loan funds. The number of projects and amount of funds disbursed are subject to the borrower's design and construction schedule and actual loan funds available, and therefore, the performance measures for this item is at times hard to predict. Staff is projecting a significant increase in loan requests due to the recent reduction in interest rates. To date, the General Assembly has transferred over \$163,000,000 from the Severance Tax Perpetual Base Account and \$10,000,000 from the Construction Fund. The CWCB has identified over \$110,000,000 in water project needs over the next 10 years.

DNR-6. Energy Development

Objective: Ensure that energy development is undertaken in a responsible manner that encourages protection of environmental resources such as water and wildlife habitat

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Percent of oil and gas wells permitted using a closed loop drilling system	Benchmark	37%	37%	80%	80%
	Actual	67%	74%	unknown	unknown

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Percent of oil and gas wells permitted in Sensitive Wildlife Habitats that are included in Wildlife Management Plans	Benchmark	0%	0%	70%	70%
	Actual	45%	53%	unknown	unknown

Strategy:

The Department will work with federal land agencies and the federal government, as well as local governments, to encourage sound management practices that minimize cumulative impacts on wildlife, the environment, and local communities. The primary mission of the OGCC is to “foster the responsible, balanced development, production, and utilization of the natural resources of oil and gas in the state of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources”. In addition, the OGCC is an “Implementing Agency” for the state’s Water Quality Control Commission (WQCC), and is responsible for upholding the water quality standards and classifications that are established by the WQCC with respect to oil and gas operations. The OGCC is responsible for regulating oil and gas development in a manner that prevents and mitigates impacts to the environment, including contamination of water. An important measure of how well the OGCC is implementing these responsibilities is the number of adverse impacts to water resources that occur from oil and gas development. Reducing or controlling such impacts during current unprecedented levels of oil and gas activity in Colorado will continue to be challenging.

A way to measure progress, in terms of reducing impacts to water resources, is to look at closed loop drilling systems, which significantly reduce impacts to the environment by eliminating the use of drilling pits. In a closed loop system, the drilling pit is replaced with a series of storage tanks that separate liquids and solids. Equipment to separate out solids and liquids are used to minimize the amount of drilling waste and maximize the amount of drilling fluids recycled and reused in the drilling process. Benefits also include: better protection of groundwater, more timely detection of drilling fluid releases, and easier and timelier reclamation. Furthermore, statutory changes in 2007 require the OGCC to encourage operators to use landscape level planning tools to provide for orderly development of oil and gas fields minimizing surface disturbance and fragmentation in important wildlife habitat. The percentage of oil and gas wells permitted in Sensitive Wildlife Habitat that are included in Wildlife Management Plans is a good measure of this landscape level planning.

Evaluation of Prior Year Performance:

Closed Loop Drilling:

The OGCC requires the use of closed loop drilling in certain situations, such as proximity to surface and/or ground water. In many situations, when operators are given a choice between using a closed loop drilling system or lined pits, the closed loop system is preferred. More frequently now, as reflected in the increasing rate of closed loop drilling, operators choose to use this more environmentally friendly drilling method on their own or at the request of farmers who do not want pits on their property.

Wildlife Management Plans:

More operators are satisfying their Division of Parks and Wildlife consultation requirement before they start drilling in Sensitive Wildlife Habitat. By developing Wildlife Management Plans, operators have a better understanding of their environmental protection obligations and associated costs earlier in the process.

DNR-7. State Land Board Lands

Objective: Earn reasonable and consistent revenue on State Land Board properties for the benefit of all trusts

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Increase revenues to the school trust by 5 percent annually	Benchmark	\$ 68,142,859	\$ 71,550,002	\$ 120,853,570	\$124,297,724
	Actual	\$120,557,842	\$144,738,002	Unknown	Unknown

The table below provides a more comprehensive and detailed look at all State Land Board revenues (not just the School Trust revenue shown above).

Income Source	FY 2007-08 Actual	FY 2008-09 Actual	FY 2009-10 Actual	FY 2010-11 Actual	FY 2011-12 Actual
Surface Rentals	\$11.8 million	\$10.5 million	\$11.3 million	\$10.4 million	\$11.5 million
Mineral Revenues (Excl. Bonus Payments)	\$49.8 million	\$57.4 million	\$37.2 million	\$45.4 million	\$52.6 million
Commercial	\$2.4 million	\$2.8 million	\$3.5 million	\$2.8 million	\$2.9 million
Bonus Payments	\$6.4 million	\$3.9 million	\$14.9 million	\$63.3 million	\$78.4 million
Other	\$0.8 million	\$1.0 million	\$0.9 million	\$0.9 million	\$0.9 million
TOTAL	\$71.2 million	\$75.5 million	\$67.8 million	\$122.8 million	\$146.3 million

Notes: The “Other” category includes mineral rental income, commercial revenue, renewable energy income, timber sales, land sales, interest income, and fee revenue.

Strategy:

The School Trust is the largest trust accounting for 98.0 percent of the total State Land Board revenue. The main revenue components are: mineral (e.g., royalty, bonus, and lease), surface (e.g. agricultural and recreation leases), and commercial (e.g. office and ground leases). The goal is to diversify the trust land portfolio ownership and leasing in order to reduce revenue instability cause by such things as drought, commercial market, and minerals pricing.

Evaluation of Prior Year Performance:

Revenue to the school trust reached a new record in FY 2011-12 driven by a recent dramatic surge in the per acre “bonus” amounts paid at auction to lease land for oil and gas development on State Trust lands. The Lowry Range drew a bonus payment of \$27 million per year, for five years, starting in FY 2011-12. As the available supply of desirable sites recedes, maintaining the current level of oil and gas revenue to the trust will be difficult. Key uncertainties related to the Lowry Range and other recent oil and gas leases include how much royalties will be generated from any oil and gas actually developed on State Land Board properties, the amount of time it will take to successfully develop such minerals, and the market price of the minerals when they are developed. The Board’s goal is to expand its portfolio with a specific emphasis on long-term asset acquisition and stewardship initiatives that will help offset declines in revenue from non-renewable sources.

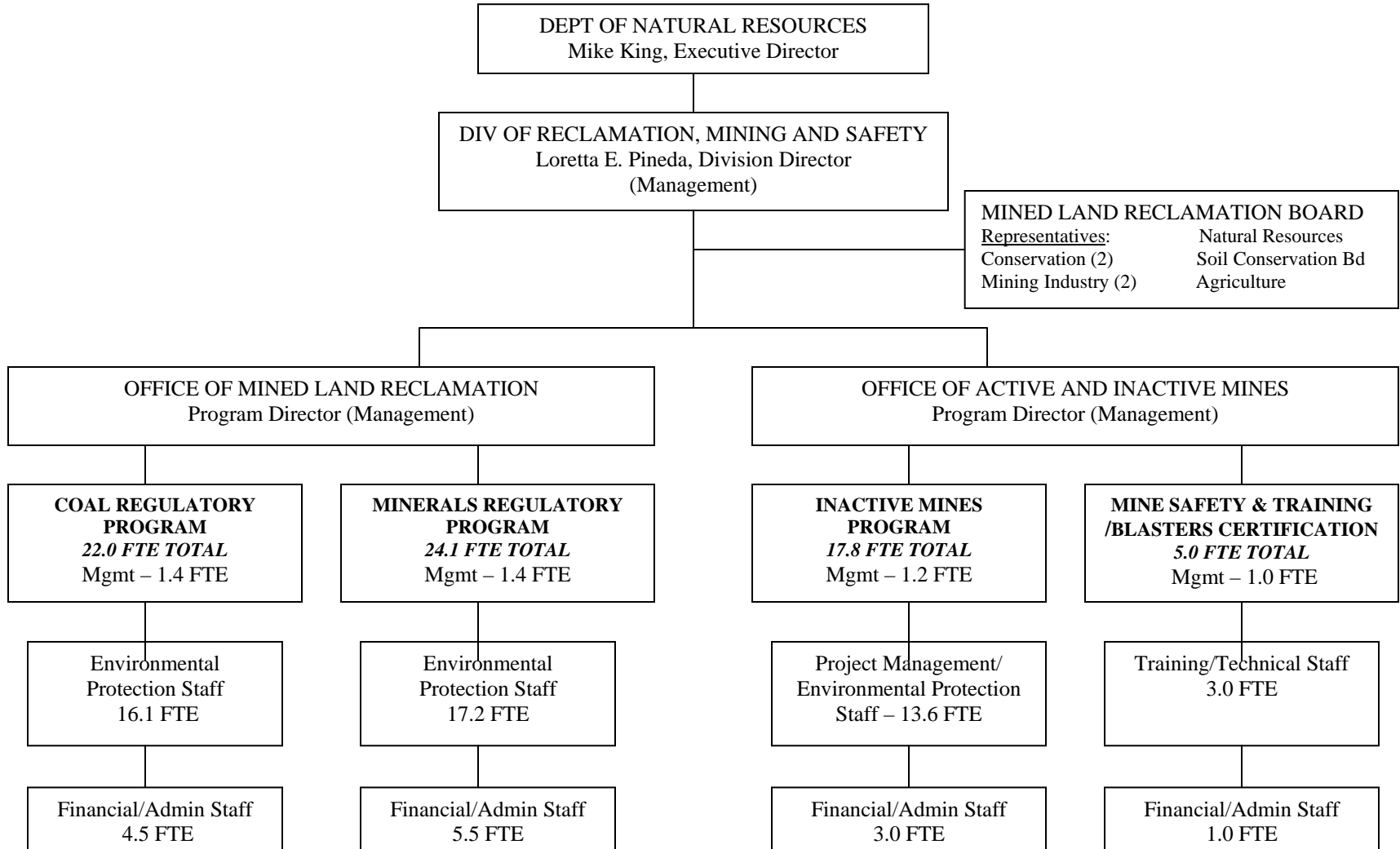
Looking forward, the benchmark for FY 2012-13 (\$120.85 million) and FY 2013-14 (\$124.3 million) are based upon reasonable growth over prior year revenues. However, the significant one-time impact of lease payments received as bonus payments is not expected to match the level achieved in FY 2011-12. As such, while the benchmark for the current and request year are lower than the amount of actual revenue received in FY 2011-12, the Department believes these benchmarks strike a balance between being realistic, achievable, and aggressive.

DIVISION OF RECLAMATION, MINING AND SAFETY

68.9 FTE

CF \$4,335,315 REAPPR \$30,000

FF \$3,302,427



Division of Reclamation, Mining, and Safety

DRMS -- Description

The Division of Reclamation, Mining, and Safety (DRMS) consists of four programs: Coal Regulatory program, Minerals Regulatory program, Inactive Mine Reclamation program, and Mine Safety and Training program. The Coal Regulatory program oversees active coal mining operations and the reclamation of the land by the mining company after the coal has been extracted. Responsibilities of the program include reviewing permit applications, amendments, revisions, and requests for bond release. The Mined Land Reclamation Board and the Minerals program issue and enforce exploration, mining and reclamation permits for all non-coal mines in Colorado on state, federal and private lands. The types of minerals regulated are metals (such as uranium, gold, silver and molybdenum) and construction materials (such as sand, gravel, marble and flagstone). The Inactive Mine Reclamation program addresses the hazards and environmental problems that exist from abandoned mines in Colorado. A comprehensive inventory of hazards and environmental problems associated with past mining activities estimated that there were 23,000 abandoned mined sites throughout the state. The Mine Safety and Training program is charged with protecting the health and safety of miners and the public that visits mines. Program activities include performing site-specific mine health and safety training, audits and education in all aspects of safe mine operations, certification of coal mine officials, and inspection of tourist mines.

DRMS – Statutory Authority:

Coal Regulatory Program: State: Section 34-33-101, C.R.S. (2012) Federal: (SMCRA) 1977 – PL 95-87

Inactive Mine Reclamation Program State: Section 34-33-133, C.R.S. (2012) Federal: (SMCRA) of 1977, Title IV, PL 95-87

Minerals Regulatory Program State: Sections 34-32.5-101 *et seq.*; 34-32-101 *et seq.*; and 25-8-104, C.R.S. (2012)

Mine Safety and Training Program: Federal: Title 34, Articles 20-25, Title 30, Parts 1-199 (SMCRA) 1977 – PL 95-87. State: Section 34-33-101, C.R.S. (2012)

DRMS --Mission:

To protect the public, miners and the environment during current mining operations; to restore abandoned mines; and to ensure that all mined land is reclaimed to beneficial use.

DRMS -- Vision:

The division is committed to balance the need for mineral resource production with protection of the public, environment and Colorado's natural resources.

Over the next five years, the biggest challenge for DRMS will continue to be balancing mineral resource development and environmental protection. Increases in precious metal values, renewed interest in strategic minerals and rare-earth-elements, coal mine expansions and demand for construction materials continue to result in an increased workload related to exploration and permit applications, revisions and enforcement activities. In addition, the DRMS staff is confronted with technical and cyclical trends related to uranium mine development and reclamation, and closeout plans for exploration and mining. DRMS continues to make adjustments to the regulatory programs to address concerns from local governments, environmental groups and industry while continuing to promote a sound and balanced approach to minerals development. DRMS must continue to make investments to its business system databases and continue development of its electronic permitting initiative and geographical information systems (GIS) in order to maintain efficient customer services.

Federal budgets will continue to get tighter and more restrictive and will continue to have implications for two critical areas that support state government programs for the regulation of active coal mining operations and the reclamation of abandoned mine lands (AML). Any federal grant reductions to the Coal Regulatory Program would make it difficult to maintain staffing levels and cover inflationary costs for the regulation of coal mining in Colorado. In addition, federally proposed changes to the grant application process for abandoned mine lands reclamation work would inhibit the Inactive Mine Reclamation program's safeguarding efforts of over 350 hazardous mine openings per year and work to reclaim problems at more than 15,000 abandoned coal and hardrock mines in Colorado. Stagnant federal funding for the mine safety training program makes it difficult to keep up with the demand for training and training materials.

New rulemaking initiatives by Office of Surface Mining (OSM), Environmental Protection Agency (EPA), Mine Safety and Health Administration (MSHA) and other federal agencies could have impacts on the division's regulatory programs, abandoned mine program, and mine safety training program. New federal regulations threaten state primacy, and may require review of state statutes, regulations and policies. This is especially true where the regulation of mining operations is concerned. DRMS' goal is to coordinate with federal agencies on proposed policies, legislation and regulation, and to maintain state primacy for regulatory programs.

Employee retention, recruitment and funding challenges will also continue over the next five years as the division workforce ages and more retirements occur. DRMS will strive to provide training and maintain adequate staffing as this transition occurs.

Tackling the most difficult abandoned mined land issues, including water quality issues, also involves dealing with long-term liability responsibilities which need to be worked out between landowners and state and federal government agencies. Without federal “Good Samaritan” legislation (provides liability waivers for organizations and groups who want to do water quality improvement projects in areas impacted by prior mining activity) many projects will continue to go unfunded and long-term objectives for environmental clean-up and reduction of mining-impacted stream water metals loading will not be realized.

