COLORADO DEPARTMENT OF NATURAL RESOURCES
BUDGET REQUEST - FY 2005 - 2006
TABLE OF CONTENTS

CHANGE REQUEST

Schedule 7
Summary of Change Requests

Department Name: Natural Resources
Submission Date: November 1, 2004
Total Number of Decision Items: 20
Total Number of Base Reduction Items: 0

Priority #	IT Request	Title	Total	FTE	GF	CF	CFE	FF
1	☐Yes ■No	OGCC - Field Inspectors for Weld & Garfield Counties	121,664	2.0		121,664		
2	☐Yes ■No	DWR - Mileage Operating Expense	87,569		87,569			
3	☐Yes ■No	DWR - Republican River Compact Compliance	51,861		51,861			
4	☐Yes ■No	Parks - Cheyenne Mountain State Park	177,830			121,830	56,000	
5	☐Yes ■No	SLB - Enterprise Fund/Appropriation	500,000				500,000	
6	☐Yes ■No	CGS - Avalanche Safety Education	50,000	1.0			50,000	
7	■Yes ☐No	DNR Information Technology Support Request	58,231	3.0		58,231		
8	☐Yes ■No	CWCB - Severance Tax Projects Increase	255,000			255,000		
9	☐Yes ■No	DNR Emergency Response Funding	100,000			100,000		
10	☐Yes ■No	DWR - Costilla Creek Compact Assessments	5,102		5,102			
11	☐Yes ■No	CWCB - Compact Dues Increase	4,810				4,810	
12	■Yes ☐No	OGCC - Computer Maint./Application Develop. & Support FTE	143,803	1.0		143,803		
13	☐Yes ■No	Parks - Utilities Approp. for Established and New State Parks	114,984			114,984		
14	☐Yes ■No	CWCB - Floodplain Mapping Staff	99,248	1.0			24,812	74,436
15	☐Yes ■No	DWR - New Water Administration Personnel	191,192		191,192			
16	☐Yes ■No	CWCB - Water Supply Planning and Finance Admin Staff	37,761	1.0			37,761	
17	☐Yes ■No	OGCC - Piceance & D-J Basin Water Quality Studies + Tools	300,725				300,725	
18	☐Yes ■No	DMG - Minerals Program Line Consolidation	0					
19	☐Yes ■No	Parks - Program Line Consolidation	0					
20	☐Yes ■No	Parks - Self-Sufficiency	0		(611,982)	611,982		
n/a	■Yes ☐No	Parks - Systems Operation and Support	426,000				426,000	
n/a	■Yes ☐No	Parks - Vehicle Registration System	175,000				175,000	
n/a	■Yes ☐No	Parks - Connectivity	44,000				44,000	
n/a	■Yes ☐No	Parks - Asset Management	230,000				230,000	
Statewide	☐Yes ■No	FY 2005-06 Vehicle Lease Line Reconciliation	19,610		(90,934)	36,092	60,521	13,931
Statewide	☐Yes ■No	FY 2005-06 Vehicle Replacements	165,816		92,609	1,571	68,493	3,143
Statewide	☐Yes ■No	Truth in Rates - Multiuse Network	(87,959)		8,229	(93,394)		(2,794)
Statewide	☐Yes ■No	Dispatch Services from Department of Public Safety	67,237		1,146	6,649	59,442	
Decision Item Subtotal			3,339,484	9.0	(265,208)	1,478,412	2,037,564	88,716
	☐Yes ■No							
Base Reduction Item Subtotal			0		0	0	0	0
TOTAL			3,339,484	9.0	(265,208)	1,478,412	2,037,564	88,716

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department:	Department of Natural Resources	**Dept. Approval:** William S Daley	**Date:** 10/25/04
Priority Number:	1 of 28	**OSPB Approval:** [illegible signature]	**Date:** 10/25/04
Division:	Colorado Oil and Gas Conservation Commission	**Statutory Citation:**	
Program:	Operations		
Request Title:	Field Inspectors for Weld and Garfield Counties		

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	2,733,489	2,777,496			2,732,859	121,664	2,854,523			121,218
	FTE	32.0	33.0			33.0	2.0	35.0			2.0
	GF										
	CF	2,733,489	2,277,496			2,232,859	121,664	2,354,523			121,218
	CFE		500,000			500,000		500,000			
	FF										
Line Item Name Personal Services	Total										
	FTE	28.0									
	GF										
	CF	2,108,462									
	CFE										
	FF										
Operating Expenses	Total										
	FTE										
	GF										
	CF	293,153									
	CFE										
	FF										
Accele-rated Drilling	Total										
	FTE	4.0									
	GF	0									
	CF	294,140									
	CFE	0									
	FF	0									

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Program Costs	Total		2,732,859			2,732,859	117,688	2,850,547			109,290
	FTE		33.0			33.0	2.0	35.0			2.0
	GF										
	CF		2,232,859			2,232,859	117,688	2,350,547			109,290
	CFE		500,000			500,000		500,000			
	FF										
EDO Vehicle Lease Payments*	Total	37,734	44,637			44,637	3,976	48,613			11,928
	FTE										
	GF										
	CF	37,734	44,637			44,637	3,976	48,613			11,928
	CFE										
	FF										

Cash Fund name/Number, Federal Fund Name: Operational Account of the Severance Tax Trust Fund and the Oil and Gas Conservation Fund (Fund #170)

* Vehicle lease payments are just COGCC's allocation from the total Vehicle Lease Payments line item in EDO.

IT Request ☐ Yes ☐ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☐ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): ☐ Yes ☐ No (If yes, Name of other Department(s)____________________)

REQUEST TO CHANGE THE BASE OPERATING BUDGET

PART B - EFFICIENCY AND EFFECTIVENESS ANALYSIS

COMMON IDENTIFICATION INFORMATION

Department:	Natural Resources
Priority Number:	1 of 28
Long Bill Group/Division:	Colorado Oil and Gas Conservation Commission
Program Title/Work Package Title:	Operations
Change Request Title:	Field Inspectors for Weld and Garfield Counties
Statutory Cite:	CRS 39-29-109(1)(a)(II), CRS 39-29-109(1)(c)(I), CRS 34-60-102(1), CRS 34-60-106(2)(d)

SUMMARY OF REQUESTED ALTERNATIVE

This change request is for $121,664 to fund two additional Field Inspectors to address high levels of oil and gas development activity in Weld County and Garfield County. In order to meet this increased demand on the Colorado Oil and Gas Conservation Commission (COGCC), funding is requested for:

- 2.0 FTE Eng/Phys. Science Tech. II - Field Inspectors
- Operating expenses for in-home offices
- 2 additional leased vehicles from Fleet Management

Funding for this change request is as follows: $117,688 is requested from the Operational Account of the Severance Tax Trust Fund and $3,976 is from the Oil and Gas Conservation Fund. The $3,976 is requested from the Oil and Gas Conservation Fund because it is for two vehicle leases which would be appropriated in the Executive Director's Office, and funding for all of COGCC's potted items comes from the Oil and Gas Conservation Fund.

PROBLEM OR OPPORTUNITY DEFINITION

Due to the increased drilling activity and corresponding increase in wells in Weld and Garfield Counties during the last 5 years, there have been a growing number of wells to inspect. The inspectors in these areas perform inspections at a rate that allow the wells in Garfield and Weld Counties to be inspected once every five years. Because of environmental concerns, surface owner issues and surface development encroachment, an additional inspector is required in each of these two areas.

AVAILABLE ATERNATIVES

<u>Description of Alternatives</u>

Alternative 1: Add 2.0 FTE Eng/Phys. Science Tech II in the Operations Section, operating expenses for in-home offices, and 2 additional leased vehicles from Fleet Management.

<u>Cost Estimate:</u> $121,664

Assumptions:

1. 2.0 FTE Eng/Phys. Science Tech II position's would be filled for 12 months in FY 2006 and thereafter.
2. New positions would need desktop computer and software, office furniture, and on-going operating.
3. 2 additional leased vehicles for 4 months in FY 2006 and 12 months thereafter.

Calculations:

1. 2.0 FTE Eng/Phys Science Tech II @ $3,500/mo plus PERA @ 10.15% and Medicare @ 1.45% = $93,744
2. 2 fax/copier/scanners @ $350 ea. = $700*
3. 2 laptop computers @ $2,300 ea. = $4,600, 2 software pkgs.@ $500 ea. = $1000, 2 printers @ $200 ea. = $400 Total = $6,000*
4. Office furniture @ $2,021 X 2 = $4,042*
5. Operating for 2.0 FTE @ $500/year = $1,000
6. 2 cell phones @ $50/mo. each and two office phones plus internet connections @ $180/mo. each = $5,520
7. 2 new leased Jeep Liberties from Fleet Management @ $497/mo. each for 4 months in FY 2006 = $3,976; and for FY 2007, and thereafter, the annual cost would be $11,928.
8. Mileage (Fleet Mgmt. rate $0.171) @ approx. 15,600 miles/year for Weld Co. vehicle and 24,000 miles/year for Garfield Co. vehicle = $6,682

		FY 2006	FY 2007
Total:	Personal Services =	$ 93,744	$96,088
	Operating =	23,944	13,202
	Vehicle Lease (EDO) =	3,976	11,928
		$121,664	$121,218

* one-time costs

COGCC's Statutory Authority to Implement Alternative 1

CRS 39-29-109(1)(a)(II) (Senate Bill 96-170) One-half of the severance tax receipts credited to the Severance Tax Trust Fund ...shall be credited to the Operational Account of the Severance Tax Trust Fund and used to fund programs established within the Colorado Oil and Gas Conservation Commission, the Colorado Geological Survey, the Division of Minerals and Geology, and the Colorado Water Conservation Board that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water...

CRS 39-29-109(1)(c)(I) ...The General Assembly may appropriate moneys from the total moneys available in the Operational Account of the Severance Tax Trust Find to fund recommended programs as follows:
(A) For programs or projects within the Colorado Oil and Gas Conservation Commission, up to forty-five percent of the moneys in the operational account...

(It is important to note that the sum of all COGCC FY 05-06 funding requests from the Severance Tax operational account, including this request, is approximately 3.2 percent (3.2%) of the moneys forecast to be available in the operational account. 80.1% of available funds are uncommitted. Including requests from other DNR divisions, roughly 79.4% of available severance tax dollars remain uncommitted.)

CRS 34-60-102(1): Oil and Gas Conservation Act – declares it is to be in the public interest to foster, encourage, and promote the 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...

CRS 34-60-106(2)(d): The Commission has the authority to regulate...Oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, taking into consideration cost-effectiveness and technical feasibility.

Alternative 1 – Linkage to Specific Department Objectives:

Department of Natural Resources Strategic Objectives include:

1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.

Alternative 2: No Action.

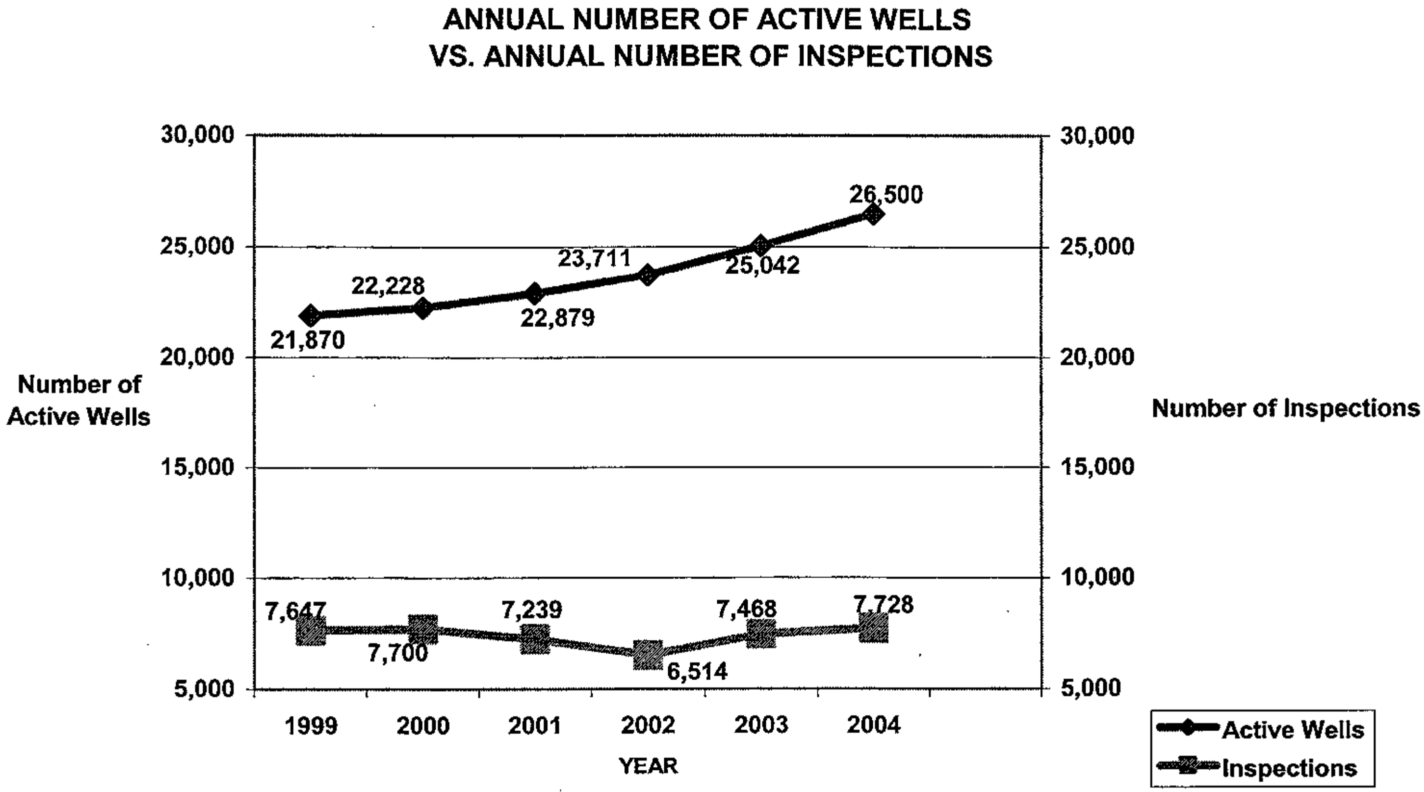
ANALYTICAL TECHNIQUE – BENEFIT-COST ANALYSIS

ASSESSMENT OF ALTERNATIVES

Description of Background Information

During the last five years, the number of oil and gas wells in Colorado has grown from 21,870 to 26,500. This is an increase of 21%. Eight OGCC FTE perform field inspections. Each year they perform a total of approximately 7,000 field inspections. On average, each well is inspected every 3-4 years. The total Colorado active well count, as well as the annual number of inspections, is shown in Figure 1.

FIGURE 1


ANNUAL NUMBER OF ACTIVE WELLS
VS. ANNUAL NUMBER OF INSPECTIONS
30,000
25,000
20,000
15,000
10,000
5,000
Number of Active Wells
Number of Inspections
21,870
22,228
22,879
23,711
25,042
26,500
7,647
7,700
7,239
6,514
7,468
7,728
1999
2000
2001
2002
2003
2004
YEAR
Active Wells
Inspections

Proposed Garfield County Inspector

The number of wells in Garfield County has increased from 775 to 1,703 during the last five years. This is an increase of 120% (see Figure 2). There are approximately 20 drilling rigs operating in Garfield County (see Figure 3) and about 30% of the State's new drilling permits are issued for wells in Garfield County (see Figure 4). In an effort to address the increased workload in Garfield County, the Northwest Colorado engineer was relocated from Grand Junction to Rifle last year. This resulted in improved COGCC presence in the area, but an additional inspector is still required there due to the high activity level of the area.

The Garfield County area has several additional issues that could be addressed with the addition of another field inspector. During the last three months, there have been two very serious incidents that involve drilling and completion operations of wells in Garfield County. The first incident was a drilling rig fire with no injuries, but the drilling rig was severely damaged. The second incident involved impacts to surface water from an improperly cemented well. With an additional inspector, the OGCC could increase its presence and enforce rules more stringently.