DRMS – PERFORMANCE MEASURES

DRMS-1. Mined Land Reclamation

Objective: Reclaim coal and minerals mined acres to a beneficial post mining land use

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Final bond release – expressed as a percentage of the total number of mined acres recorded per fiscal year.	Benchmark	5.0%	5.0%	3.0%	3.0%
	Actual	1.0%	2.0%	Unknown	Unknown

Strategy: This is a measure of lands reclaimed per year at mining operations and thus compliance with Colorado’s mining laws. Mines are required to reclaim all areas disturbed by mining to a beneficial post mining land use such as rangeland, cropland and/or wildlife habitat. Reclamation includes reestablishing the approximate original land surface, reapplication of topsoil and revegetation. Reclamation is guaranteed by the submittal of financial assurance instruments such as corporate surety bonds or cash instruments. The bonds are held by the state. The bonds and reclamation liability are not released until all reclamation standards are met. This measure is expressed as a ratio of total acres reclaimed and for which the bond and reclamation liability are released, over the total acres disturbed by mining in a single fiscal year. The percentage of lands reclaimed will vary from year to year. An increasing percentage of reclaimed lands will indicate Colorado’s mines are trending towards reclamation rather than operational

expansion, whereas a decreasing percentage of reclaimed lands will indicate a trend towards actively expanding mining operations. The benchmarks are derived from past acreage release activity and industry trends.

Evaluation of Prior Year Performance: This measure is contingent on mine operators submitting applications for release of acreage. DRMS cannot mandate that operators request release; however, regulatory operations including ongoing permitting, inspection and extensive consultation with mine personnel and involved landowner stakeholders are implemented to encourage expeditious, efficient and successful reclamation.

DRMS-2. Regulate Mining

Objective: Protect the environment by ensuring regulatory compliance at coal and mineral mine sites.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The percent of inspected coal and mineral mine sites that are in regulatory compliance annually.	Benchmark	100%	100%	100%	100%
	Actual	97%	97%	Unknown	Unknown

Strategy: This is a measure of overall regulatory compliance for the mine sites that were inspected in a single fiscal year as compared to the ideal of 100% compliance at inspected sites. Mine operators manage the sites to ensure protection of environmental resources, minimize onsite impacts, and prevent offsite impacts. Inspections that result in no violations being cited offer a measure of this goal (percent of inspected sites in compliance). The Mined Land Reclamation Board and the Division determine when a permit is in violation of statutes, rules or regulations. The benchmarks reflect the division’s goal to achieve total compliance.

Evaluation of Prior Year Performance: The percentage of mine sites exhibiting compliance remained relatively constant at 97% as compared to previous years. The percent of mine sites inspected and in compliance will be a function of various factors.

Frequency of inspections and regulatory presence in the field may influence this percentage. As the DRMS increases inspection frequency, the mine operators may be more proactive in maintaining mine site compliance. An increased inspector presence also improves the probability that regulatory outreach and education will further facilitate operator initiatives to maintain compliance.

DRMS-3. Safeguarding/Reclamation of Abandoned and Inactive Mines

Objective: Reclaim or safeguard abandoned mine hazards to restore lands to beneficial use and prevent accidental deaths and injuries to the public.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Percentage of abandoned mine features reclaimed/safeguarded out of a baseline inventory of 23,000 total project units¹.	Benchmark	36.0%	40.5%	42%	43%
	Actual	38.6 %	40.5%	Unknown	Unknown

Strategy: This is a measure of the cumulative percentage of hazardous features safeguarded/reclaimed at abandoned mine sites relative to the original estimated number of features from statewide inventories conducted between 1980 and 2009¹. This inventory is updated as additional problems are encountered in the field and addressed as part of on-going projects. The baseline is 23,000 estimated hazardous features or “units” associated with abandoned and inactive mines in Colorado that existed at the inception of the program. The ability to address the remaining roughly 60% of hazardous abandoned mine features is entirely dependent on the amount of federal and state funding available to the program each year. At present funding levels, the program is only able to design, bid and construct closures on 350 to 450 hazardous mine openings each fiscal year. Federal funding for this program is set to decline in the next 5 years, therefore this measure is expected to continue increasing incrementally, but at a reduced rate of perhaps 200 to 300 mine closures per year. The benchmarks reflect these projected federal funding levels and prior year accomplishments.

By reclaiming and safeguarding abandoned mine hazards, land is put back into productive use, and serious accidents or deaths are prevented, saving both taxpayer and private dollars by reducing costs associated with emergency response, search and rescue, and medical and accident insurance costs. Preventing accidents and deaths in abandoned mines in the mountain areas and around old mining towns now turned to popular tourist attractions (Central City, Breckenridge, Leadville, Telluride, Silverton, Ouray, Crested Butte etc.) promotes and protects tourism, which in turn increases local income and tax revenues for both the State and local governments.

Evaluation of Prior Year Performance: The benchmark was met in FY2011-12. In addition to safeguarding another 455 hazardous mine openings, the performance measure reclaimed 220 acres of abandoned or inactive mined land, putting over \$7.2 million in reclamation expenditures directly into Colorado’s construction and engineering–consulting sectors. Abandoned mine reclamation includes several different aspects including safeguarding, historic preservation, economic stimulation, and environmental clean-up. Project activities include field investigations, project development, project design, NEPA (National Environmental Protection Act) compliance, realty work, construction contract bidding and management, site construction and reclamation, construction inspection, as well as site monitoring and maintenance of prior project work. The program also performs reclamation at coal mine fires. Coal mine subsidence areas are not reflected in this measure, but are included in the 220 acres of land reclaimed.

¹Source for abandoned mine hazards baseline inventory: Colorado’s Inactive Mine Reclamation Plan/Inventory, Colorado Division of Mined Land Reclamation, 1980. This multi-year on-ground effort inventoried abandoned coal and hardrock mining hazards throughout the state. Based on this work, it was estimated that there were approximately 23,000 hazardous features or “units” related to abandoned and inactive mines in Colorado at that time.

Objective: Reclaim and safeguard forfeited mine sites from the effects of mining to restore lands to beneficial use, protect lands and waters from environmental releases, and prevent accidental deaths and injuries to the public.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Percentage of completed reclamation projects out of a baseline inventory of 252 forfeited mine sites.	Benchmark	74%	82%	87.5%	89%
	Actual	76%	84.3%	Unknown	Unknown

Strategy: This is a cumulative percentage measure of reclamation projects that have resolved environmental and public safety problems at forfeited mine sites, relative to the total number of forfeited sites that existed in the permit system database between 1983 and 2008. As of July 2009, the current total number of forfeited sites is 252. The number of revoked and forfeited mine sites is continually updated in the permit system database as additional permits are revoked (approximately 2-3 per year) and their corresponding bonds forfeited. The benchmarks are based on prior year accomplishments and the technical difficulty of the remaining sites.

By reclaiming and safeguarding forfeited mine sites, land is put back into productive use, and serious environmental releases, accidents and deaths are prevented, saving both taxpayer and private dollars by reducing costs associated with emergency response, emergency environmental cleanups, and medical and accident insurance costs. Preventing accidents and deaths at forfeited mine sites along streams, rivers, and around old mining towns now turned to popular tourist attractions (Central City, Leadville, Silverton, Ouray, Crested Butte etc.) promotes tourism, improves scenic vistas in mountain areas, and increases private tourism income and associated tax revenues for the State and local governments.

Evaluation of Prior Year Performance: The benchmark was exceeded in FY 11-12. A total of 21 forfeited mine sites were addressed and removed from the backlog list during this period. Multiple smaller-bonded projects were combined together in purchase-order contracts to create more efficiency and gain an economy of scale for contracting and reclamation construction. In several cases the forfeited mine sites have not been maintained and require safeguarding and environmental protection. Some sites were found to have hazardous materials issues that were not originally foreseen during bonding and permitting, including asbestos testing and disposal, and other toxic chemicals and substances such as cyanide and metallurgical processing reagents. Hazardous materials testing and disposal requirements have increased the costs of reclamation.

DRMS-4. Environmental Restoration at Inactive Mines

Objective: Reduce stream degradation caused by past mining to restore lands to beneficial use and improve water quality and aquatic life in Colorado's watersheds.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Number of water quality improvement projects completed on streams impacted by legacy mining, expressed as a percentage of a baseline of 133 approved legacy mining- related TMDLs.	Benchmark	12.5%	17%	31%	38%
	Actual	15 % (Actual data for new measure)	24 %	Unknown	Unknown

Strategy: This measure compares the number of mining-related water quality improvement projects performed by DRMS each year to a total of 133 currently documented pollution impairments related to legacy mining and natural background metals loading in Colorado's streams and rivers. The Inactive Mine Reclamation Program reclaims hardrock mine waste and performs source controls work to incrementally address these 133 separate TMDL's² (Total Maximum Daily Loads) that have exceeded allowable standards for metals and/or acidity. In simpler terms, there are 133 stream segments where water quality is affected by historic mining operations, which the Division is attempting to address. This performance measure will measure the Division's success in completing water quality improvement projects to address these 133 water quality problems. Mining related nonpoint source pollution in Colorado is widespread and diverse. Stream acidity and dissolved metals resulting from past mining and milling activities combines with some areas of natural background loading to contribute to the contamination of the state's water resources. Often there are multiple mine reclamation projects that occur year to year as funds permit at individual sites on the same stream segment, as well as multiple projects on the same mine site where there are complex site characteristics. These reclamation projects ultimately result in an incremental improvement to water quality that, combined with the other projects on a

segment, eventually result in measureable stream water quality improvements over a period of from 2 to 5 years following construction. As vegetation is reestablished, and geochemical and hydrologic equilibrium occur at each site post-construction, stream water quality is re-measured by the Colorado Department of Public Health and Environment (CDPHE) and aquatic bio-assessments are performed by the Division of Parks and Wildlife on a biennial to 5-year period for each impaired stream segment. The CDPHE *Measureable Results Program* is used to prioritize the remaining loading sources on impaired stream segments for future funding and reclamation projects. The ability to address the remaining impacted stream segments is entirely dependent on the amount of federal and state funding available to the program each year. The benchmarks are based on prior accomplishments and cost share opportunities with federal partners.

By improving water quality and restoring aquatic communities in Colorado’s mountain streams, land is put back into productive use and fisheries are improved, saving both taxpayer and private dollars by reducing costs associated with releases of toxic materials to the environment, improving availability of irrigation water, and increasing the attractiveness of mountain streams for rafting and fishing in areas now turned to popular tourist attractions (Central City, Idaho Springs, Minturn, Silverton, Ouray, Telluride, Crested Butte etc.) This helps promote and protect tourism, improves scenic vistas in mountain areas, and ultimately increases private tourism income and associated tax revenues for both State and local communities where stream degradation has inhibited recreational and agricultural uses.

²TMDL: Total Maximum Daily Load (TMDL) is a measure of dissolved pollutants or chemical constituents of Colorado’s streams, rivers, and lakes. As required under the Federal Clean Water Act (CWA), a TMDL must be developed by the State for each stream segment. The TMDL represents what the water quality should be, based on the use and classification of the stream or river. These standards are adopted and then approved by the EPA. If impairments are found, that is, if the actual water quality in the stream is found to be worse than the TMDL allows, Colorado must develop a plan to reduce or eliminate the pollutants, or face lawsuits from Environmental Groups and the EPA under the Clean Water Act for failure to address the impairments.

Evaluation of Prior Year Performance: The benchmark was exceeded in FY 2011-12. In addition to conducting 32 water quality improvement projects at 20 legacy mining sites, the program put over \$1.5 million in expenditures directly into Colorado’s construction and engineering-consulting sectors. In future years the baseline number of impairments will change due to elimination of impairments through ongoing reclamation work, and inclusion of new impairments as the remaining streams in Colorado are assessed and TMDL’s adopted. The baseline number of impairments (the number of TMDL-related water quality issues) should be adjusted every 5 years.

DRMS-5. Mine Safety

Objective: Protect the safety of Colorado's miners

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Average injury rate at mines that received training from the Mine Safety and Training Program as compared to target (previously national) injury rates, as measured in “non-fatal days lost” (NFDL).	Benchmark	National NFDL Coal 2.50 Non-coal 1.96	National NFDL Coal 2.452 Non-Coal 1.793 <i>*Benchmark was changed in FY 2012-13 to focus on Colorado data.</i>	Colorado/ MSTP Trained NFDL Coal 2.0 Non-Coal 2.1	Colorado/ MSTP Trained NFDL Coal 1.95 Non-Coal 2.0
	Actual	Colorado NFDL for MSTP Trained Miners- Coal 2.31 Non-coal 1.84	Colorado /MSTP Trained NFDL Coal 1.979 Non-Coal 2.237	Unknown	Unknown

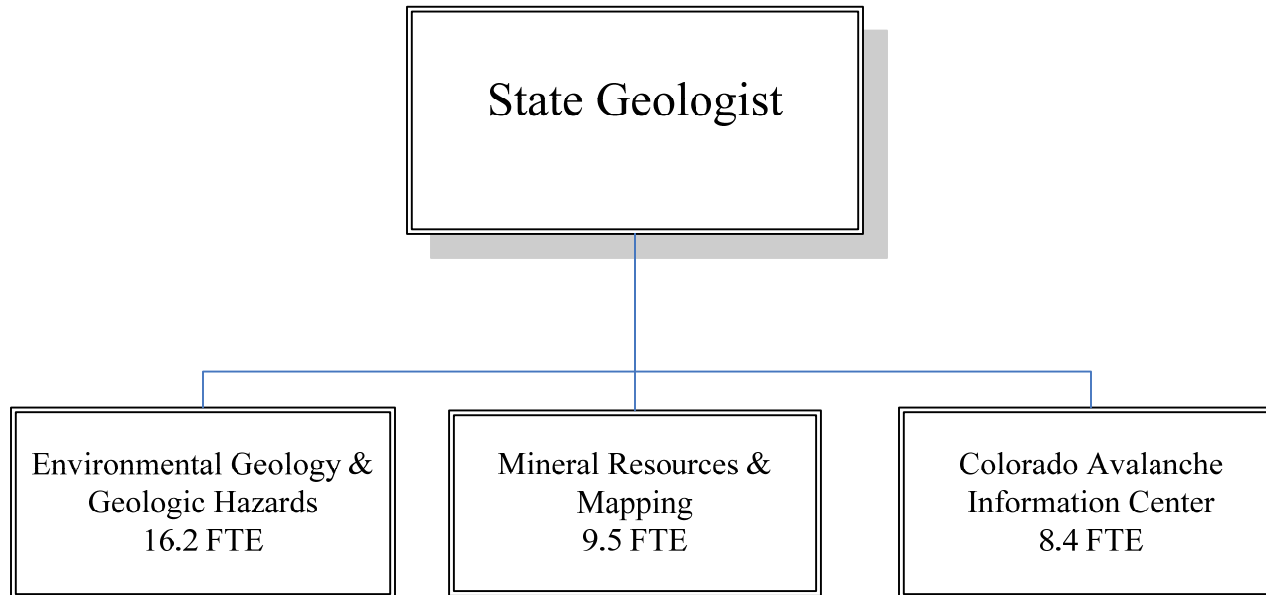
Strategy: The “non-fatal days lost” (NFDL) rate is a calculation based on specific types of injuries that occur per 200,000 miner work hours. In FY 2010-11 and FY 2011-12, the measure compared NFDL injury rates for coal and non-coal mines to the National NFDL injury rates. Beginning in FY 2012-13, the measure will compare injury rates for mines trained solely by Colorado’s MSTP to target benchmarks that reflect the goal of fewer injuries/a lower NFDL rate per year.