FIGURE 2

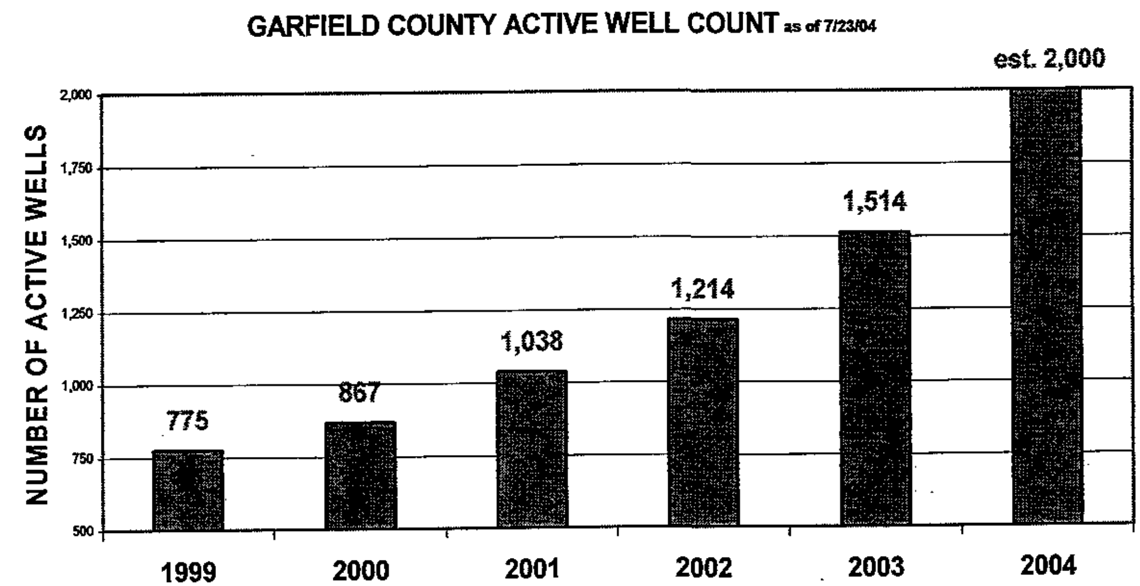
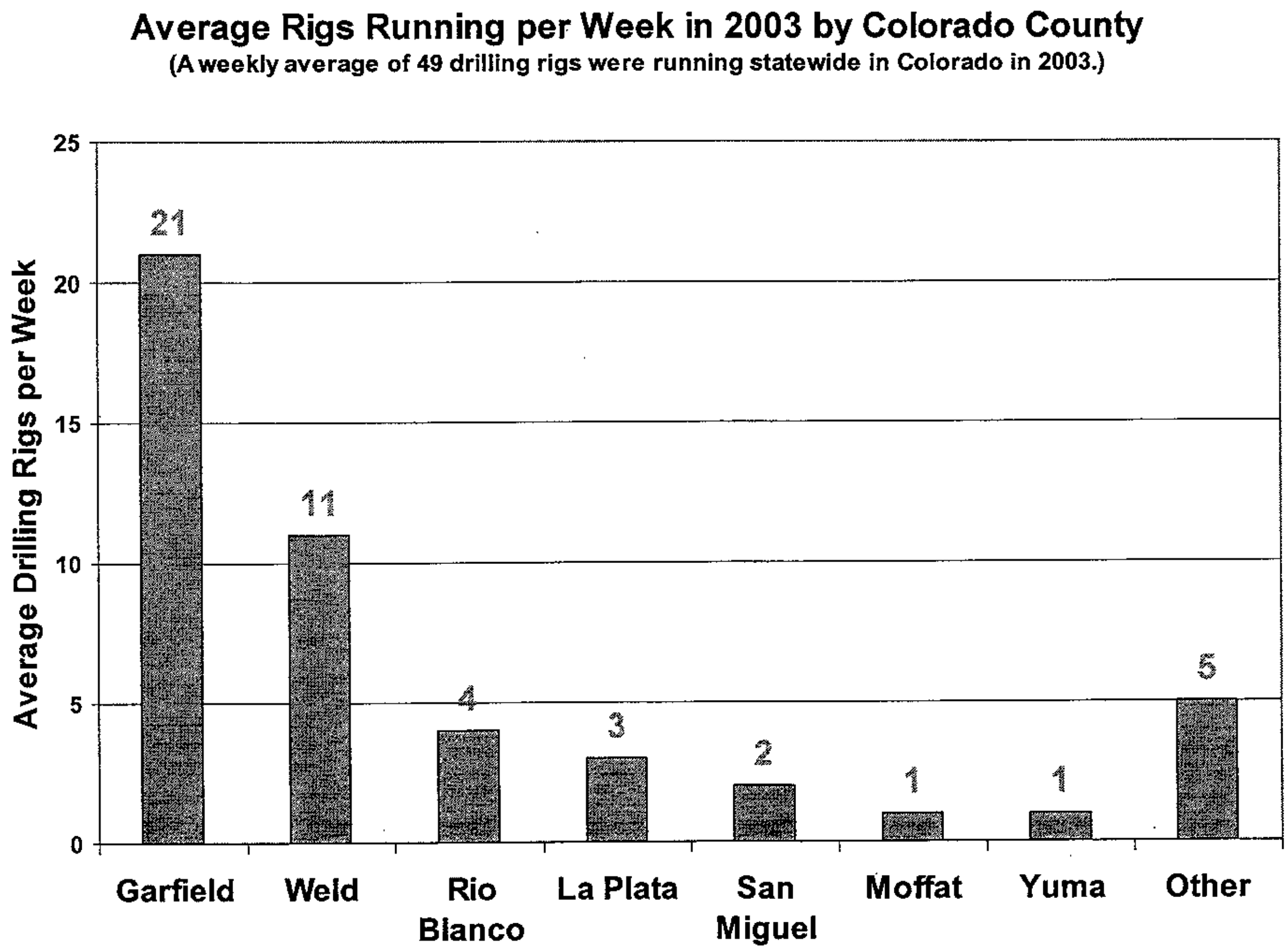
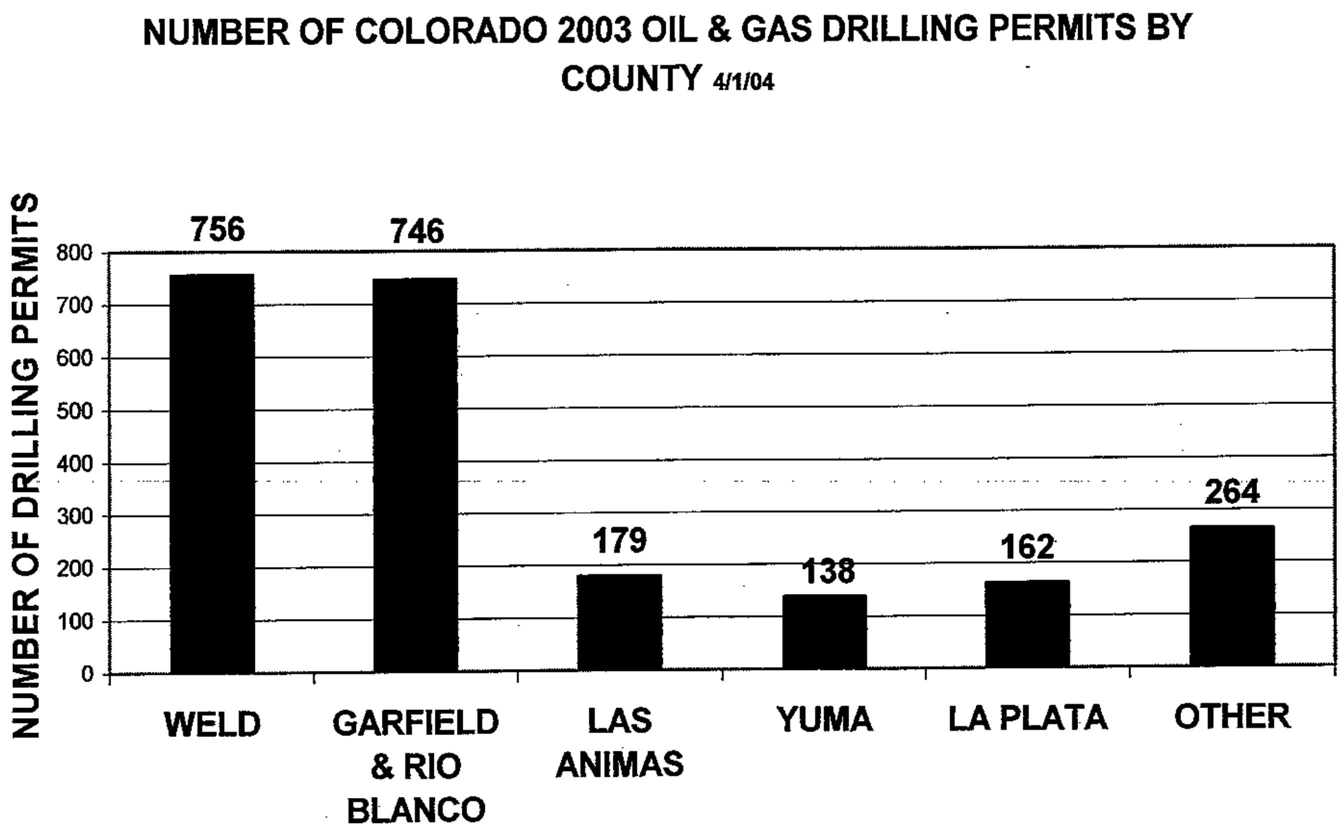


FIGURE 3



Average Rigs Running per Week in 2003 by Colorado County
(A weekly average of 49 drilling rigs were running statewide in Colorado in 2003.)
Average Drilling Rigs per Week
25
20
15
10
5
0
21
11
4
3
2
1
1
5
Garfield
Weld
Rio Blanco
La Plata
San Miguel
Moffat
Yuma
Other