Evaluation of Prior Year Performance:

- **Coal Mines** - Last year, the NFDL rate for Colorado coal mines receiving MSTP services was 1.979 as compared to a national rate of 2.452.
- **Non-Coal Mines** - Last year, the NFDL rate for non-coal mines receiving MSTP services was 2.237 as compared to a national rate of 1.793. MSTP is providing targeted training to mines that have had safety problems and significant numbers of injuries in the past.

MSTP's assistance to mines for the goal of reducing their lost-time injury rates and protecting the safety of their mine workers is achieved by providing effective, consistent and current mine safety and health training, auditing mine safety practices and developing and distributing new, innovative training tools to mine safety personnel and mine employees. As Colorado's mining industry recovers, larger numbers of experienced mine employees are retiring and mine operators are hiring large numbers of inexperienced mine employees. These employees must learn to operate larger, technologically advanced equipment in challenging geologic environments in a safe and healthful manner. Adequate training and certification of coal mine officials and miners is critical to a safe coal mining industry in Colorado.

Colorado Geological Survey (CGS)



\$4,805,429 Total Funds 34.1 FTE
\$2,990,746 CF \$858,714 RF
\$955,969 FF

Mission of the Colorado Geological Survey:

Building vibrant economies and sustainable communities free from geologic hazards, through good science, collaboration, and sound management of mineral, energy and water resources.

Vision of the Colorado Geological Survey:

Protect public safety and enhance the economy of Colorado.

CGS Delivers Its Services Through Three Main Programs:

- The **CGS Environmental Geology and Geologic Hazards Program** protects people and property by reducing or eliminating risks from geologic hazards and lack of safe, adequate water. Across the state, businesses, citizens, state agencies, and local governments make informed and smart land use and business decisions because of the Survey's work. Average citizens and large companies alike, use our geologic hazard, water quality data, and groundwater-supply maps, online tools and on-the ground assistance to avoid or reduce vulnerability and losses to geologic hazards and lack of safe water. Through educational programs, CGS increases the awareness and understanding of these issues throughout Colorado.
- The **CGS Mineral Resources and Mapping Program** improves the sustainability and economy of Colorado. State agencies, private industry, local governments and others utilize our studies, maps, statistical data to responsibly explore and develop critical mineral and energy resources. The state's economy and environment will benefit from CGS's leadership in the studies of CO₂ sequestration and geothermal power generation (a clean, renewable energy source). Colorado's green industry, which is expected to generate \$61 billion in revenue and provide over 600,000 jobs by 2030, utilize our maps and studies of rare earth metals needed for wind and solar production.
- The **CGS Colorado Avalanche Information Center** protects people and property by reducing or eliminating short and long-term risks from avalanches. Avalanches not only take lives and destroy property, they damage local and regional economies as well. Local communities and regional industries all suffer serious economic losses when avalanches close transportation corridors causing lost visitor days and increased transportation costs. CDOT, Colorado's Ski Industry and

others use CGS forecasting, online tools, and maps to avoid or reduce their vulnerability and losses to avalanche hazards. CGS also increases public safety through extensive educational programs and educational aids readily available to the public.

Other Ways CGS Benefits the Citizens and Economy of Colorado

- Public safety is protected by CGS’s quick response to geologic hazard and avalanche disasters across the state.
- CGS prevents large economic losses by working with local governments to place new developments in hazard free areas or to successfully mitigate risks.
- Local, regional, and state agencies make use of CGS groundwater studies and maps to ensure that municipalities, agriculture, and private industry have safe and adequate water supplies.
- Colorado Parks and Wildlife as well as the tourism industry use CGS popular geology guides to promote state parks and geologic wonders throughout Colorado.

CGS -- Statutory Authority:

The statutory authority for the Colorado Geological Survey is found at Title 23, Article 41, Part 2, Colorado Revised Statutes (2012).

CGS PERFORMANCE MEASURES

CGS-1. Avalanche Safety

Objective: Make winter travel and recreation in the Colorado Mountains safer through avalanche safety training and forecasting

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The number of avalanche deaths per 100,000 population per year	Benchmark	0.122	0.122	0.122	0.122
	Actual	0.139	0.137	N/A	N/A

Strategy:

Colorado's population has risen 55% since 1990; however, the number of avalanche deaths per 100,000 population has decreased. Four other states that have similar topography, Alaska, Utah, Montana, and Wyoming, have all experienced a dramatic increase in avalanche deaths per 100,000. As the population continues to increase each year, the CAIC attempts to keep this measured outcome on a downward trend.

Key Products and Customers:

CDOT and local governments use our avalanche forecasting information to reduce the costs of avalanche mitigation and road closures, thereby reducing maintenance costs and economic losses from transportation delays.

The Ski and Recreation Industries, backcountry rescue, guides, and local businesses rely on CGS forecasting, online tools, and maps to access and manage their vulnerability and losses to avalanche hazards.

Evaluation of Prior Year Performance:

The 2011-2012 operating season for the Colorado Avalanche Information Center (CAIC) was marked by a very dry fall that set the stage for very dangerous avalanche conditions during the winter and early spring. By the end of March, the snowpack in Colorado ranged from 75 to 104% of the 30-year average. By the end of May, the snowpack was 7 to 33% of the 30-year average. There were 2,257 avalanches reported to the CAIC between October 2011 and May 2012. In Colorado, there were seven people killed in seven accidents in 2011-12. Two of these accidents occurred within the boundary of an operating ski area. Seven deaths is above the 10-year average of 5.5, and equal to the 2010-2011 season where seven people lost their lives in avalanches. During the last 10 years, 55 people have lost their lives in avalanches in Colorado. There were 50 people caught and 18 people buried in avalanches during the same time period. In 2011-12, the CAIC staff taught 136 avalanche classes to 5,338 students. From November 1, 2011 through May 31, 2012 there were 1,241,802 visits to the CAIC website.

CGS-2. Land Use Review

Objective: Protect people and property by reducing or eliminating short and long-term risks from geologic hazards sound land-use planning and timely Land Use Reviews

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Percentage of Land Use Reviews completed within the statutory deadline	Benchmark	97%	97%	97%	97%
	Actual	97%	97%		

Strategy:

Development in hazard-prone locations continues to increase. Local elected officials and the private sector utilize CGS land-use reviews to reduce or eliminate vulnerability to geologic hazards. CGS communicates hazard risks and integrates mitigation strategies into functional recommendations that are used by local planners and elected officials. State statutes require that CGS complete some types of land-use reviews (subdivisions) within 21 days.

Key Products and Customers:

Government agencies at local, regional and state levels integrate CGS land-use reviews into land-use planning and sustainable development policies. Landowners and private industry also use CGS land-use recommendations to reduce potential future liabilities in areas of known natural or human-induced hazards.

Evaluation of Prior Year Performance:

During FY 2011-12, CGS met its benchmark performance measure of completing 97% of the Land Use Reviews within the statutory deadline of 21 days. This performance measure is an Individual Performance Objective (IPO) metric for all of the Land Use Review (LUR) staff.

CGS-3. Geologic Mapping

Objective: Reduce the impact of geologic hazards on the citizens of Colorado through geologic mapping

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The cumulative percent of the total state’s quadrangles mapped at the 1 to 24,000 scale	Benchmark	22.9%	23.2%	23.3%	23.5%
	Actual	22.9%	23.2%		

Strategy:

Each year, CGS maps geologic hazards, mineral and energy resources, groundwater aquifers, and basic geology in areas of the state where such information is limited or does not exist. State agencies, land managers, local governments and the public use CGS maps to identify and manage natural resources and reduce injuries and economic losses from geologic hazards. The CGS mapping program is overseen by a diverse group of stakeholders that prioritize the areas mapped; highest priority is to complete mapping in areas with high growth rates. The CGS mapping program (STATEMAP) is part of the National Cooperative Geologic Mapping Program. Forty-seven states participate in this program.

Evaluation of Prior Year Performance:

The STATEMAP program has met its performance measure benchmark for FY 2011-12.

CGS-4. Advise Policy Makers

Objective: Provide sound geologic advice and information to a variety of constituencies on the impact of geologic hazards or the geology of ground water

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The percent of counties in the state and state departments receiving assistance in geologic hazards or ground water issues from CGS.	Benchmark	30%	30%	40%	40%
	Actual	34%	45%		

Strategy:

Our assistance work makes communities more resilient and resistant in the face of natural hazards by integrating sound science and hazard mitigation into day-to-day land use decisions. Colorado is subject to severe hazards and weather. At the same time, the state is growing fast, with many people moving to hazard or drought prone areas. Growth in these areas also exposes billions of dollars of private property, public facilities, and infrastructure to damages from geologic hazards and drought. Colorado communities need maps, plans, and strategies for reducing their vulnerable to natural hazards.

The cheapest and easiest approach to geologic hazard problems is to understand, anticipate, and mitigate the problems before they occur. For example, a landslide investigation and mitigation program may cost a few thousand to tens of thousands of dollars, whereas an active landslide, in a key transportation corridor, will cost several millions of dollars to remediate.

The need for studies of ground water in its geological framework grows with each new Coloradan and every drought period. In order for the counties and state departments to fully understand the impact of the current draw on the State’s aquifers and ground water, more geologic information is needed. CGS provides that independent information in the form of studies that it completes and publishes, along with acting as technical advisors to the Interbasin Compact Commission Roundtables.

Evaluation of Prior Year Performance:

CGS met this performance measure goal in FY 2011-12. CGS helped protect public safety by providing thirty-three counties and numerous city councils and boards with geologic hazard and water supply technical support. CGS also assisted the Division of Reclamation, Mining and Safety, the Colorado Department of Transportation, the Governor's Energy Office, and the Colorado Division of Emergency Management.

CGS-5. Promote Responsible Development

Objective: Promote the responsible economic development of mineral and energy resources

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The percent of counties in the state and state departments receiving assistance in mineral and energy resources from CGS	Benchmark	10%	10%	17%	17%
	Actual	11%	18%		

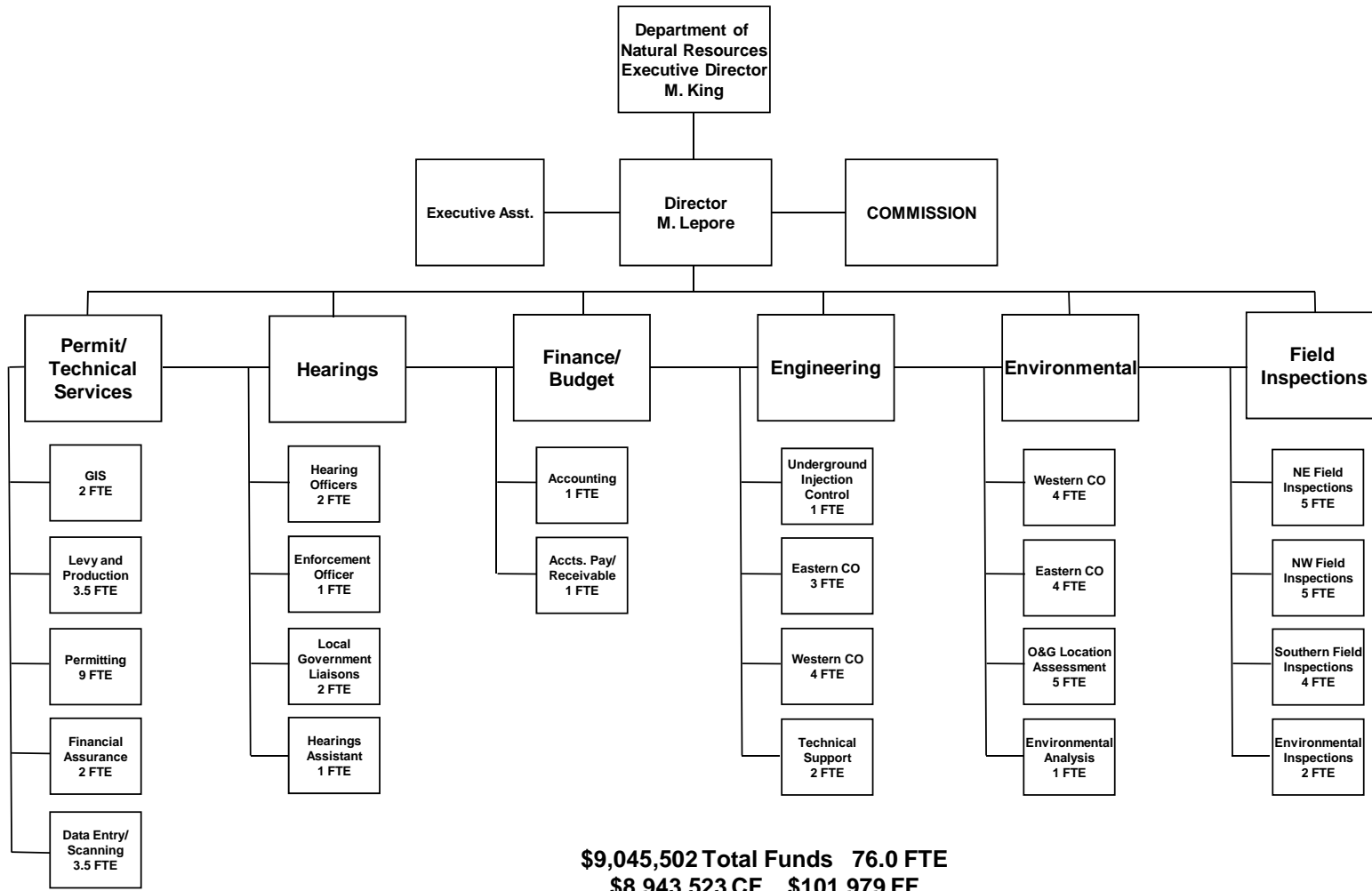
Strategy:

Information about the location and character of mineral and energy deposits and the locations of active mines and quarries are vital to entities that may be planning urban or commercial development. These data may be used to make informed land use decisions. If citizens and local government officials are aware of new exploration trends in their area, plans to accommodate exploration and development of mineral and energy resources can be made, thereby avoiding or mitigating land use conflicts.

Evaluation of Prior Year Performance:

The Mineral and Energy Resources Program assisted a number of counties in FY2011-12. Studies included areas in Moffat County along with numerous mining districts. CGS also provided technical support to numerous counties and mining districts in Colorado.