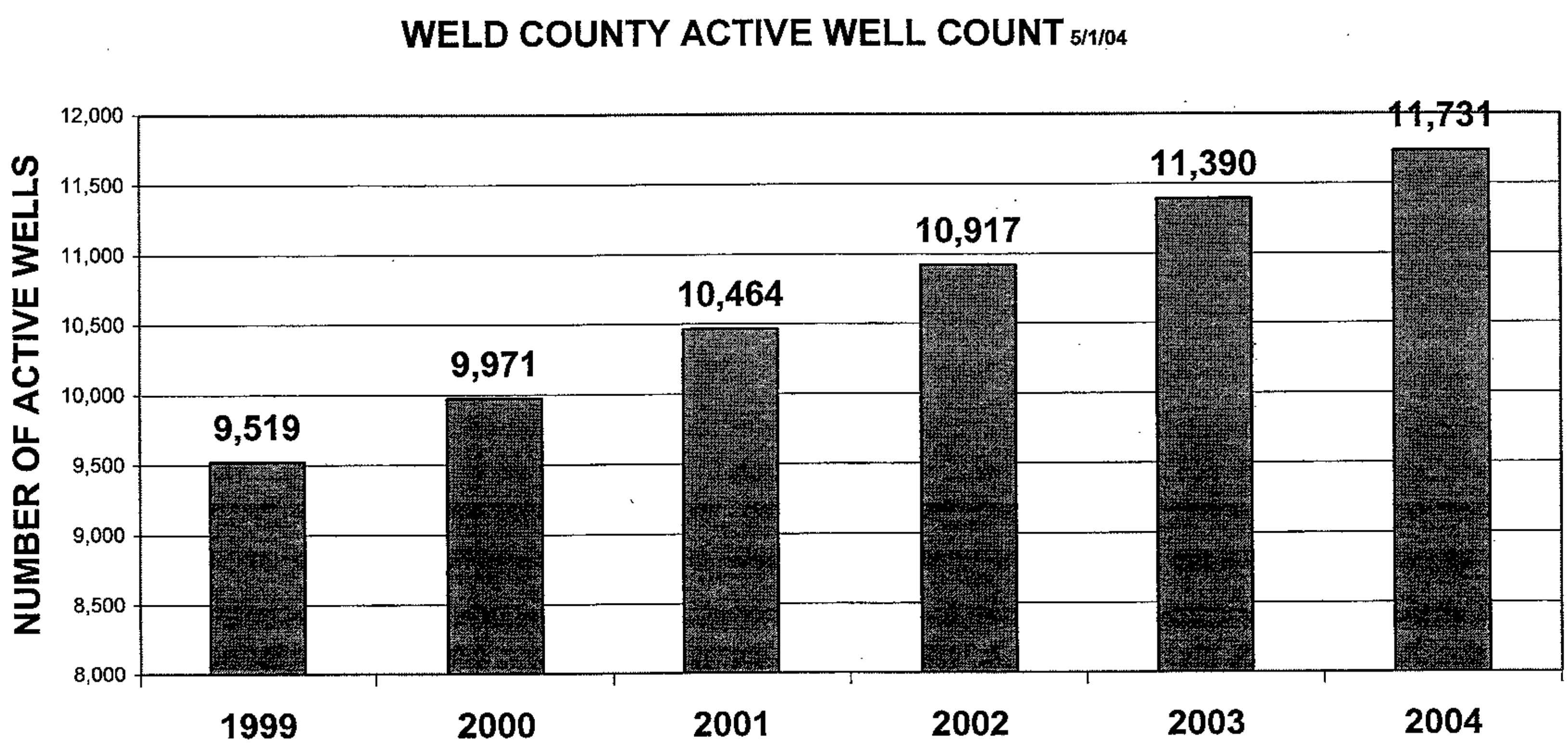
FIGURE 4


NUMBER OF COLORADO 2003 OIL & GAS DRILLING PERMITS BY COUNTY 4/1/04
NUMBER OF DRILLING PERMITS
800
700
600
500
400
300
200
100
0
756
746
179
138
162
264
WELD
GARFIELD & RIO BLANCO
LAS ANIMAS
YUMA
LA PLATA
OTHER

Proposed Weld County Inspector

The number of wells in Weld County has increased from 9,519 to 11,731 during the last five years. This is an increase of 23% (see Figure 5). There are approximately 11 drilling rigs operating in Weld County (see Figure 3) and about 30% of the State's new drilling permits are issued for wells in Weld County (see Figure 4). This growth in the number of wells has been constant over the last five years. Currently, the inspector in Weld County performs 2,200 inspections each year. With almost 12,000 active wells in Weld County, each well will be inspected every five years. The addition of another inspector in Weld County would reduce the frequency of well inspections to every 3 years.

Figure 5



Linking Budgetary Expenditures to Beneficial Outcomes

The primary beneficial outcomes of Alternative 1 are:

Customer	Beneficial Outcome to Customer
Oil and Gas Industry, Local Governments, and The Public	• Increases employee availability to perform site inspections, pursue enforcement, address landowner concerns, and outreach. • Reduces potential risk of impacts to public health, safety, welfare and the environment.
OGCC Staff	• Allows staff to find well problems earlier while the problems are easier to correct. • Resolution of problems quicker lessens the liability of the state.

Application of Analytical Technique/Assumptions and Calculations

The following chart provides an analysis of some of the major potential risks to public health, safety, welfare and the environment created by oil and gas activity which the COGCC will not be able to adequately address without the approval of this request. There is an incremental risk associated with the diminished ability of the COGCC to focus on risk mitigation because of increased drilling permitting and regulatory reporting workload and decreased vehicle availability. This chart assigns a potential cost of each risk item to effected entities and calculates total potential annual cost avoidance.

Assessment of Annual Incremental Risk Attributed to Alternative 2 - "No Action"								
Issue	**Impact to**	**Cost Per Occurrence**	**Annual Frequency**	**Annual Cost of Impacts**	**Health Safety and Welfare Impact**	**Incremental Risk Factor**	**Cost of Incremental Risk**	**Cost Incurred by**
Contamination from leaking production equipment and pits	Surface owners, surface waters, soils, ground water	$25,000	10	$250,000	High	8%	$20,833	Industry and COGCC
Environmental and land owner impacts by untimely well site reclamation	Surface owners, surface waters, soils, ground water	$10,000	100	$1,000,000	Medium	8%	$83,333	Industry
Wildlife and livestock impact from oil in pit	Surface owners and wildlife	$10,000	25	$250,000	High	8%	$20,833	Industry
Unauthorized discharge of produced water	Surface owners, surface waters, soils, ground water	$75,000	10	$750,000	High	8%	$62,500	Industry and COGCC
Additional Issues due to current workload management								
Delay in delivery of information to stakeholder community	Govt., Industry, Resellers, Public	$25	3000		Low	100%	$75,000	Various
Delay in Identifying orphan wells	Environmental response fund	$25,000	2		Medium	100%	$50,000	COGCC
Permit delay	Industry	$8,500	5		Low	100%	$42,500	Industry
Total Cost				**$2,250,000**			**$355,000**	

Definition of terms used in above chart:

Annual Frequency – Annual average number of total occurrences in Colorado.
Incremental Risk Factor - Percentage of impact not currently being addressed (multiplier to calculate cost of incremental risk). Reduced availability of office staff to be able to deal with issues due to current workload management (equivalent to 1 total FTE out of 12 = 8%.)
Cost of Incremental Risk – Portion of annual cost of impacts that is at risk due to current workload management.

Future Value Benefit-Cost Comparisons

Year	Cost of Alternative 1	Benefit of Avoiding Incremental Risk Attributed to Alternative 2 "No Action"	Net Value
1	$121,664	$355,000	$233,336
2	$121,218	$365,650	$244,432
3	$123,620	$376,620	$253,000
4	$126,082	$387,918	$261,836
5	$128,606	$399,556	$270,950
6	$119,265	$411,542	$292,278
7	$134,202	$423,889	$289,686
8	$136,920	$436,605	$299,685
9	$139,706	$449,703	$309,998
10	$142,561	$463,194	$320,633

Assumptions:
1. Net value is based on the incremental risk cost which could potentially occur in each year.
2. Inflation on Personal Services for 2.0 FTE is 2.5%
3. There is no inflation on operating.
4. No vehicle cost in year 6, and inflation on Fleet Management vehicle lease is 3% in year 7 with new lease.
5. Inflation on incremental risk cost is 3%.

Conclusion: Alternative 1 provides a satisfactory level of customer service and a lower risk of impacts to public health, safety and welfare and the environment. Alternative 2 "no action" subjects the State to an increasing level of risk.

Description of Key Issues for Decision Making

The key issues for decision making are as follows:

- Colorado is experiencing incrementally increasing risk of impacts to public health, safety and welfare and the environment from increased oil and gas activity.
- With the projections of increased oil and gas activity, the level of risk is expected to increase if no action is taken to adequately staff and equip the Division.

Recommendation

The COGCC recommends that funding for Alternative 1 be approved.

Schedule 6
Decision Item Request for FY 2005-06

Department: Natural Resources
Priority Number: 2 of 28
Division: Water Resources
Program: Water Administration; Public Safety
Request Title: Vehicle Mileage

Dept. Approval: William A Daley Date: 10/25/04
OSPB Approval: Arelw L Day Date: 10/25/04
Statutory Citation: 37-80-102; 37-92-501; 37-92-502; 37-87-105; 37-87-107; 37-91-104

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	908,800	1,245,373	0	1,245,373	1,239,017	87,569	1,326,586	0	1,326,586	87,569
	FTE	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0
	GF	707,339	719,036		719,036	712,680	87,569	800,249		800,249	87,569
	CF	118,573	465,568		465,568	465,568		465,568		465,568	
	CFE	82,888	60,769		60,769	60,769		60,769		60,769	
	FF										
Line Item Name	Total	908,800	1,245,373	0	1,245,373	1,239,017	87,569	1,326,586	0	1,326,586	87,569
	FTE	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0
Operating	GF	707,339	719,036		719,036	712,680	87,569	800,249		800,249	87,569
Expense	CF	118,573	465,568		465,568	465,568		465,568		465,568	
	CFE	82,888	60,769		60,769	60,769		60,769		60,769	
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name:
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes x No (If yes, Name of other Department(s)____________________)

Efficiency and Effectiveness Analysis

Department: Natural Resources
Request Title: Vehicle Mileage
Priority Number: 2 of 28
Division: Water Resources
Summary of Requested Alternative:

The Colorado Division of Water Resources requests $87,569 in general funds for vehicle mileage expenses to allow the agency to provide critical water administration and public safety work at the same level of service provided during FY 2002-03. As a result of increases in mileage rates assessed by Fleet Management, mileage expenses for state vehicles driven by Water Resources have increased 38% since FY 2002-03. Without addition funding, the agency would be compelled to reduce miles driven by 410,061 miles to remain within budget. This action would result in canceling all fieldwork that requires state vehicles for 1.4 days out of every five.

Element No. 2 – Problem or Opportunity Definition.

At the beginning of FY 2003-04, State Fleet Management increased variable mileage rates to compensate for substantial increases in costs incurred for maintenance and fuel for state-owned vehicles. Increased maintenance costs are of particular concern for this agency since budget constraints have allowed for no vehicle replacements for 3 fiscal years. The Division of Water Resources secured a supplemental appropriation of $57,590 for FY 2003-04 to compensate for this increase. This allowed the agency to finance critical field services for one year at FY 2002-03 levels. At the beginning of FY 2004-05, the agency incurred additional increases in variable mileage assessments, such that a two-year cumulative increase of 38% has increased our funding shortfall from $57,590 in FY 2003-04 to $87,569 in FY 2004-05. The agency expects to submit a supplemental funding request of $87,569 for FY 2004-05 to address this shortage. Considering the magnitude of the change, it is now prudent to request a permanent increase in funding, beginning in FY 2005-06.

The effects of the mileage increase vary across major areas of the agency, since Water Resources uses a different mix of vehicle classes in each area. Variable mileage percentage increases across vehicle classes are not the same. Following is a table that demonstrates this impact by major area of the agency. One area of particular note is the new well inspection program, established by SB 03-45. This program planned for acquisition of eight new vehicles, beginning in the spring of 2004; the fiscal analysis prepared in support of this legislation assumed a variable mileage rate of $.15/mile. During the first full year of vehicle use, mileage costs will actually be 48% higher than initially envisioned; consequently, provision is made in this analysis to compensate for that increase.

VEHICLE COST SUMMARY

LOCATION	Ave. annual miles	$/Mile (new)	$/Mile (old)	% Increase	Cost (new)	Cost (old)	$ Increase
Division 1	398,277	$0.217	$0.158	37.3	$86,426	$62,928	$23,498
Division 2	365,112	$0.211	$0.157	34.4	$77,039	$57,323	$19,716
Division 3	157,184	$0.217	$0.154	40.9	$34,109	$24,206	$9,903
Division 4	122,968	$0.217	$0.153	41.8	$26,684	$18,814	$7,870
Division 5	139,934	$0.212	$0.141	50.4	$29,666	$19,731	$9,935
Division 6	75,125	$0.212	$0.165	28.5	$15,927	$12,396	$3,531
Division 7	54,234	$0.215	$0.170	26.5	$11,660	$9,220	$2,441
Denver	80,062	$0.189	$0.142	33.1	$15,132	$11,369	$3,763
Well Inspection Program	96,000	$0.222	$0.150	48.0	$21,312	$14,400	$6,912
TOTALS	**1,488,896**	**$0.214**	**$0.155**	**38.0**	**$317,954**	**$230,386**	**$87,569**

COST REDUCTION NECESSARY TO MAINTAIN FY 2002-03 COST	$87,569
MILAGE REDUCTION NECESSARY TO MAINTAIN FY 2002-03 COST	410,061

Water Administration

If the Division of Water Resources is required to reduce mileage by 410,061 miles, this equates to requiring our field personnel to park their vehicles for 1.4 days during every 5 working days, thus suspending 28% of field enforcement activities for the entire water season. Should this occur, the reduction in water diversion observations will precipitate illegal diversions (theft) of water by junior water rights owners. Following three extremely dry years, water users are sorely pressed to produce a crop. They are expected to be very aggressive in this objective; many farmers experiencing difficult financial conditions will take whatever water they find, and worry about the consequences of out of priority diversions later.

All water divisions were asked to project the quantity of water theft likely, under this scenario. Their research projects a potential theft of 143,000 acre-feet of water for this fiscal year. This water is valued at $66.67 per acre-foot. The estimate of value is based upon the assumption that one acre of irrigated land will generate $200 in income from crop production; one acre of irrigated land typically uses 3 acre-feet of water. At $66.67 per acre-foot, the estimated value of total crop production lost equals the value of the water, $9,533,300 per year. In addition, lack of adequate field enforcement activities threatens the ability of this agency to assure compliance with interstate compact requirements; this environment could expose the State to future litigation activities.

Other mission critical functions of the agency will be impacted, as well. The reduction in mileage will impact the effectiveness of the hydrographic program streamflow measurement and water year streamflow and water diversion records, real-time satellite transmission of stream flow data, dam safety program, safe storage level determination and new project approval, and field inspections required under the new well inspection program.

Hydrographic Measurements

The hydrographic program is a comprehensive hydrographic system that conducts streamflow measurements at various sites along the State's natural rivers and creeks to determine the amount of water available at that location for distribution to water users. These flow measurements are determined with equipment in river gauging stations that measure the depth and flow of a river/stream on a continual basis. This information is useful to produce/publish annual streamflow records that describe the mean daily streamflow, the instantaneous maximum, lowest mean streamflow, and monthly/ annual volumetric totals for a specific river location. The information and records are used to improve administration of water rights, monitor plans of augmentation to prevent injury to senior water rights, monitor and account for water delivery of reservoir storage, and collection, breakdown and analysis of complex data from municipalities and other water users for short and long-term planning.

The reduction in available mileage results in reduced measurement and streamflow data collection in every river basin throughout Colorado. The streamflow measurements provide a time-specific quantification of water available at a particular point and are used to effectively administer water. There is increasing scrutiny of Colorado's administration of water and compact deliveries with an eye toward gaining water for downstream states. An over-delivery of water to downstream states injures Colorado citizens through missed opportunity for beneficial use of that water. An under-delivery could cause interstate litigation to be initiated by the downstream States or the Federal Agencies. Streamflow measurements are also used as a calibration tool to adjust for changing streambed conditions that naturally occur due to seasonal flow fluctuations. The ability to maintain stream gaging stations, which are located at important hydrologic locations throughout the state would be reduced. These gaging stations contain data recorders that continuously monitor the change in river depth that is used to calculate the mean daily streamflow. This data is extremely valuable to support water management decisions and to provide current conditions and comparison with long-term data.

Satellite Monitoring System

The satellite-linked monitoring system (SMS) provides the Division of Water Resources, other state and federal entities, and the water user community with access to real-time and historic streamflow data from gaging stations across the State of Colorado. These data and software systems provide for more effective water rights administration, water resource management, computerized hydrologic record development, and flood warning. The SMS allow the Division of Water Resources to collect, process, store, and distribute any kind of environmental data transmitted from remote locations. The data set of interest to the Division is the water level at rivers, streams, diversion structures, and reservoirs. The SMS converts these raw water level values into several "products" of use to various "clients". The "products" range from raw data passed on to other computer systems to the official Hydrographic Records of mean daily stream flows. Our "clients" include Division of Water Resources personnel and other water users wanting real-time administrative data, computer systems performing other analyses, and the varied user community of state and federal agencies, municipalities, canal companies, attorneys, and consulting engineers needing access to real-time and historic stream flow data.

This reduction in travel due to the increased lease rate, if it continues indefinitely, creates hardship in maintaining the satellite monitoring system. This is a comprehensive system of remote-sensing equipment that is housed in river gaging stations that provide near-instantaneous streamflow information via satellite relay. The purpose of this satellite monitoring system is twofold: This system is used to provide real-time streamflow data to water users and water commissioners via electronic access to current streamflow information; this allows our water commissioners to monitor fluctuating water supply conditions, thus promoting efficiency in water administration and distribution. The remote monitoring system also serves as an advance warning system to alert officials of imminent flooding conditions. It has become a valuable tool in making real-time adjustments based on ever-changing streamflow conditions, especially in times of scarce water supply.

Intangible benefits are centered on the reliance that water users have upon an unbiased state authority to regulate water supplies in strict accordance with water right decrees and Interstate Compacts. This reliance has a proven record of lessening dissension among competitive water users and the potential for contentious/unnecessary litigation between water users or downstream states.