COLORADO OIL & GAS CONSERVATION COMMISSION



Colorado Oil and Gas Conservation Commission (OGCC)

OGCC -- Description:

Through a largely regulatory role, the Oil & Gas Conservation Commission (OGCC) is charged with fostering the responsible, balanced development of our state's oil and gas resources while protecting the public health, safety and welfare, including the environment and wildlife resources. The OGCC accomplishes this important role through three workgroups:

- Operations -- Environmental protection specialists, engineers and field inspectors in this section ensure technical compliance with the OGCC rules and regulations. Staff reviews information and applications for approval, including production and injection well applications, technical well information, pit applications, land farms, remediation work plans for exploration and production waste cleanup operations and requests to plug and abandon wells. Field inspections are performed to ensure compliance for: drilling, production, and injection wells; well abandonment; pit and landfarm operations; and exploration and production waste cleanup operations. The Operations staff is also responsible for responding to inquiries and investigating complaints. As part of their duty to provide technical expertise, staff recommends enforcement actions and supports enforcement actions before the Commission at hearings for violations of OGCC rules. This section is responsible for identifying, recommending, and managing projects using the Oil and Gas Conservation and Environmental Response Fund (Fund 170).
- Administration and Hearings -- This section assists the Commission¹ in conducting hearings, holding local public forums, developing policies, and implementing rules, regulations, and orders to maximize oil and gas production and revenues for the state, to prevent waste, to protect correlative rights, and to protect public health, safety, welfare and the environment. It acts as a liaison to the Department, the public, and industry regarding OGCC activities. This includes responding to inquiries, investigating complaints, and performing outreach to parties such as the oil and gas industry, local governments and other interested groups to share information about issues of concern, to form committees, and to work on rulemaking. This section also manages the division's financial resources by preparing the annual budget request, and administering appropriations for their effective and efficient use.
- Information -- This section processes, reviews and publishes oil and gas operator-submitted reports and applications and responds to customer inquiries. The information section is responsible for collecting, reviewing for compliance, processing,

¹ The Colorado Oil and Gas Conservation Commission is a nine-member public board charged with implementing and enforcing the Colorado Oil and Gas Conservation Act, Title 34 Section 60. Seven members are appointed by the Governor; the other two members include the Executive Director of the state's Department of Natural Resources and the Executive Director of the Department of Public Health, Safety and the Environment or their designees.

storing and tracking oil and gas well information, production volumes and conservation levy volumes and production values in the State of Colorado in order to supply information on the complete life cycle of the oil and gas wells. This section ensures that oil and gas operations and regulatory reporting are in compliance with the rules, regulations and orders of the Commission, including reviewing all drilling permit applications for regulatory compliance, and verifying that oil and gas operators are properly registered and meet the OGCC financial surety requirements. This section is responsible for managing the Local Area Network and the OGCC Internet Website to disseminate OGCC information to the public, government agencies, and other customers.

OGCC -- Statutory Authority:

Oil and Gas Conservation Act – Title 34, Section 60, Colorado Revised Statutes

OGCC -- Mission:

The mission of the Colorado Oil and Gas Conservation Commission (OGCC) is to foster the responsible, balanced development of Colorado's oil and gas natural resources. Responsible development results in:

- The efficient exploration and production of oil and gas resources in a manner consistent with the protection of public health, safety and welfare, including protection of the environment and wildlife resources;
- The prevention of waste in the production and utilization of oil and gas;
- The protection of mineral owners' correlative rights, and;
- The prevention and mitigation of adverse impacts to the environment and to wildlife resources.

The OGCC seeks to serve, solicit participation from, and maintain working relationships with all those having an interest in Colorado's oil and gas natural resources.

OGCC PERFORMANCE MEASURES

Given the importance of Oil & Gas impacts on water supplies to both the Oil and Gas Conservation Commission and to the Department of Natural Resources, a performance measure related to these issues can be found in the Section titled “DNR-Wide Performance Measures”, at the beginning of this document.

OGCC-1. Surface Disturbances

Objective: Decrease surface disturbance caused by oil and gas activity

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Percent of reclamation inspections that comply with OGCC rules.	Benchmark	86%	86%	90%	90%
	Actual	82%	87%	Unknown	Unknown

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Percent of oil & gas wells that are drilled, pursuant the new rules, horizontally and/or from multi-well pads	Benchmark	36%	36%	85%	85%
	Actual	58%	81%	Unknown	Unknown

Strategy:

The OGCC strives to reduce impacts to the surface by requiring the use of multi-well pads, when practical, and conducting reclamation inspections subsequent to drilling operations. The use of horizontal and directional drilling technologies reduces surface disturbance because multiple wells can be drilled from a common well pad, which is located to minimize impacts to water resources, wildlife, and surface owners. Furthermore, horizontal wells provide the additional benefit of reducing the total number of wells that need to be drilled, thus further reducing impacts to public health, the environment, and wildlife.

Evaluation of Prior Year Performance:

Reclamation Inspections: As field inspectors began in FY 2008-09 to devote more time enforcing interim reclamation rules on a regular and timely basis, the percent of reclamation inspections that complied with OGCC rules was expected to fall in the near term, as it did in FY 2008-09, and gradually improve as oil and gas operators corrected the mistakes that led to failed inspections. The significant improvement from 54% to 87% between fiscal years 2008-09 and 2011-12, was greater than expected but can be attributed to the OGCC's larger, re-organized field inspection staff and increased attention to reclamation by both the OGCC and industry.

Note: To be in compliance, interim reclamation should be in progress, waiting on re-vegetation within 12 months of well completion. The OGCC strives to evaluate progress twice during the 18 month period following well completion. Final reclamation inspections are conducted when the operator requests the release of its financial assurance.

Horizontal and Directional Drilling: The percentage of wells that were drilled horizontally and/or directionally from a common well pad increased from 36% in FY 2009-10 to 81% in FY 2011-12, as a result of the OGCC's and industry's efforts to minimize surface impacts.

OGCC-2. Public Health

Objective: Decrease health, safety, and environmental (other than water) incidences caused by oil & gas operations.

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Total number of citizen complaints that resulted in a Notice of Alleged Violation - per thousand active oil & gas wells	Benchmark	.16	.16	.25	.25
	Actual	.45	.33	Unknown	Unknown

Strategy:

The OGCC diligently and promptly responds to all complaints that are received by the agency. Each complaint is publicly tracked on the OGCC web site until the issue is resolved. Although not all complaints are related to issues that the OGCC has the regulatory authority to resolve, the number of complaints that are received by the agency, and result in a Notice of Alleged Violation, is considered to be one important indicator of the impact that the oil and gas industry is having on the public and how well OGCC regulation is reducing the impact.

Evaluation of Prior Year Performance: Of the 246 complaints received by the OGCC in FY 2011-12, 16 were found to be in violation of OGCC rules. Notices of Alleged Violations (NOAV's) were issued for those 16 incidents. The percentage of valid complaints decreased slightly from the previous year. The total number of complaints also decreased from the 296 reported in FY 2010-11. Not included in the performance measure are the 156 NOAV's issued in FY 2011-12, as a result of routine inspections and other regulatory work, rather than complaints. More inspectors in the field are finding more problems before they become significant enough to generate complaints.

Note: Surface owner requests for water well sampling are included in the complaint figures. Future software development will create a separate category in the OGCC database for these requests.

OGCC-3. Historic Impacts

Objective: Decrease environmental impacts from historic oil and gas activity.

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Number of orphaned oil & gas wells plugged and abandoned and sites reclaimed by the OGCC.	Benchmark	27	27	25	25
	Actual	2	20	unknown	unknown

Strategy:

Since the early 1990’s, the OGCC has had an active orphaned and abandoned oil and gas well plugging and site reclamation program. Occasionally, orphaned and abandoned wells and oil and gas operations sites in need of reclamation are identified by OGCC inspectors or are reported to the OGCC by the public. Typically, these wells and sites pre-date modern oil and gas regulation in Colorado. The orphaned and abandoned well plugging and site reclamation program was established to use funds provided by the regulated industry to prevent impacts to the environment and public health, safety, and welfare that could be posed by these old wells and sites.

Evaluation of Prior Year Performance: In FY 2011-12, the OGCC completed a greater than usual number of projects due to a combination of more funding and the smaller size of most projects, as compared to the projects completed in FY 2010-11.

OGCC-4. Public Information

Objective: Increase opportunities for disseminating information to the public

Performance Measure	Outcome	FY 2010-11 Actual	FY 11-12 Actual	FY 12-13 Estimate	FY 13-14 Request
Number of visits to the Oil and Gas Conservation Commission's website.	Benchmark	931,422	931,422	1,400,000	1,400,000
	Actual	1,119,147	1,383,801	Unknown	Unknown

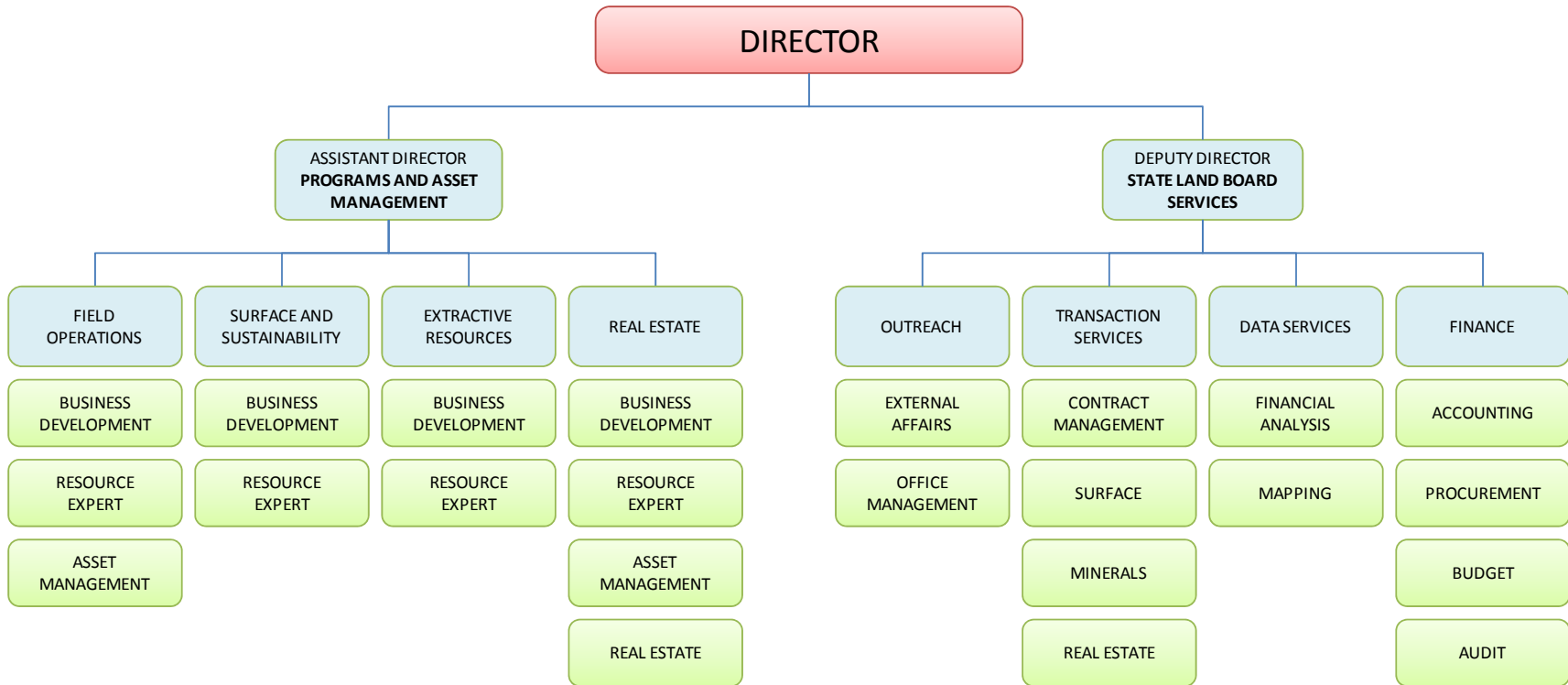
Strategy:

The OGCC's website provides electronic access to valuable information about oil and gas development in Colorado. The website contains all regulatory information that has been submitted for oil and gas wells, which includes, but is not limited to, information regarding permits, well construction, production, complaints, and inspections. Also available are digital well logs and extensive Geographic Information System (GIS) maps that contain over 100 layers, such as wells sites, well spacing orders, oil and gas fields, wildlife information, Bureau of Land Management stipulations, color aerial photography, topography, and water resource information. The OGCC works to continuously improve the volume and quality of data provided to the regulated community, federal, state and local governments, the media, and the general public.

Evaluation of Prior Year Performance:

The continued high volume of individual visits to the agency's website is a reflection of its value to the industry, the general public, and government agencies.

Colorado State Board of Land Commissioners



\$4,974,521 Total Funds	37.0 FTE
\$4,749,521 Cash Funds	\$225,000 Reappropriated Funds

Colorado State Board of Land Commissioners

State Land Board – Description:

The State Land Board operates as a fiduciary for eight trusts. The trusts are: School Trust (accounting for over 98% of total revenues), Public Building Trust, Penitentiary Trust, University of Colorado Trust, Saline Trust, Internal Improvements Trust, Colorado State University Trust, and Hesperus Trust.

In the case of the School Trust, the State Land Board has been mandated by law to:

- Manage an intergenerational trust for the support of public schools;
- Earn reasonable and consistent income over time;
- Establish and maintain a long term Stewardship Trust (300,000 acres) that will be managed to protect and enhance the beauty, natural values, open space, and wildlife habitat of those lands; and
- Not significantly diminish the Trust.

The State Land Board's operations are organized around a director, deputy director, and four sections. These are the Field Operations, Minerals, Real Estate, and Financial Sections.

The Field Operations Section works with state trust land lessees on day-to-day land management issues and challenges, as well as on longer-term initiatives to ensure that natural resources on trust lands are conserved and that the long-term value of the trust asset is maintained or improved. This section also performs property inspections and recommends appropriate land disposals and acquisitions.

The Minerals Section issues leases for production, issues exploration permits, collects royalties, conducts royalty revenue audits, conducts public lease auctions, collects auction bonuses, rentals and advance minimum royalties, sets reclamation bond amounts, approves reclamation for bond release, examines mineral lease tracts for production evaluation, and audits for environmental protection. This section is also responsible for energy leases.

The Real Estate Section provides the asset management for the commercial and other special uses of state trust land, coordinates and provides the technical services needed, and generates strategic investment options for both land disposals and acquisitions. This

section is responsible for oversight of the development portfolio of state trust land including development agreements and entitlement projects.

The Financial Section administers the State Land Board's 19 trust fund accounts (two per trust) and processes 25,000 accounting transactions including allocation of the \$122.8 million in annual revenue. The section directs the \$5.0 million expense budget which includes managing the procurement process and all related construction contracts. Additionally, the section oversees the formulation of the annual budget request and analyzes land transactions and investments considered by the Board. The Financial Section is responsible for oversight and reporting of the Investment and Development Fund.

State Land Board – Statutory Authority:

Federal: Federal Statehood Enabling Act of 1875 (Para. 7-12 and 14 and 15).

State: Colorado Constitution, Article IX, Section 9-10.

Colorado Revised Statutes Title 36, Article 1 through 7.

State Land Board – Mission:

As its constitutional and statutory mission, the Colorado State Land Board protects, enhances, and manages Colorado's permanent endowments of land assets for the reasonable, consistent and ongoing benefit of Colorado's public schools and public facilities, while recognizing that economic productivity is dependent on sound natural resource stewardship, including the protection and enhancement of the beauty, natural values, open space and wildlife habitat of those lands.