Dam Safety

The mission of the Dam Safety program is to prevent loss of life, prevent and/or reduce property damage, and to protect the State's water supplies from the failure of dams. The Dam Safety program assures a safe environment related to the design, construction, and operation of dams and reservoirs in accordance with Section 37-87-101 through 125, C.R.S. and Rules and Regulations for Dam Safety and Construction. The program includes the enforcement of a comprehensive set of regulations, policies, and procedures for the construction and maintenance of dams, the safe operation of reservoirs, and emergency preparedness. The safe storage level is determined by the review and approval of engineered plans for the construction and repair of dams, and regular safety evaluations of existing dams and reservoirs by professional engineers.

Reduction in the ability to perform the necessary duties of the Dam Safety program increases the risk of dam failure resulting in potential loss of life and property damage. In addition, program reduction is likely to result in the construction of dams and reservoirs by unlicensed engineers, non-engineers and engineers without the necessary knowledge, experience and skill to design and construct these high-risk structures. A portion of the existing dams will not be maintained or will be maintained at a significantly lower level resulting in increased failure incidents threatening life, property and water storage.

Well Construction

The mission of the Division of Water Resources and The Board of Examiners for Water Well Construction and Pump Installation Contractors is the protection of the groundwater resources and public safety. This is accomplished through the proper licensing of contractors and the development and enforcement of rules and regulations for the proper construction of water wells, monitoring and observation wells, and pump installation. The Division of Water Resources and The Board of Examiners for Water Well Construction and Pump Installation Contractors, in accordance with Section 37-91-101 through 112, C.R.S. are responsible to safeguard the public health and to protect and preserve the groundwater resources of the State of Colorado. The Board promulgates and enforces Water Well Construction Rules related to the minimum construction standards for water wells, monitoring wells and pump installation and administrative rules regarding licensure, disciplinary action and correction of improperly constructed wells.

During FY 2005-06 the agency plans to complete 1,000 construction inspections and observations. A significant curtailment of mileage to perform these inspections could result in improperly constructed wells, improperly abandoned wells, and improperly installed pumps resulting in greater risk of groundwater contamination, water contamination, disease, well contamination, and increased number of open and illegal wells. All of these factors increase risk and reduce protection of the public's safety.

The Department's prioritized objectives relevant to this request include:

1.2 Maximize efficient use of Colorado's water resources and comply with and enforce other states' compliance with interstate compacts.

1.7 Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance and regulatory enforcement related to statutorily authorized programs.

2.3 Promote conservation and stewardship of the state's natural resources among private and public landowners by providing technical assistance and incentives.

Element No. 3 – Available Alternatives:

Alternative # 1 (Recommended):
Provide $87,569 in funding to allow the Division of Water Resources to provide an adequate level of water administration and public safety services commensurate with the level of service provided during FY 2002-03.

Alternative #2 (Not Recommended):
Provide no additional funding to the agency. Curtail field observations of water diversions by 28%, and reduce the effectiveness of the hydrographic program streamflow measurement and water year streamflow and water diversion records, real-time satellite transmission of stream flow data, dam safety program safe storage level determination and new project approval, and the well inspection program.

Alternative #3 (Not Recommended):
Divert appropriated operating funds from other activities to provide necessary supplemental funding for increased vehicle mileage expenses.

Element No. 4 – Selected Analytical Technique

The Alternative Benefit/Cost Technique is applied to this request.

Element No. 5 –Assessment of Alternatives

Alternative #1

Benefits

Benefits are based upon the economic value of crop production that can be realized with adoption of this alternative.

Total benefits: $66.67/acre-foot x 143,000 acre-feet of water diverted to appropriate senior water rights holders = $9,533,300

Costs
The total amount that is requested is $87,569.

Benefit/Cost Ratio: $9,533,300/$87,569 = 109

Calculations and Assumptions

Described above for individual work components. The qualitative benefits associated with the impact of increased effectiveness on other programs affected by this proposal are significant, but could not be quantified.

Alternative #2 – will severely jeopardize the most critical core missions of this agency, including water allocation, interstate compact compliance, and effective hydrographic, dam safety and well inspection programs.

Alternative #3 – The agency evaluated the feasibility of reducing operating expenses in other areas of the agency to generate the necessary $87,569 for incremental mileage expenses. Operating funds to support the core mission of the agency were reduced through mandatory general fund cuts by nearly 4% in FY 2002-03 and nearly 3% in FY 2001-02. During this period, the agency also absorbed all inflationary cost increases. The agency concluded that any shifting of expenditures would simply endanger the same functions impacted by alternative #2; this alternative, consequently, does not provide any quantifiable benefit.

We recommend adoption of alternative #1.

Schedule 6
Decision Item Request for FY 2005-06

Department: Natural Resources
Priority Number: 3 of 28
Division: Water Resources
Program: Water Administration
Request Title: Republican River Compact Compliance

Dept. Approval: Date: 10/25/04
OSPB Approval: Date: 10/25/04
Statutory Citation: 37-80-102; 37-67-101

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	319,352	699,822	0	699,822	251,324	51,861	273,975	0	273,975	50,791
	FTE	0.0	0.5		0.5	0.0	0.0	0.0		0.0	0.0
	GF	191,404	445,781		445,781	222,114	51,861	273,975		273,975	50,791
	CF	7,797	26,112		26,112	29,210					
	CFE	120,151	227,929		227,929	0					
	FF										
Line Item Name	Total	2,009	139,636	0	139,636	0	50,754	50,754	0	50,754	46,363
Republican	FTE	0.0	0.5		0.5		0.0	0.0		0.0	0.0
River	GF	2,009	139,636		139,636		50,754	50,754		50,754	46,363
Compact	CF										
Compliance	CFE										
	FF										
Line Item Name	Total	120,151	349,529	0	349,529	0	0	0	0	0	0
Republican	FTE	0.0	0.0		0.0						
River	GF		121,600		121,600						
Roll	CF										
Forward	CFE	120,151	227,929		227,929						
	FF										
Line Item Name	Total	197,192	210,657	0	210,657	251,324	1,107	252,431	0	252,431	4,428
	FTE										
Vehicle	GF	189,395	184,545		184,545	222,114	1,107	223,221		223,221	4,428
Lease	CF	7,797	26,112		26,112	29,210		29,210		29,210	
Payments	CFE										
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name:
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☒ Yes ☐ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes x No (If yes, Name of other Department(s)____________)

Efficiency and Effectiveness Analysis

Department: **Natural Resources**
Request Title: **Republican River Compact Compliance**
Priority: **3 of 28**
Division: **Water Resources**

Summary of Requested Alternative: The Division of Water Resources requests $51,861 to satisfy its obligations under the Republican River Compact and the terms of the Final Settlement Stipulation (FSS) in the case Kansas v. Nebraska and Colorado, No. 126 Original:

- $42,533 personal services for a full time Water Commissioner (Engineering / Physical Sciences Technician II) to provide on-the-ground Republican River Compact compliance enforcement. The duties for the Commissioner will include stream flow diversion and well pumping measurements, verification of irrigated acreage and other land use investigations, and curtailment of well/surface water rights in accordance with the Compact, the FSS, and the priority system. The Division will utilize its existing FTE allocation from its personal services line.
- $4,933 for total operating expenses.
- $1,107 for a state leased vehicle.
- $3,288 for total capital expenses.

The Division received adequate funding for contracted technical experts needed in the development of compliance models and systems during FY 2003-04 and FY 2004-05. Beginning in FY 2005-2006, the Division must dedicate a permanent employee to compact regulatory compliance activities. This will address the added workload demand on the Division of Water Resources in achieving compliance with the Republican River Compact.

The State of Colorado was successful in negotiating a mutually acceptable Final Settlement Stipulation (FSS) that obviated the need for an anticipated nine-month trial. In addition to saving an estimated $5 million in legal and technical expenses, the FSS allows Colorado to decide how to meet our compliance obligations to the compact and how to best protect the agrarian economy in seven counties in northeastern Colorado. Through legislative creation of a Conservation District and of a regional revenue source, Colorado now has the means to most effectively control this limited water supply and to dry up the necessary irrigated cropland to assure compliance.

Presently, Colorado irrigates approximately 574,000 acres of croplands by 3,967 large-capacity irrigation wells in the Republican River Basin. Meeting state-line water delivery requirements of the FSS will require that a number of these wells reduce or cease pumping. The added duties associated with this increased water administration exceed the capacity of our current staffing levels in the Republican River Basin. This request, therefore, for added personal services and a state vehicle is directly associated with compliance activities and technical investigations that are mandated by the FSS and are necessary to assure Colorado satisfies its obligations under the Republican River Compact and the Final Settlement

Stipulation.

Element No. 2 – Problem or Opportunity Definition.

For the period of 1998 – 2002, Colorado exceeded its Republican River Compact allocation by an average of 4,178 acre-feet per year. The Final Settlement Stipulation requires Colorado to achieve compact compliance for a five-year average beginning in 2003. Concluding 2003, Colorado already has fallen out of compact compliance by more than 14,000 acre-feet. Achieving compliance for the five years ending in 2007 may require the retiring of a large portion of the 574,000 agricultural acres irrigated. House Bill 04-1256 and Senate Bill 04-235 provided for the necessary means of allowing interruptible water supply agreements and for the creation of a Republican River Water Conservation District respectively. The Division of Water Resources will now be charged with helping enforce these agreements and working with the conservation district to assure compliance.