State Land Board – Vision:

In the 21st century, Colorado's trust lands will become one of the state's most treasured assets, producing valuable results for each generation of beneficiaries while sustaining enduring value of the trust lands for future generations.

SLB PERFORMANCE MEASURES

Given the importance of school trust revenue to both the State Land Board and to the Department of Natural Resources, a performance measure related to this issue can be found as one of 7 major Department performance measures ("DNR-7 State Land Board Lands"). These performance measures are contained just before the divisional sections of the Strategic Plan.

SLB-1. Agency Cost Effectiveness

Objective: Revenue Production

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp	FY 2013-14 Request
Revenue dollar per \$1 of expenditure	Benchmark	N/A	N/A	\$20.14	\$20.14
	Actual	\$24.06	\$28.56	<u>In progress</u>	In progress

Strategy:

This new performance measure in the FY 2013-14 budget submission tracks the overall cost-effectiveness of the State Land Board in terms of revenue earned per \$1 of operating expenditure. The State Land generates around \$20 in revenue for every \$1 of operating expenditure.

Evaluation of Prior Year Performance:

At \$123 million in FY 2010-11 and \$146 in FY 2011-12, these fiscal years were the highest trust revenue years on record. FY 2011-12 revenues were more than double (100%) higher than prior fiscal years while operating expenditures grew less than 20%. Revenues were driven by one-time oil and gas lease auction or “bonus” revenues related to horizontal drilling technology. Bonus revenues accounted for half of the revenues in FY 2010-11 and FY 2011-12. We expect the bonus revenue to drop in FY 2012-13 and FY 2013-14 with some of the reduction to be backfilled by increased oil royalties, agricultural rents, and commercial revenues.

SLB-2. Property Inspection

Objective: Protect trust assets

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12. Actual	FY 2012-13 Approp	FY 2013-14 Request
Percent of Agricultural Property Inspections Rated Good or Above for Range Conditions	Benchmark	65.5 percent	60.0 percent	65.0 percent	70.0 percent
	Actual	53.0 percent	50.0 percent	<u>In progress</u>	In progress

Strategy:

Beyond monetary value identified in other performance measures, the State Land Board is mandated to protect trust assets and make decisions that promote long term goals of the various trusts. This performance measure incorporates the stewardship duties of the State Land Board and reflects the quality of leased agricultural land. There are five categories of range conditions: Excellent, Good, Fair, Poor, and Unknown (not included).

Evaluation of Prior Year Performance:

Two factors have contributed to the drop in the performance measure in FY 2010-11 and FY 2011-12. The first factor is drought conditions in several parts of the State have had a noticeable impact on the quality of agricultural lands. The second factor is the impact of increase oil and gas development. District Offices are responsible for citing oil and gas wells and enforcing special stipulations. Due to the significant increase in oil and gas development throughout the state, but particularly along the Front Range, district managers have been unable to perform timely property inspections and proactively identify issues that require agricultural lessees to take remedial action. Consequently, the State Land Board has requested an oil and gas field inspector in FY 2013-14 to assist the districts with the oil and gas workload.

SLB-3. Investment and Development Fund

Objective: Pursue Investment opportunities

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Investment and Development Fund Net Present Value estimate	Benchmark	\$20 million	\$20 million	\$81 million	\$81 million
	Actual	\$34.8 million	\$81 million	TBD	TBD

Strategy:

The Investment and Development Fund (36-1-153 C.R.S.) was created to allow the State Land Board to make value added investments in School Trust properties for revenue or land value enhancement. The net present value estimate is a risk-adjusted return. The performance measure is a sum of all the projects funded by the Fund and includes completed, ongoing, and inactive projects. A positive net present value indicates the amount the State Land Board anticipates the Fund will earn above the School Permanent Fund which is considered a “risk free” investment.

Evaluation of Prior Year Performance:

As presented in the Investment and Development Fund Report, delivered to the JBC on November 1, 2011, the I&D Fund continues to serve as a valuable tool for enhancing the value of State Land Board properties. The funds have supported activities that range from fencing and stock-well installation to land entitlement for urban development to staff and consultant resources for developing and executing large projects. Due to these activities, the State Land Board expects to realize a \$1.7 million increase in annual revenue over the next 10 to 20 years and an increase of \$156 million in value over the next 5 to 20 years.

SLB-4. Revenue Recovery

Objective: Ensure that revenues owed to the State Land Board are recovered

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12. Actual	FY 2012-13 Approp	FY 2013-14 Request
Annual Audit Revenue	Benchmark	\$400,000	\$400,000	\$600,000	\$600,000
	Actual	\$1,076,547	\$ 590,502	TBD	TBD

Strategy:

This performance measure shows the effectiveness of the State Land Board’s mineral audit program. The program has 3.0 FTE auditors, contract dollars, and uses the Department of Revenue for specific audits.

Evaluation of Prior Year Performance:

Audit revenues are inherently variable over time. After the launch of an audit program, revenues can be substantial for a number of years and the State Land Board audit program has, in fact, averaged roughly \$1.0 million in audit revenue each year for the past decade. In time however, many factors that drive audit recoveries are addressed by the lease-holders and, with improved compliance, revenues begin to decline. Since the program has been in place for over a decade, our expectation is that audit recoveries will not remain at current levels in perpetuity. Current indications suggest that improved compliance, especially with large payers, will begin to reduce audit revenues in the coming years. When evaluation performance, it is worth noting that the cost of the 3.0 FTE in terms of salary and benefits is roughly \$180,000.

Colorado Division of Parks and Wildlife

Division of Parks and Wildlife -- Description:

A major part of the mission of the Colorado Division of Parks and Wildlife is to perpetuate the wildlife resources of the state and to provide people with the opportunity to enjoy them. Per Section 33-1-101(1), C.R.S.; “It is the policy of the state of Colorado that the wildlife and their environment are to be protected, preserved, enhanced and managed for the use, benefit, and enjoyment of the people of this state and its visitors. It is further declared to be the policy of this state that there shall be provided a comprehensive program designed to offer the greatest possible variety of wildlife-related recreational opportunity to the people of this state and its visitors and that to carry out such program and policy, there shall be a continuous operation of planning, acquisition and development of wildlife habitats and facilities for wildlife-related opportunities.”

Under S.B. 11-208, the former Division of Wildlife was merged with the former Division of Parks and Outdoor Recreation, effective July 1, 2011. As a result, another major mission of the Division of Parks and Wildlife is to manage Colorado’s state park system and outdoor recreation programs. Attracting over 12 million visitors per year, Colorado’s 43 state parks and statewide recreation programs are a vital cornerstone of Colorado’s quality of life, offering some of the highest value outdoor recreation destinations in the state. These state parks include a variety of landscapes to match the state’s geography, from urban playgrounds to back-country retreats, from mountain lakes to whitewater adventure. Colorado State Parks enable everyone, regardless of age, background, economic or social circumstance, to enjoy the state’s internationally famous natural beauty and experience a wide range of activities. Park visitors and beneficiaries of State Parks’ many statewide outdoor recreation programs can literally “re-create” themselves both physically and spiritually. The parks are a priceless, irreplaceable legacy for future generations. Providing enjoyment of the outdoors and protecting the legacy is a key part of this mission. Colorado’s state park system includes more than 4,200 campsites, 42 cabins and yurts, and encompasses 225,260 land and water acres. Several statewide programs including Trails, Boat Safety, Commercial River Outfitter Licensing, and Registrations for vessels, snowmobiles, and off-highway vehicles are also administered through the Division of Parks and Wildlife. Through hunting, fishing, wildlife viewing, state park visitation, and outdoor recreation, the Division is an integral revenue source to Colorado’s growing economy.

DPW -- Statutory Authority:

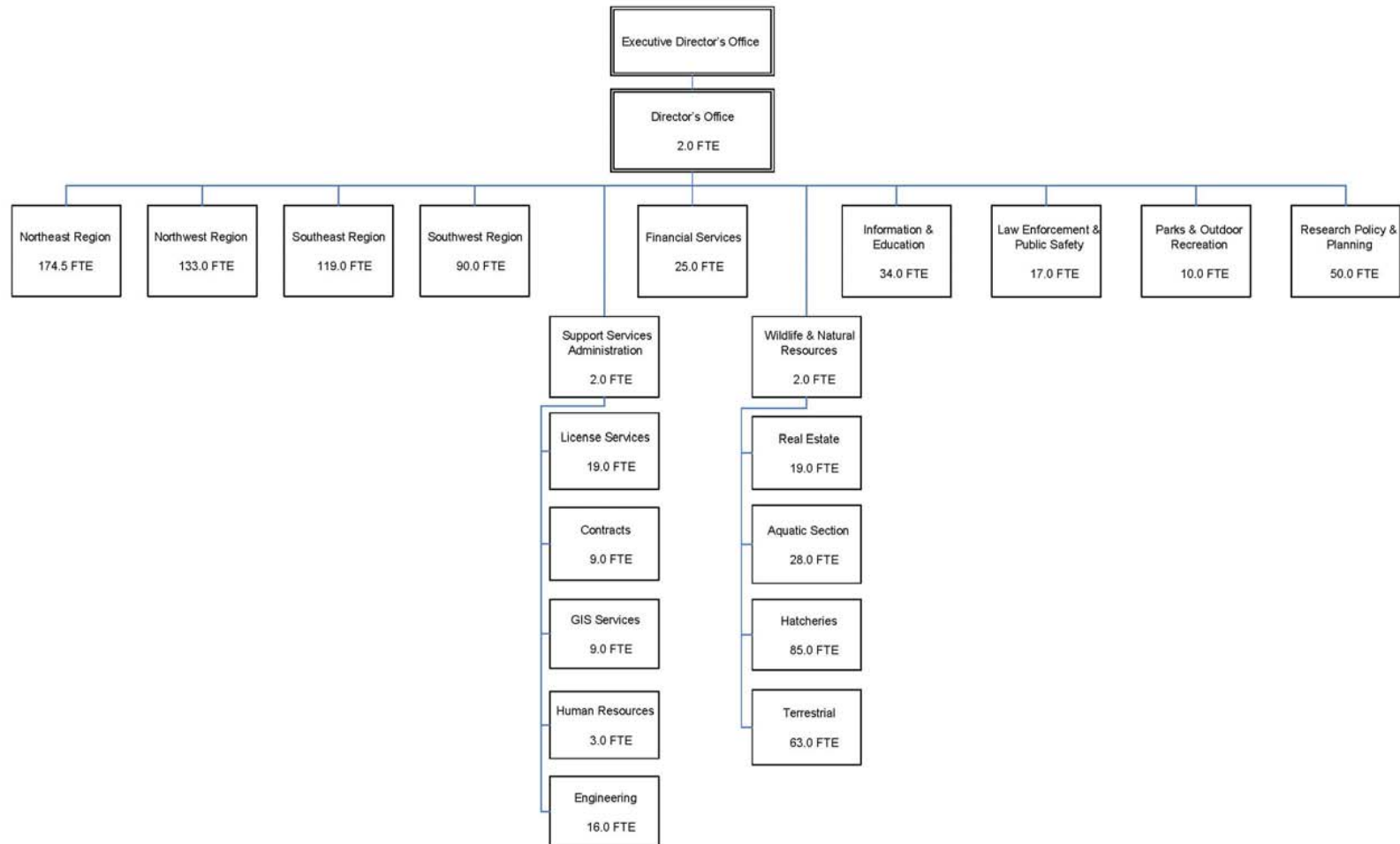
Title 33, Articles 1 through 9, Colorado Revised Statutes, relate to operation of wildlife programs

Title 33, Articles 10 through 15, Colorado Revised Statutes, relate to the operation of state parks and outdoor recreation programs.

Colorado Division of Parks and Wildlife

909.5 FTE 130,578,375 TF

117,697,681 CF 12,880,694 FF



DIVISION OF PARKS AND WILDLIFE (DPW) PERFORMANCE MEASURES

Given the importance of species conservation, hunting, fishing, and outdoor recreation to both the Division of Parks and Wildlife and to the Department of Natural Resources, objectives related to these programs are listed as three of seven major Department performance measures (see performance measures “DNR-1 Species Conservation”, DNR-2 “Outdoor Recreation”, and DNR-4 “Wildlife Recreation” at the beginning of the Strategic Plan).

DPW-1. Habitat

Objective: Protect wildlife habitat

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Number of habitat acres protected (Cumulative)	Benchmark	820,000	840,000	1,030,000	1,060,000
	Actual	889,011	1,006,435	Unknown	Unknown

Strategy:

Habitat protection is a crucial component in the preservation of Colorado’s wildlife and as such is a high priority for the DPW. Property rights placed under DPW ownership or easement assures the public of long term, perpetual management to provide for recreation access and to maintain viable wildlife habitat. For this performance measure, the term “protected” means to preserve and enhance wildlife habitat or to provide public recreation access, or both. The performance measure calculations exclude lands owned by the State Land Board and leased by DPW for hunting and fishing recreation purposes.

Evaluation of Prior Year Performance:

As of FY 2010-11, the DPW has exceeded its benchmark by 69,011 acres, which is approximately 20% over the target. Of this total acreage, 405,518 acres have been acquired through fee title, 168,911 acres have been acquired through perpetual conservation

easements, 54,005 acres have been acquired as perpetual public access easements, 114,842 acres through third-party perpetual conservation easements, and 145,735 acres have been acquired as leasehold interests (excluding SLB Statewide lease agreement).

As of FY 2011-12, the DPW has exceeded its benchmark by 166,435 acres, which is approximately 8% over the target. Of this total acreage, 397,380 acres have been acquired through fee title, 175,191 acres have been acquired through perpetual conservation easements, 83,028 acres have been acquired as perpetual public access easements, 168,450 acres through third-party perpetual conservation easements, and 182,386 acres have been acquired as leasehold interests (excluding SLB Statewide lease agreement).

DPW-2. Public Awareness

Objective: Raise public awareness of the nature and purpose of wildlife management

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Approp.	FY 2012-13 Approp.	FY 2013-14 Request
Percentage of the State’s public who are aware that license sales help manage all wildlife in Colorado.	Benchmark	80	80	85	85
	Actual	88	83	Unknown	Unknown

Strategy:

Educating the public (including school children and adults) about wildlife and wildlife management is a key component of the DPW’s mission. The DPW utilizes numerous programs to reach a variety of audiences including Project WILD, Angler Education, wildlife festivals, the Wildlife Management Public Education Council (Wildlife Council), Colorado Outdoors magazine, as well as diverse and varied stakeholder meetings. Public involvement is measured primarily through annual surveys of the public. Benchmarks are chosen based on national and state research that approximately 10% of the population are anti-hunting or against traditional forms of wildlife management. The CPW assumes that between 80%-90% public awareness is a reasonable benchmark.

Evaluation of Prior Year Performance:

The DPW education programs are all designed to promote the benefits of wildlife management. The Wildlife Council has just completed its sixth year of aggressively promoting the benefits of wildlife management. Survey results indicate that over 83 percent

of people surveyed comprehended the message about the benefits of wildlife management. The Division will continue to work with the Wildlife Council to promote the value of wildlife management and encourage people to hunt, fish, and get outdoors through media campaigns in TV, radio, and other markets.