Additionally, the FSS, signed in December 2002, calls for the Division to fulfill the following administrative duties:

- Provide a report of all approved and denied well permits or other requests for well construction within the basin.
- Determine virgin water supply, computed water supply, allocations, imported water supply credit, augmentation credit, and computed beneficial consumptive use based on methodology set forth in the Republican River Compact Agreement accounting procedures.
- Determine stream flow depletions caused by well pumping.
- Pursue system improvements on the basin.
- Limit its use of the flexibility of water derived from sub-basins in excess of specific sub-basin allocations.

The newly assigned Water Commissioner would serve as the lead in all of these administrative duties while providing valuable input on system improvements and other long-term solutions.

Litigation expenses and non-compliance penalties involving the Arkansas River Compact proved extremely costly. The Division believes that the negotiated Final Settlement Stipulation favorably enables Colorado to avoid similar costs by actively allocating limited water resources throughout the basin.

The Division's statutory obligations are set forth in the following statutes:

Title 37	Article 67	Republican River Compact
Title 37	Article 80	State Engineer
Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Stream)
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water)

The Department's prioritized objectives regarding interstate river compact obligations include:

1.2 Maximize efficient use of Colorado's water resources and comply with and enforce other states' compliance with interstate compacts.

2.3 Promote conservation and stewardship of state natural resources among landowners by providing technical assistance and incentives.

Element No. 3 – Available Alternatives

Alternative No. 1 (Recommended):

- Appropriate General Funds to cover the costs of added personal services and one vehicle.
- This alternative will fund necessary water administration personnel in the Republican River Basin to curtail out-of-priority diversion, to assure retired lands are not irrigated, and to measure compact delivery flows at three interstate river compact gaging stations.
- In terms of Republican River administration, failure to effectively administer water rights in the basin could result in approximately a 20% reduction of water delivery to the appropriate holders of water rights. This 20% estimate is based on the time required to administer 574,000 agricultural acres spread over seven counties and 7,700 square miles. With approximately 22,000 acre-feet of annual compact entitlement, and estimating water value at $500 per acre-foot, the basin's water users receive an added $2,200,000 in entitled water through effective administration.

Alternative No. 2 (Status Quo, Not Recommended):

- Maintain current Division 1 staff allocation and utilize existing Republican River Basin staff levels, thus risking failure to maintain compliance with the Final Settlement Stipulation issued by the United States Supreme Court.
- Based on prior litigation involving the Arkansas River and Republican River Compacts, such costs to the state can be estimated at $5 million. These costs may be incurred by the Attorney General and the State Engineer in FY 2006-07 and beyond.
- This alternative assumes that effective water rights administration throughout Division 1 (not related to compact compliance) would be maintained, with a benefit to owners equal to that in Alternative 1.

Alternative No. 3 (Not Recommended):

- Reallocate existing staff from Division 1's public safety and water administration personnel to ensure compliance. While existing personnel in these areas are collectively qualified to administer water rights within the basin, a dedicated Republican River Compact Compliance Water Commissioner would develop a skill set unique to this interstate agreement.
- Though the displaced staff will come from areas throughout Division 1, this analysis uses Republican River Basin administration for quantitative comparison. Reallocating staff to Republican River Compact administration would result in the reduction of water delivery as outlined in Alternative No. 1. The annual revenue lost under this alternative ($2,200,000) is therefore reflected as benefits in Alternatives 1 and 2.
- This does not include indirect or imputed damages to the associated communities that will suffer from lost agricultural revenue.
- This alternative has no direct cost to the Division. It is considered the baseline alternative.

Element No. 4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the value of the Republican River property owners receiving the total amount of water to which they are entitled and avoiding further litigation with Kansas and Nebraska.

Element No. 5 – Assessment of Alternatives

There are three alternatives: 1) add requested funding; 2) do not add requested funding, do not re-allocate existing staff, and risk non-compliance with the FSS; 3) re-allocate Division 1 personnel to the detriment of water administration through the remainder of Division 1.

Alternative	Cost	Year	Benefit to Owners	Benefit-Cost Ratio
1	$51,861	1	$2.2 M	42.4
	$50,791	2	$2.2 M	43.3
2	$0	1	$2.2 M	-
	$5 M	2+	$2.2 M	.44
3	$0	1	$0	-
	$0	2	$0	-

Based upon the three alternatives, Alternative No. 1 is our recommendation due to the avoidance of substantial litigation expenses and due to the beneficial impact to the decreed water right owners in the Division. This protects the use of Division 1 waters by Colorado water users, thus maintaining the current benefit level without incurring substantial litigation expenses (Alternative No. 2). While Alternative No. 3 incurs no such litigation, its reallocation of Division 1 services removes protection of water usage and the corresponding benefit of appropriate administration.

Breakdown of Alternative No. 1 costs:

EPST II

Expense	**Year 1**	**Year 2**
Salary/mo	$ 3,176	$ 3,176
Months	12	12
Salary	$ 38,112	$ 38,112
PERA (10.15%)	$ 3,868	$ 3,868
Medicare (1.45%)	$ 553	$ 553
Total PS	**$ 42,533**	**$ 42,533**
Operating:[1]		
Miles to be Driven (person.)	(9 mos.) 11,250	
Cost/mile (reimburse 4X4)	$ 0.32	
Cost of Miles	$ 3,600	
Miles to be Driven (fleet)	(3 mos.) 3,750	(12 mos.) 15,000
Cost/mile (fleet)	$ .222	$ .222
Cost of Miles	$ 833	$ 3,330
Operating cost	$ 500	$ 500
Total Operating	**$ 4,933**	**$ 3,830**
Leased vehicle ($369/mo.)[2]	**$ 1,107**	**$ 4,428**
Furniture	$ 2,021	0
Computer & Software	$ 1,267	0
Total Capital	**$ 3,288**	**0**
Total Expense	**$ 51,861**	**$ 50,791**

[1] Assumes vehicle lease begins April 1, 2006. Personal vehicle utilized prior to that date. $.32 and $.222 cost per mile per FY 2004-05 costs.

[2] Lease estimate of $369 monthly provided by Ron Clatterbuck, New Vehicle Coordinator, State Fleet Management, for a ½ ton 4X4 pickup, appropriately equipped.

Schedule 6

DECISION ITME REQUEST for FY 2005-06

Department:	Natural Resources	Dept. Approval:	Date: 10/25/04
Priority Number:	4 of 28	OSPB Approval:	Date: 10/25/04
Division:	Parks and Outdoor Recreation	Statutory Citation: CRS 33-10-101 to 33-15-112	
Program:	Park Management and Maintenance		
Request Title:	Cheyenne Mountain State Park		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total		26,811,737			26,811,737	177,830	26,989,567		26,989,567	177,830
	FTE		250.6			250.6		250.6		250.6	0.0
	GF		2,831,763			2,831,763		2,831,763		2,831,763	0
	CF		18,150,983			18,150,983	121,830	18,272,813		18,272,813	121,830
	CFE		4,940,060			4,940,060	56,000	4,996,060		4,996,060	56,000
	FF		888,931			888,931		888,931		888,931	0
(B) Total New State Parks Program Line (Total consolidation of new state parks line items)	Total		1,031,971			1,031,971	177,830	1,209,801		1,209,801	177,830
	FTE		12.5			12.5		12.5		12.5	0.0
	GF		164,174			164,174		164,174		164,174	0
	CF		492,797			492,797	121,830	614,627		614,627	121,830
	CFE		375,000			375,000	56,000	431,000		431,000	56,000
	FF										
Program Costs	Total		826,171			826,171	95,982	922,153		922,153	95,982
	FTE		12.5			12.5		12.5		12.5	0.0
	GF										
	CF										
	CFE										
	FF										
Seasonal Work Program	Total		205,800			205,800	81,848	287,648		287,648	81,848
	FTE										
	GF										
	CF										
	CFE										
	FF										

Letter Notation:

Cash Fund name/Number, Federal Fund Name: Parks Cash Fund 172

IT Request ☐ Yes ☒ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)__________________)

Efficiency and Effectiveness Analysis

Identifying Information

Department:	Natural Resources – Division of Parks and Outdoor Recreation
Request Title:	Cheyenne Mountain State Park
Priority number:	4 of 28
Summary of Requested Alternative:	Operations of Cheyenne Mountain State Park
Performance Measures:	Expand recreational opportunities to park visitors Full year funding to keep first State Park in El Paso County open

Problem or Opportunity Definition

Surveys and polls indicate strong public preferences to preserve open space and invest in expanded recreational and park facilities. In this regard Colorado State Parks' provision of outdoor recreation with amenities is consistent with public expectations. In particular, seniors and young families, the fastest growing segments of the population, expect that State Parks will provide updated amenities such as showers, modern campgrounds, well designed trail systems, frequent safety patrols and environmental education. It is our responsibility to ensure these facilities are adequately maintained, supported, and accessible to the public, who have paid for their development and use.