DPW-3. Park Acres

Objective: Provide sustainable outdoor recreation settings, statewide programs and education opportunities to keep pace with the rising demands, needs, and diversity of Colorado citizens and visitors.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Acres of State Parks land managed per capita	Benchmark	.08	.08	.08	.08
	Actual	.07	.08	Unknown	Unknown

Strategy:

The Division operates 43 State Parks that provide outdoor recreation opportunities for citizens throughout the state. The state parks and statewide recreation programs are a vital cornerstone of Colorado’s economy and quality of life. The Division actively manages a total of 225,270 land acres among all parks and 178,474 acres in 93 Designated Natural Areas. The 2010 Colorado population from the most recent 2010 U.S. Census is 5,024,748. Based on these figures, the Division manages .08 acres of land per capita. The desired outcome for this performance measure is an increase in the number of land acres managed by the Division to keep pace with the increase in number of residents of Colorado. This is consistent with the Division-wide Strategic Plan Recreation Goal which states that State Parks will: “Provide sustainable outdoor recreation settings, statewide programs and education opportunities to keep pace with the rising demands, needs, and diversity of Colorado citizens and visitors.” The Division has several options for increasing the amount of acreage it actively manages, including acquiring buffer parcels adjacent to existing parks; acquiring inholdings within existing parks; and increasing the level of management on properties that the agency currently owns but are not yet open to the public (Staunton and Lone Mesa State Parks, for example).

Evaluation of Prior Year Performance:

During FY 2011-12, the Division only added very minor inholding property acquisitions, totaling roughly 13 acres. The most recent data available shows population has been growing at about 0.9 percent per year. Partly due to this slowing population growth, this performance has been reached in the FY 2011-12.

DPW-4. Campsite Usage

Objective: Retain current and acquire new customers through exceptional service and by improving State Parks' visibility with innovative marketing.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Percentage of occupancy at campsites	Benchmark	18.0%	18.0%	19.5%	20.0%
	Actual	19.0%	19.0%	Unknown	Unknown

Strategy:

There are more than 4,200 campsites in the Colorado State Parks system. The percentage of these campsites that are occupied during prime camping season (roughly April through October) is a key indicator of the overall popularity of the system. This percentage can also be used to extrapolate other important information, including revenue stream trends and the degree to which the Division is meeting visitor expectations. The desired outcome for this performance measure is an increase in the percentage of occupancy per total rental nights available at campgrounds each year and is consistent with the Division-wide Strategic Plan Marketing Goal which states that State Parks will: “Retain current and acquire new customers through exceptional service and by improving State Parks’ visibility with innovative marketing.” The agency has a number of strategies to achieve this outcome, including marketing efforts that would improve the mid-week reservations (when occupancy is at the lowest level).

Evaluation of Prior Year Performance:

Occupancy was in line with agency projections. Given the Division’s goal to retain current and acquire new customers, the benchmark for this performance measure was raised from 18.0 percent in previous years to 19.5 percent in FY 2012-13 and 20.0

percent in FY 2013-14. This adjustment also reflects that actual performance has been 19.0 percent in each of the three last actual years.

DPW-5. Park Stewardship

Objective: Improve and sustain the ecological, scenic and scientific assets in and around state parklands through proactive stewardship.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Establish resource management practices and maintain the resources in good condition for all state parks	Benchmark	70%	70%	70%	70%
	Actual	69%	69%	Unknown	Unknown

Strategy:

The Division needs to provide and promote a systematic framework for addressing the changing values and opportunities on state lands which recognizes and utilizes the current potential for these properties while preserving and enhancing the quality of the parks for current and future generations. Every park has a resource stewardship plan with individual goals to protect key resources, but the condition of the vegetation is one overall measure that can be informative about resource quality over time and can be measured with GIS. This measure does not directly take wildlife or water quality measures into account which is important at many parks. This measure is affected by how much integrated weed management, fire mitigation work and native re-vegetation is completed by the parks, as well as by how much visitors and uses are managed. This performance measure is based on the percentage of acreage within Colorado State Parks that is rated at the Good or Excellent level in relation to total park acreage. Monitoring will be implemented as part of the Stewardship program. Another measure is the condition of the 93 designated Colorado Natural Areas. This is reported by 3 sources annually: volunteers, park staff visits, and Colorado Natural Areas Program (CNAP) staff visits. The report includes an overall condition rating of excellent, good, fair or poor. The rating would be the percentage of Natural Areas in good to excellent condition. These measures are consistent with the Division-wide Strategic Plan’s

Natural Resource Goal which states that State Parks will: *“Improve and sustain the ecological, scenic and scientific assets in and around state parklands through proactive stewardship.”*

Evaluation of Prior Year Performance:

For FY 2011-2012, the proportion of total acreage in Colorado State Parks that is rated at the good or excellent level was 69%. In FY 2011-2012, the Stewardship Program has focused on identification of non-native plant areas through mapping and field inventory; development of integrated weed management plans at several parks; selective application of herbicides at most of the parks, and; restoration with native grasses, shrubs and trees best suited for habitat improvements. Hazardous tree removal has played an important role in these efforts as well, especially in parks faced with significant forest pest invasions (e.g., Steamboat Lake, Pearl Lake, Golden Gate Canyon, and State Forest State Parks). A large portion of the Division’s efforts are cooperative, with local county weed control coordinators, county land use officials, the Colorado State Forest Service, and adjoining landowners playing an important role.

DPW-6. Customer Satisfaction

Objective: Apply effective, accurate and reliable information for the analysis, planning, and implementation of all decisions.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Annual customer satisfaction survey	Benchmark	77%	77%	92%	92%
	Actual	91%	91%	Unknown	Unknown

Strategy:

The concept behind this performance measure is that the Division would email on an annual basis a customer satisfaction survey to customers of state parks. This survey would consist of a set of questions that would remain the same each year and would be returned via email. The survey would help measure overall visitor satisfaction with respect to a number of natural resource, recreation, safety, education, and park planning criteria. The performance measure would be comprised of a percentage of

customers that rate their experience with State Parks at the Good or Excellent level with respect to the criteria outlined in the survey. Over time, the Division's desired outcome would be to maintain the level of satisfied customers and increase that level by one or more percentage points each year. Questions on the survey would break down aspects of the visitor experience, such as law enforcement, customer service, resource quality, recreation opportunities, and level of park development. This performance measure is consistent with the Division-wide Planning Goal which states that State Parks will: "Apply effective, accurate and reliable information for the analysis, planning, and implementation of all decisions." The above measurement is the percentage of customers that rate their experience at state parks as good or excellent.

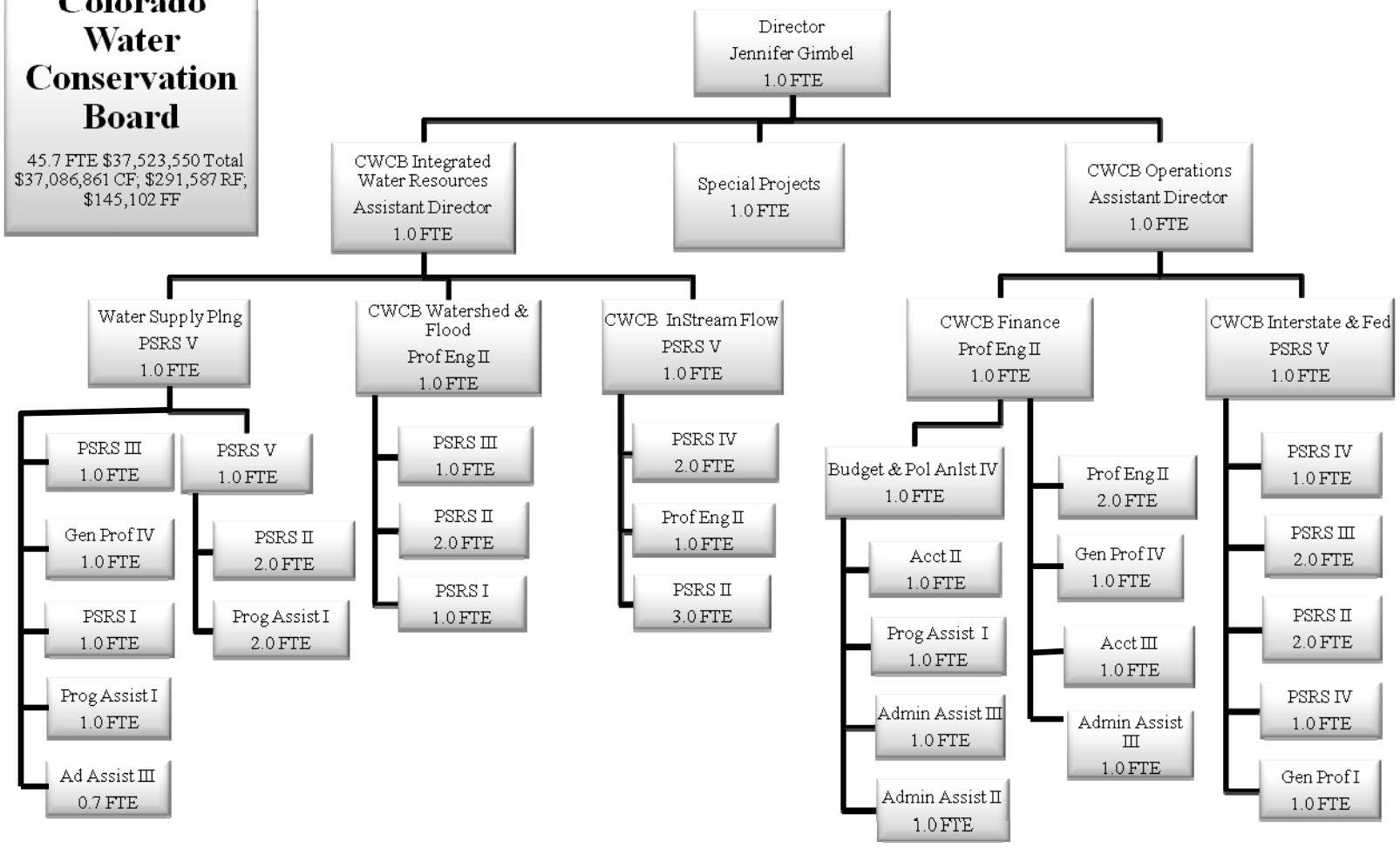
The recent Corona Research Market Assessment Study indicates that 91% of all visitors ranking the quality of their experience as good or excellent.

Currently, Colorado State Parks does not have a systematic way of calculating this performance measure on an annual basis. During the next fiscal year, Colorado State Parks staff will attempt to either establish a way of capturing this performance measure for future annual reporting purposes or develop an alternative performance measure.

Evaluation of Prior Year Performance: Customer satisfaction surveys are only undertaken once every several years. Performance shown above reflects the most recent survey of state park users undertaken during the summer of 2010. Based on comments from the State Auditor's Office and legislators, the Department has updated the benchmark for this performance measure and hopes to achieve 92% customer satisfaction in its next survey.

**Colorado
Water
Conservation
Board**

45.7 FTE \$37,523,550 Total
\$37,086,861 CF, \$291,587 RF,
\$145,102 FF



Colorado Water Conservation Board (CWCB)

CWCB -- Description:

The CWCB was created in 1937. It is responsible for water supply protection, flood protection, water supply planning and finance, stream and lake protection, water conservation and drought planning, intrastate water development and management, as well as the management of related water information and educational materials. The CWCB functions under the following five major programmatic areas:

The **Interstate, Federal, and Water Information** Section protects the State's ability to utilize its compact allocations both interstate and intrastate, ensures effective support for the administration of international treaties, interstate compacts, and U.S. Supreme Court decisions impacting Colorado's water resources, and participates in the Endangered Species Recovery Programs and similar efforts that maintain Colorado's ability to develop its compact apportioned waters. In addition, this Section promotes the development, implementation, and maintenance of statewide water information management systems. The Section develops, operates, and maintains the Decision Support System (CDSS), as well as maintains the state's Water Resource Information Center (WRIC).

The **Watershed and Flood Protection** Section works to prevent flood damage, support stream restoration efforts, and provide local jurisdictions with technical assistance as well as new and revised floodplain information. The Section administers the Weather Modification Program, manages the Flood Response Fund, Healthy Rivers Fund, and Watershed Protection Fund, and implements executive orders related to Flood Protection.

The **Finance and Administration** Section oversees the Construction Fund and the Severance Tax Trust Fund Perpetual Base Account. The Section also provides funds to agricultural organizations for emergency drought-related water augmentation purposes. In addition, the Section requests Severance Tax Trust Fund Operational Account funds for projects and programs, manages the CWCB Construction Fund Non-Reimbursable Program and develops CWCB's annual Projects Bill. The Section also monitors and reports on agency operating and related budgetary information, as well as agency-wide support for administrative and board coordination functions.

The **Stream and Lake Protection** Section appropriates, acquires, and protects instream flow and natural lake level water rights to preserve and improve the natural environment to a reasonable degree.

The **Water Supply Planning** Section implements the Statewide Water Supply Initiative (SWSI) and supports the ongoing implementation of the Colorado Water for the 21st Century Act. The section's mission is to plan Colorado's water supply future to

help provide an adequate water supply for Colorado's citizens, businesses, agriculture, and the environment. To do this, the section provides tools, products, and programs that support local basin planning and state water supply planning and grants to help implement solutions to Colorado's water supply needs. The Section also promotes water use efficiency while providing public information and technical and financial assistance for water conservation planning. Efforts and successes in reducing water demand through water efficiency and conservation will play a critical role in meeting Colorado's future water supply needs and mitigating the water supply shortages forecasted for the future. Drought Planning is also an important part of this Section. The Section encourages and assists communities to prepare and implement drought mitigation plans, monitors drought impacts, and informs the public, media, and state officials about drought conditions and issues. Tools and resources are also available for local drought mitigation planning.

CWCB -- Statutory Authority:

Title 36, Articles 20 and 75

Title 37, Articles 60-69, 83, 92, and 96

Title 39, Article 29

CWCB -- Mission:

CWCB must develop and implement programs to:

- Conserve, develop, protect, and manage the waters of the state for present and future generations
- To meet the more general mission above, CWCB will work to conserve the waters of the State for wise and efficient beneficial uses; develop waters of the State to preserve the natural environment to a reasonable degree; fully utilize State compact entitlements; help ensure that Colorado has an adequate water supply for our citizens and the environment by implementation of CWCB adopted mission statements and the findings and recommendations identified in the 2010 Statewide Water Supply Initiative; protect the waters of the state for maximum beneficial use without waste; and manage the waters of the State in situations of extreme weather conditions – both for floods and droughts.

CWCB – Vision:

Carry out the agency mission in accordance with applicable state and federal law and regulations.

CWCB – PERFORMANCE MEASURES

Given the importance of water supply initiatives to both the Colorado Water Conservation Board and to the Department of Natural Resources, this issue was listed as a major Department performance measure (see performance measure “DNR-5 Water Supply” at the beginning of the Strategic Plan).

CWCB-1. Instream Flows

Objective: Protect additional miles of decreed instream flow water rights resulting in enhanced protection of Colorado’s environment.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Miles of stream where CWCB actively manages water rights to leave water in streams for purposes of improving wildlife habitat.	Benchmark	100 miles	100 miles	100 miles	100 miles
	Actual	75.86 miles (9,034 miles)	138 miles (9,172 miles)	Unknown	Unknown

Incremental miles added / (Total miles Protected)

Strategy:

Instream flow refers to the practice of establishing water rights in a river or stream for the purpose of preserving Colorado’s environment, including protection of wildlife and wildlife habitat that rely on rivers and streams for their survival. The objective of this program is to increase the number of streams and natural lakes protected by a state-held water right in order to: (1) meet non-consumptive water needs to preserve and improve the natural environment to a reasonable degree, and; (2) for watershed and river restoration protection projects. A critical component of this program is installing, operating, and maintaining stream gages to monitor stream flow and assure compliance with instream flow water rights. The CWCB currently holds, monitors, and protects

instream flow water rights on approximately 9,120 miles of Colorado’s streams. The amount of additional miles that will need to be protected is unknown due to diversion and complexities of other water issues.

Evaluation of Prior Year Performance:

During FY 2011-12, the Colorado Water Conservation Board took final action and appropriated an additional 16 stream segments totaling 138 miles of stream. This represents approximately a 45% increase over the number of miles appropriated in the previous fiscal year.

Note: The FY 2010-11 actual number of total miles protected was adjusted upward from 9,005.17 miles to 9,034 miles to correct a database entry error.

CWCB-2. Online Documents

Objective: Disseminate technical information.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Increase technical documents on-line	Benchmark	5,000	5,000	6,090	6,090
	Actual	6,246	7,272	Unknown	Unknown

Strategy:

The Division is committed to providing historic and current water resource information to the water community and the public through various mediums, including the Decision Support System (DSS) and the Division’s imaging system. The CWCB is the lead agency responsible for the implementation of the DSS, which provides water resource data, planning tools, modeling datasets and documentation on-line, for use by the Division and the public to help make better informed water resource decisions. Another tool used to disseminate water resource information is Laserfiche, the agency’s imaging system. The system provides an accessible, user-friendly web portal for accessing CWCB’s library of documents, including (but not limited to) maps, reports, studies, data and documentation. Since the establishment of the Office of Information Technology (OIT), this work is conducted through that office. This performance measure may no longer be appropriate to be within the DNR Strategic Plan.

Evaluation of Prior Year Performance:

The accomplishments of the CWCB Imaging System Project during Fiscal Year 2011 concentrated on the following two areas: (1) scanned and uploaded 900 large format loan project and historical water supply maps to Laserfiche, and (2) completed a feasibility study on a data harvesting/integration project with Colorado State University, which investigated the searching of both document management systems at one time. The conclusions reached by this study indicate that harvesting water data and sharing it across systems is possible, and recommends adopting a proven data-sharing protocol. Of note, the benchmark for FY 2012-13 and FY 2013-14 was increased from 5,000 documents to 6,090 documents (the average number of new documents added over each of the last three actual years).

CWCB-3. Flood Protection

Objective: Protect Colorado’s citizens from financial hardship associated with natural hazards

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Increase insured value of flood prone properties	Benchmark	\$4.3 billion	\$4.45 billion	\$4.65 billion	\$4.70 billion
	Actual	\$4.4 billion	\$4.6 billion	Unknown	Unknown

Strategy:

The Division helps protect Colorado citizens from flooding and related natural hazards. The Division works to prevent flood damages, supports local stream restoration efforts, reviews and approves floodplain designations, and provides local jurisdictions and citizens with technical assistance and revised floodplain information. It will increase the number of stream miles designated by the Board and will increase the number of homeowners eligible for federally backed flood insurance to help prevent uninsured losses. It will increase the number of people receiving flood forecasts and updates during the flood season. The Division will also increase the number of updated floodplain maps statewide that can be used to assess flood threats and post-flood damages.

The CWCB will provide for reduced economic loss to homeowners due to flooding in the State of Colorado by increasing the total insured value of properties that are covered by federally backed flood insurance.

Evaluation of Prior Year Performance:

The Division was successful in helping the following communities enroll in the National Flood Insurance Program since early 2008: Aguilar, Cedaredge, Fraser, Granby, Leadville, Mt. Crested Butte, Ovid, Rye, Saguache, and Simla. In addition, the City of Centennial and City of Loveland received help to become enrolled in the Community Rating System Program, reducing flood insurance costs to homeowners. Also, the Division leveraged a moderate amount of State funds to obtain around \$1 million dollars in grant funds from FEMA to produce new and revised digital floodplain information. Several new countywide studies were initiated, progressed, or completed during the prior fiscal year. The total value of insured flood-prone structures statewide was increased and multiple stream restoration efforts were supported utilizing the Colorado Watershed Protection Fund, other funding sources, and in-house expertise.

CWCB-4. Water Efficiency

Objective: Reduce the demand for water

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Create reductions in M & I water supply demand through water conservation planning and implementation of water efficiency measures.	Benchmark	Approx 1.5% annual demand reduction or approx 10,153¹ ac ft	Approx 1.5% annual demand reduction or approx 11,350 ac ft	Approx 1.5% annual demand reduction or approx 12,458 ac ft	Approx 1.5% annual demand reduction or approx 13,400 ac ft
	Actual¹	10,153 ac ft or approx 1.5% annual demand reduction	11,026 ac ft or approx 1.5% annual demand reduction	Unknown	Unknown

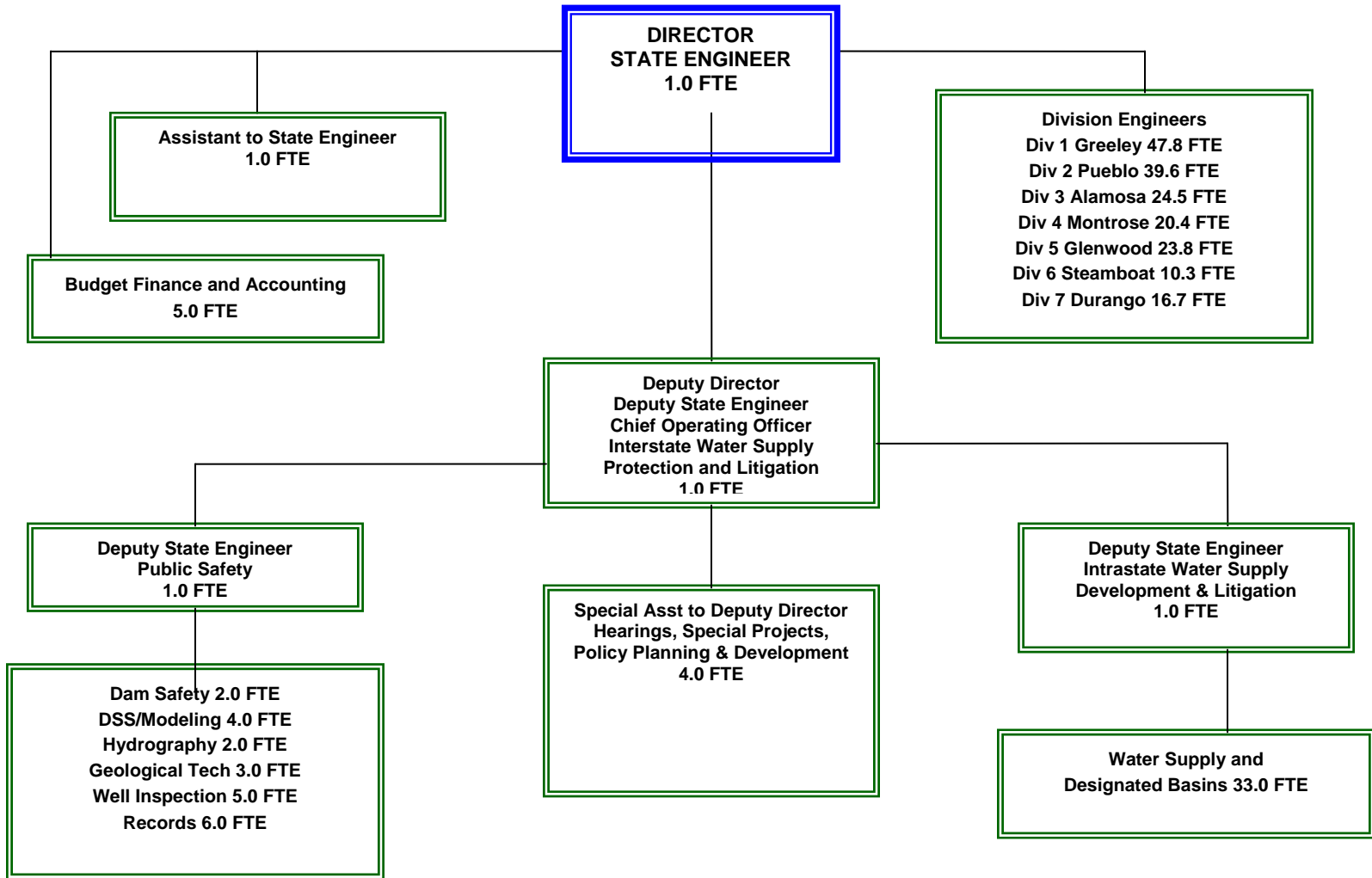
Strategy:

The CWCB will provide data regarding water conservation through the Division's conservation planning efforts, specifically from the administration of the Water Efficiency Grant Program and role in providing technical assistance for water conservation planning. The state will see reductions in Municipal and Industrial (M & I) water supply demand as a result of water conservation plan implementation occurring through the use of the Water Efficiency Grant Program. The Division assists in the development and implementation of water conservation plans, as well as reviewing and approving water conservation plans. It provides water conservation and drought planning, implementation grants through its Water Efficiency Grant Program, and helps water providers integrate climate change into their water resource planning efforts. It provides technical assistance and public education and outreach programs, such as workshops, conferences, and meetings, to promote the Water Efficiency Grant Program and other water conservation planning resources. Through these efforts, the CWCB will increase the number of covered entities with current and approved water conservation plans. It will increase the number of communities that have drought mitigation plans. It will coordinate and provide climate change data that will be used by water providers in their planning. Maximum utilization of current Division staff will enable the Division to carry out its mandate as defined in Sections 37-60-124, 126, & 126.5 C.R.S. Further, effective program management will ultimately result in valuable water resource supply savings due to water conservation driven demand reductions at the M & I water provider level.

Evaluation of Prior Year Performance:

The total number of water conservation plans on file with the CWCB as of the end of FY 2010-2011 was 45 – an increase of 5 over the previous fiscal year. In FY 2011-12, an additional 12 water conservation plans were approved, bringing the total count to 57 approved plans. Of this total amount, 45 are plans for covered entities and the remaining 12 plans are for non-covered entities. These numbers do not completely reflect 2 regional plans completed during FY 2011-12. One plan contained 16 non-covered entities and the other contained 3 non-covered entities. In terms of covered and non-covered entities, there are 45 covered entities and 29 non-covered entities represented within the plans. The number of water conservation plans approved for FY2011-12 was more than the CWCB had anticipated. Nevertheless, the entities that completed plans were fairly small in terms of water demand, averaging approximately 4800 acre feet per year. The lower demands characterizing these entities will result in a smaller savings.

On average, entities have set goals to reduce demand from water conservation plan implementation by approximately 1% to 2% annually (1.5% average) and ramping up incrementally as conservation measure programs come online. FY 2011-12 water savings were calculated by adding the total demands for all plans approved from that year and reducing that demand by the 1.5% annual average and adding to the previous year's calculations. The FY2012-13 benchmark was derived by taking the total demands of approved plans on file for FY 2012-13 to date plus an estimation of additional plans through the rest of the fiscal year.



\$20,976,022 Total Funds 251.1 FTE
 GF \$18,881,890 CF \$1,922,394 FF \$171,738

Division of Water Resources

Division of Water Resources-- Description:

The Colorado Division of Water Resources (DWR) is responsible for the supervision and control of water resources in this state per Section 37-80-102(h), C.R.S. Water administration is DWR's principal duty, requiring daily oversight of the allocation system that distributes water to farmers, industries, municipalities, and all other water users (Section 37-92-301, C.R.S.). This allocation system is performed in accordance with the Doctrine of Prior Appropriation (the first entity to historically use water in a stream retains the first priority to continue diverting water for the same use), Colorado Supreme Court decisions, Interstate Compacts, water court decrees, and rules and regulations issued by the State Engineer.

The DWR is also committed to meeting the ever increasing challenges of origin issues, reserved rights, wetlands, endangered species recovery, and interstate water issues on an already limited water supply.

Major DWR programs include:

Water Administration

This program provides supervision and control of surface and ground water resources in Colorado, which includes administration of over 100,000 decreed water rights. This includes daily oversight of water allocation to all water right owners in the state including farmers, industries, and municipalities. In addition to meeting the needs of Colorado water users, DWR also ensures interstate compact compliance and monitors water supplies through stream flow measurements and ground water regulation.

Dam Safety

This program provides public safety of life and property through the regulation of approximately 2,900 jurisdictional and non jurisdictional dams within the state; currently there are 1,819 jurisdictional/non-federal dams. Dams in Colorado are classified as either "jurisdictional" or "non-jurisdictional" based on the height of the embankment above the natural ground, the surface area of the reservoir, or the total reservoir storage capacity. Essentially, larger dams are considered jurisdictional and are regulated in a more stringent manner given the larger potential for impact if the dam fails. The Dam Safety program includes the review and approval of plans for the construction, alteration, modification, repair, enlargement, and removal of dams and reservoirs, safety inspections and emergency action plans.

Well Inspection

This program is primarily focused on protecting the ground water in Colorado by way of licensing water well contractors and enforcement of the Water Well Rules. This includes setting and enforcing minimum construction standards through approved permits

and inspections for the construction, repair, plugging, sealing, and abandonment of all wells, test holes, monitoring and observation holes/wells, and dewatering wells. There are currently over 250,000 water wells in Colorado and over 40,000 oil and gas wells that require a water well permit by the DWR.

Division of Water Resources -- Statutory Authority:

Federal/State Statutory and Other Authority:

Colorado Revised Statutes: Sections 37-80 through 37-92, et seq.; 37-61 through 37-69, et seq.

Division of Water Resources -- Mission:

It is the mission of the Colorado Division of Water Resources to competently and dependably administer and distribute the waters of the Colorado in accordance with the laws of this state, ensure that dams and water wells are properly constructed and maintained to ensure public safety and to develop, maintain and provide access to accurate and timely information regarding water resources. The Division will strive to fulfill its mission by exercising good stewardship of human and fiscal resources, by assisting the public in the clarification of complex water issues and the generation of creative solutions to problems, and using technology to its greatest advantage while promoting the sustainability of the state's limited water resources.

Division of Water Resources – Vision:

The Colorado Division of Water Resources is a leader in the water community of Colorado and the western United States. This is accomplished by focusing on the following areas: people, water, and stewardship. People, because we recognize that the business of water involves our employees and the public. Water, because the administration, safety, and use of the State of Colorado's water resources is something we are committed to and care deeply about. Stewardship, because we understand and accept our obligation to the taxpayers and ourselves, in using and protecting the resources in the most effective manner possible.

DWR PERFORMANCE MEASURES

Given the importance of Interstate Compacts to both the Division of Water Resources and to the Department of Natural Resources, this issue was listed as one of seven major Department performance measures (see performance measure “DNR-3 Compact Compliance” at the beginning of the Strategic Plan).

DWR-1. Efficiency of Water Use

Objective: Optimize the availability of water supplies in time, place, and amount by successive reuse of water.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
The number of times water is used in-state before leaving Colorado	Benchmark	3.2	3.2	3.2	3.2
	Actual	3.59	2.09 *Record water year; Flows exceeded reservoir capture ability* ¹	Unknown	Unknown

Workload Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Est.	FY 2013-14 Est.
Number of Gages	Total annual number Satellite Monitoring Network	525	530	540	540

Strategy:

Water, in various forms of precipitation, falls from the sky and eventually shows up in the rivers. Users can then divert and use the water. Not all the water diverted is consumed; some returns (return flows) to the stream for others to use. The State of Colorado, via

¹ In FY 2011-12, record high snowpack conditions were recorded across Colorado, leading to a significant runoff in the spring. Reservoirs captured these flows but due to limited capacity and infrastructure, a large portion of these flows continued downstream.

the Division of Water Resources (“DWR”), administers this water in priority pursuant to the Prior Appropriation Doctrine (“first in time, first in right”). The field staff of the DWR, or water commissioners, administers the diversions pursuant to water rights court decrees and interstate compacts. As a semi-arid state with seasonal and limited water supplies, the State of Colorado attempts to optimize the benefits of the limited water supplies by successive reuse of water. Therefore, a performance measure of overall effectiveness of water management is the capture of water in reservoirs and use of these return flows as they successively cascade from the mountains to the prairies before eventually leaving the state. The goal is to maximize the benefit for Colorado by using it at least three times before it exits Colorado state-lines. The performance measure compares the water diverted, stored and used in Colorado to the water exiting the state; this is expressed as a ratio.

An important workload measure related to this performance measure is the number of Satellite Monitoring System (“SMS”) gages that the DWR operates in order to measure these water flows and promote efficient use. The SMS is a comprehensive system of remote-sensing equipment that is housed in over 530 river, stream, canal, and reservoir gauging stations across the state. The system provides near real-time (hourly updates) information regarding streamflow and water level via satellite relay. Once in the database, the information is accessible via computer, telephone, and the Internet. When new SMS gages are installed, water users and DWR staff benefit from improved accuracy and availability of data. This allows multiple water administration decisions per day (as opposed to once or twice weekly), improved water distribution, and more effective water use. The DWR staff can monitor fluctuating water supply conditions remotely, thus promoting efficiency in water administration and distribution.

Cost Savings to State of Colorado

If Colorado fails to meet interstate water compact obligations due to the unavailability of accurate and timely streamflow information, the state may incur significant legal costs and be liable for subsequent repayment of water or money for any shortfall in water delivered to downstream states. Additionally, the SMS effectively reduces the overall cost to the public and increases the efficiency of water rights administration by avoiding the costs of additional FTE and operating expenses that it would take to manually perform all of the duties.

Evaluation of Prior Year Performance:

With the implementation of remote sensing and transmission of streamflow and diversion information, the DWR was able to optimize the use of water within the state while meeting Colorado’s compact obligations. In FY 2011-12, approximately 26 million acre-feet of water was diverted to irrigation or municipal use or stored in reservoirs and 12 million acre-feet of water exited the state, indicating that water was used 2.09 times in Colorado before exiting the state.

Due to record high snowpack conditions in FY 2011-12, reservoirs across Colorado filled, and interstate compact obligations were satisfied; however, the state had limited ability to capture all of this water for successive use because of the quick rate at which the water flowed and limited storage capacity.

DWR-2. Water Administration and Enforcement

Objective: Assure the effective distribution and compliance with applicable water laws.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Formal regulatory orders issued by DWR per year compared to the total number of surface and groundwater structures actively diverting water	Benchmark	4.2%	4.5% **Please see footnote ** ¹	5.1% **Anticipated Use Rules will Increase Enforcement Needs** ²	5.5%
	Actual	3.02%	5.45%	Unknown	Unknown

Workload Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Est.	FY 2013-14 Est.
Headgate Visits, Observations, and Inspections	Total Annual	420,425	451,095	451,095	451,095

Strategy:

Water administration is conducted within a regulatory environment in which limited water supplies are distributed in time, amount, and location to adjudicated water rights based upon their respective water right priority and available water supplies. The vast majority of citizens or water users have come to rely upon DWR to assure the limited water supplies are being distributed effectively and in compliance with all applicable laws. While most changes in curtailment are accomplished with cooperation of users,

¹ ****Modified annually based on average outcome from three previous fiscal years [2008-09: 3.46%; 2009-10: 6.92%; 2010-11: 3.02%]****

² ****Benchmark will likely increase in FY 2012-13 with anticipated water use rules promulgated in the Rio Grande Basin.****

sometimes formal regulatory orders are issued to compel diversion adjustments when compliance is not voluntary. Regulatory orders include headgate and wellhead orders, cease and desist orders, injunctions, dam restriction orders, orders to comply with rules, or reporting requirement letters. These measures of enforcement are done by water commissions, well inspectors, and dam inspectors who conduct field inspections and ensure proper diversions or storage of water; daily records are available in most districts to review response rates and increase efficiency of water administration. This performance measure is the percentage of formal regulatory orders filed by DWR per year compared to the total number of surface and groundwater structures actively diverting water. The performance measure is expressed as a percentage. An associated workload measure is the number of observations, inspections, or visits conducted by DWR staff in a year. These observations can lead to formal orders being issued.

Cost Savings to State of Colorado

Daily oversight of water administration and subsequent enforcement ensures maximum delivery to water users. Additionally, it prevents illegal diversions by junior appropriators and injury to senior water right holders. This decreases the likelihood of inter and intrastate lawsuits, including claims from the U.S. Supreme Court, Colorado water courts, senior water users, and the public. Savings to the State of Colorado are seen in the avoidance of potentially costly litigation claims and economic damages that could be felt by senior water rights holders, who will not receive all of the water to which they are entitled.

Evaluation of Prior Year Performance

In response to court decisions, compact litigation, and user requests over the past few years, the DWR has increased groundwater enforcement. This includes promulgation of measurement and well use rules in several water divisions. However, a learning curve exists while water users attempt to get in compliance with these new regulatory requirements. Formal regulatory orders such as wellhead and surface headgate orders, and letters ordering required meter reports and corresponding data are necessary to enforce the regulations and protect water users' water entitlements. The number of regulatory orders issued by the DWR in FY 2011-12 increased from the previous fiscal year. This is due to the continued work on the enforcement of the well measurement rules in several divisions, including Division 1 (South Platte and Republican River Basin). The trends for this performance measures will change annually, based on whether or not rules are anticipated in each division.

DWR-3. Dam Safety

Objective: Inspect jurisdictional dams using the risk-based profiling system. Maintain emergency action plans for all high and significant hazard dams. Prevent jurisdictional dam failures by conducting inspections and issuing restrictions.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
% of Inspections Completed	Benchmark	100%	100%	100%	100%
	Actual	100%	100%	Unknown	Unknown
Emergency Action Plans (EAP)	Benchmark	100%	100%	100%	100%
	Actual	99.3%	98.6%	Unknown	Unknown
Jurisdictional Dam Failures	Benchmark	0	0	0	0
	Actual	0	0	Unknown	Unknown

Workload Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Est.	FY 2013-14 Est.
# of Restrictions	Total at End of Water Year	165 *As of October 31, 2011*	158 *As of August 21, 2012*	158	158
Volume of Storage Loss	Total Acre-Feet at end of Water Year	102,904	102,667	102,667	102,667

Strategy:

There are approximately 2,900 jurisdictional and non jurisdictional dams within Colorado. Dams require inspection to assure they are properly maintained and to assess any factors that would increase the potential for failure. Dam failure can cause loss of life and/or significant property damage. Inspection frequency is based on risk based profiling (the “hazard classification”) of a dam. This classification is based on the impact of failure and is not a classification that a particular dam is hazardous or has potential for failure. Currently there are 1,819 jurisdictional/non-federal dams; of these 621 dams are classified high (318) or significant (303) because a failure would be expected to cause loss of life and/or significant property damage within the flood plain areas below the dams. The DWR dam safety program includes dam inspections of jurisdictional dams¹, design review, construction and repair inspections, and requires emergency action plans (EAP) for high and significant class dams.

Dam safety engineers must perform periodic field safety evaluations of existing dams by hazard class. Regular visual observation through inspection is one of the most important tools available to the dam safety program. The frequency of field inspection for a particular dam is determined by the risk-based profiling system. The risk-based profiling system is a software tool that ranks the relative physical conditions of high and significant hazard dams in Colorado. The rankings are used to more effectively allocate resources to dams determined to present the greater risk to public safety and property. Dam inspections are performed to identify conditions at the dam: aging outlets; deteriorated concrete; displaced embankments; increases in seepage; and a lack of maintenance which if left unattended might ultimately increase the probability of failure to the point where a failure actually occurs. Lastly, the imposition of a storage restriction is an indication to a dam owner that the problem identified is serious and that action, maintenance or repairs, is truly necessary to enable a return to full storage.

Emergency preparedness for incidents that jeopardize public safety has become an integral part of dam safety program; Emergency Action Plans are required in order to detect incidents at dams, give adequate warning, and guide responders in the event of a dam failure. The Colorado Rules and Regulations for Dam Safety and Dam Construction (2-CCR-402-1: January 1, 2007) requires that Emergency Action Plans be updated and maintained for all high hazard and significant hazard dams.

This performance measure tracks the total number of dam inspections and compares the number to the expected annual inspections for dams, based on the risk-based profiling score. Construction inspections do occur, but are not included in this analysis. This performance measure also compares the number of high and significant hazard dams to the Emergency Action Plans (expressed as a percentage) and the number of jurisdictional dam failures annually. The workload measure of number of restrictions demonstrates the program effectiveness in identifying dams that pose a greater risk to public safety.

¹ Non-jurisdictional dams are only inspected at the owner’s request or based on a complaint by a water user.

Cost Savings to State of Colorado

The cost savings to the State of Colorado is seen by the prevention of loss of life and property damage. Dam inspections are conducted based on hazard class and are successful in detecting problems before they get to a dangerous tipping point. The importance of inspections and restrictions is illustrated by summarizing the effects of the last dam failure in Colorado that resulted in loss of life.

Lawn Lake Dam failed upstream of Estes Park in July of 1982, sending flood waters through campgrounds and the town of Estes Park, killing three people and destroying property. The Executive Director of the DNR, the State Engineer, and the State Attorney General were all personally sued for negligence. The DNR personnel were eventually found to be free from liability; however, it took eight years of litigation and untold man hours to arrive at that verdict. Due to this event, the Colorado General Assembly significantly increased staffing and funding for the Dam Safety Program. At the time of the failure, the estimated dollar value of damages caused by the ensuing flood was \$32 million dollars. This tragedy was a reminder that regular dam inspections, followed by storage restrictions when necessary, continue to be one of the best tools to maintain safe dams and reduce the risk of dam failure for the people of Colorado.

Evaluation of Prior Year Performance:

The Dam Safety Branch conducted inspections as required per dam hazard class risk based scores. In FY 2011-12 the Dam Safety Branch inspected all dams slated for inspection. The number of inspections is variable because not all dams are required to be inspected every year.

Additionally, the Dam Safety Branch continued to educate dam owners on safety and the importance of Emergency Action Plans. The dam safety engineers continue to assist dam owners in the preparation of their plans. In FY 2011-12, 98.6% of high and significant hazard dams had Emergency Action Plans in place. There were zero incidents of jurisdictional dam failures in FY 2011-12. As of August 21, 2012 a total of 158 dams were restricted and a total volume of storage of 102,667 acre-feet was unavailable due to restrictions. Although many dams were repaired and removed from the restricted list within the last year, a number of dams were also added to the restricted list. Of the restricted dams in Water Year 2011-12, so far 15 restrictions were lifted, freeing 1,319 acre-feet of storage. Additionally, eight new restrictions were imposed, reducing storage 1,033 acre-feet. Maintenance and repair activities resulted in a net gain of 286 acre-feet of storage for this Water Year.

DWR-4. Well Inspection

Objective: Assure the protection of the groundwater resources and public health through enforcement of minimum well construction and pump installation requirements.

Performance Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Approp.	FY 2013-14 Request
Well Inspections vs. Well Completions	Benchmark	30%	22.9%	24%	30%
	Actual	23.2%	20.3%	Unknown	Unknown

Workload Measure	Outcome	FY 2010-11 Actual	FY 2011-12 Actual	FY 2012-13 Est.	FY 2013-14 Est.
Total Inspections	Total Annual	1,248	1,112	1,112	1,112

Strategy:

The well inspection program was instituted for the protection of public safety and of groundwater resources through enforcement of the Water Well Rules (2 C.C.R. 402-2). Improperly constructed wells can allow pollutants to infiltrate into aquifers and ultimately into potable supplies. The program operates by assuring compliance with construction standards through inspections. Well inspector duties in this program include inspecting water well constructions and pump installations, monitoring and observation hole/well constructions, well abandonments, complaint investigations, providing education and outreach, and generally supporting the State Engineer and Board of Examiners for Water Well Construction and Pump Installation.

A key focus of the well inspectors and the well inspection program is to prevent substandard construction of wells and to locate and initiate action against unlicensed contractors working illegally in the state. This performance measure compares inspections and

¹ ** Modified annually based on average outcome from three previous fiscal years [2008-09: 25.2%; 2009-10: 23.2%; 2010-11: 20.3%]. **

² ** Modified benchmark based on anticipated increase in new home/well construction and correlated increase in well construction enforcement. **

reported well completions. The benchmark of this performance measure reflects staffing and funding levels for a deterrence type program.

Cost Savings to State of Colorado

This program safeguards the public health of the people of Colorado and protects the groundwater in Colorado. This includes setting and enforcing minimum standards through permit applications and inspections for the construction, repair, plugging, sealing, and abandonment of all wells, test holes, monitoring and observation holes/wells, and dewatering wells. The cost savings to the State of Colorado is seen by the reduction in potential litigation that may occur from lack of enforcement of improperly constructed wells, which can lead to water contamination and associated remediation costs.

Evaluation of Prior Year Performance:

The number of inspections will vary and are dependent upon the number of wells being constructed and the number of available staff for inspections. The well inspection program is cash funded via well permitting fees and, due to the economy, is not staffed at the full level. With a reduced number of staff in FY 2011-12, the well inspectors inspected 20.3% of the wells completed. Since this is a cash-funded program, DWR must staff the program at conservative levels considering the variability in the number of wells (and consequent funding) constructed each year. Colorado's economy during the last few years has resulted in a decrease in the total number of well permit applications received and the total number of well permits issued by DWR; and consequently a decrease in the number of wells completed.