Cheyenne Mountain State Park, the first state park in El Paso County, is located on the southwest edge of Colorado Springs, three miles from the intersection of I-25 and Academy Boulevard. The park encompasses 1,680 acres of grassland meadows, forested slopes and steep, rugged rock faces. Once fully open to the public, Cheyenne Mountain State Park will provide a variety of recreational opportunities for Colorado Springs' citizens and visitors, including camping, hiking, picnicking, wildlife viewing and environmental education activities.

This park preserves one of the Front Range's largest remaining parcels of pristine open space in a metropolitan area. The property (formerly the privately owned JL Ranch) was identified by the City of Colorado Springs as its highest priority for open space acquisition in the city's recent Open Space Plan. With significant help from GOCO, the City of Colorado Springs, El Paso County and our other partners, State Parks purchased this 1,680-acre "Crown Jewel" property at a cost of $16.8 million, including GOCO's contribution of $8.6 million. It preserves one of the largest remaining open tracts in the Colorado Springs area, as well as significant wildlife habitat and a key part of the city's visual backdrop. As the first State Park in El Paso County, it will provide new recreational opportunities to Colorado Spring's citizens and visitors

Planning for park development is now complete. Significant effort has been made to identify the most sustainable areas for park development and trails; park roads and facilities will be concentrated on just 80 of the site's 1,680 acres. As designed, the park will protect the view shed for the Colorado Springs metropolitan area and preserve significant habitat for native wildlife like bear, mountain lion, deer, fox, elk, coyote, turkey and numerous bird species, including a highly sensitive Prairie Falcon nesting area. The visiting public will be able to enjoy the rugged backcountry of this park through a comprehensive trail system. Other park amenities will include a visitor center, trailhead with parking, a 62–site campground with a camper services building, picnic areas, a group picnic area, and a maintenance shop and compound. New components not identified in previous iterations of the park's master plan include cabins and an event center – a first for Colorado State Parks. In total, it is expected that the development of all facilities will cost approximately $20 million and construction will continue through FY 2009-10. Current business models indicate that Cheyenne Mountain State Park should eventually generate enough revenue to cover all operating expenses, making it totally self-sufficient. An estimated 300,000 people will visit the park annually once development is complete and all areas of the park are open to the public.

In FY 00-01, a caretaker operating budget was funded that established a Park Manager to oversee planning, design and development activities, as well as caretaker functions of maintenance, patrol and resource management.

During FY 02-03, a business plan and conceptual plan were both completed for the park. Construction of a trail system has already begun and will be completed during FY 04-05.

In FY 04-05, a budget request was funded to begin limited operations. This funding included 2 staff, each funded for ½ year.

The FY 05-06 request is for funding of operations for the park to support facilities, scheduled to be completed by FY 05-06. The following facilities will be fully operational for the entire fiscal year: a 291-site trailhead parking lot and approximately 16 miles of natural surface trail. The park Visitor Center and the maintenance shop are projected to be open in January, 2006. The 62 –site campground, camper services building, restrooms, one group picnic area and individual picnic sites will not be complete until late in the fiscal year, and therefore will be open beginning July 2006 (FY 06-07). Marketing efforts will be initiated to generate visitation with the goal of maximizing the park's ability to be self-sufficient.

At total build-out, park amenities at Cheyenne Mountain State Park will include the following:

- Visitor Center (~ 6000 sq. ft.) with multi-purpose room, office space, exhibits, etc., 71 car parking spaces, 11 RV parking spaces, and trail linkages.
- Trailhead parking area with 276 parking spaces, flush restroom, and shade shelter.
- Two individual picnic areas totaling 42 sites, two flush restrooms, trail links and 73 parking spaces.
- A group picnic area with a covered pavilion capable of holding 200 people, a flush restroom, amphitheater, playground, volleyball court, trail links, and 84 parking spaces.
- An event center (~ 9200 sq. ft.) capable of hosting 250 people, with a boardroom, catering kitchen, administrative office, and 61 parking spaces.
- A small meeting lodge (~ 1600 sq. ft.) with 20 parking spaces.
- 18 full-service cabins and associated infrastructure.
- 52 full-hookup campsites with water, sewer and electric.
- 10 basic walk-in tent sites.
- A camper services building with restrooms, showers, laundry, admin office space, playground, with 15 car and 9 RV parking spaces.
- 3 additional flush restrooms located in and around the campgrounds.
- A maintenance shop (~ 4000 sq. ft.) with 3 bays, storage and office space located in a compound (~ 37,600 sq. ft.) offering storage, a twelve vehicle line shed and 13 employee parking spaces.
- Approximately 1.5 miles of paved, accessible trails.
- Approximately 18 miles of natural surface, hiking and biking trails.
- All roads and parking lots to be paved.
- All utilities provided by Colorado Springs Utilities – water, sewer, electric and natural gas.

Available Alternatives

Alternative #1- Funding based on a fully operational, market based park model

- Statutory authority for this alternative: Sections 33-10-101 to 33-15-112 C.R.S.
- Specific Department objectives promoted by this alternative:
  - 1.1 Provide leadership in responding to population growth and increasing demands by providing services, information, and assistance to accommodate economic activity in conjunction with sound stewardship.
  - 1.6 Provide and promote a variety of outdoor recreational opportunities for citizens and visitors.

2.4 Increase citizen knowledge and understanding of natural resource issues by expanding and enhancing public information and outreach efforts.

2.5 Improve customer service to the people of Colorado and visitors by demonstrating a 10 percent increase in customer satisfaction and implementing initiatives to improve access to Department services to under-served populations.

- Create a positive revenue stream that fully supports the operation and staffing costs of this initiative, while helping State Parks achieve its goal to become more self-sufficient.

Alternative # 2 - Delay or indefinitely postpone full opening of Cheyenne State Park to the public or limit access

- Statutory authority for this alternative: Sections 33-10-101 to 33-15-112 C.R.S. No additional statutory authority needed to delay or postpone opening.
- Specific department objectives promoted by this alternative: None of the objectives listed under alternative #1 would be advanced or promoted by this alternative.
- Citizens will not be able to use facilities constructed with significant amounts of public funding.

Linking Budgetary Expenditures to the Full Range of Outcomes

Stakeholders	**Beneficial Outcomes of Alternative #1**
Outdoor Recreationists	• Trail connections with the City of Colorado Springs' Cheyenne Canyon Park to the north and the Nature Conservancy's Aiken Canyon to the south. • Recreational opportunities including campgrounds, picnic areas, hiking, biking, bird watching, wildlife viewing, and environmental education. • Camping facilities planned for the park will fill a gap in the available camping along the I-25 corridor between metropolitan Denver and Pueblo.

Citizens	• A positive income stream that supports the park system. • Personal and social benefits derived by citizens who use parks to enhance their lifestyle and health through outdoor recreation. • Preservation of significant wildlife habitat used by bear, mountain lion, deer, fox, coyote, elk, and numerous bird species; The Colorado Division of Wildlife has identified a highly sensitive prairie falcon nesting area in the southwestern portion of the site. • This park has been designated as a GOCO Legacy project, receiving over $5M to date toward development of facilities. A request for $5.064 M of additional GOCO Legacy Funding has been submitted to GOCO. • Significant contributions from other partners, including the City of Colorado Springs and El Paso County, have been made to establish a large regional park linked to regional trail systems.
Future Park Visitors	• Preserve the facilities and natural resources for future generations. • Preservation of facilities and protection of investment.

General types of potential benefits.
The visitors to the park will benefit in having a full array of services available to them. The local residents benefit through enhanced tourism and recreational opportunities and park visitors benefit statewide by this investment.

Potential reductions in budgetary costs.
This initiative requires no additional General Fund support and has the potential to generate a net positive cash flow.

Timely maintenance and care of facilities should avert major repairs in the future and will increase the life cycle.

<u>Selected Analytical Technique</u>

Benefit-Cost Analysis

Costs and Benefits to Fund Request
Total Estimated Revenue received from implementing Alternative #1 $125,258

Total Estimated Budget $177,830
Cash Funds $121,830
Cash Funds Exempt (GOCO) $ 56,000

[1] Colorado's economic indicators continue to point to a rebound. Four Colorado counties, Douglas, Gilpin, **El Paso**, and Larimer received an A+ rating in the State of the Rockies Report Card and Conference Project (based on 15 different indices, including economic indicators such as unemployment rates, earnings growth, and small business growth). The score is used to measure a community's relative level of prosperity in comparison with other Rocky Mountain area counties. The overall economic growth trends indicate an increase for potential visitation, which supports the need for facilities such as Cheyenne Mountain State Park.

[1] "Colorado Close-Up, An Economic Newsletter", Office of State Planning and Budget, May 2004

Assessment of Alternatives

Alternatives	**Benefits and Objectives**			
	Enhanced recreational opportunities for local residents and citizens statewide	Economic development benefits for local communities	Protect our natural resources and maintain our investment in facilities	Preservation of significant wildlife habitat and open space
Alternative #1 – Fund request	Yes	Yes	Yes	Yes
Alternative #2 – Do not fund request. Delay, postpone, cancel construction at the	No	No	No	Yes

Alternatives	Benefits and Objectives			
	Enhanced recreational opportunities for local residents and citizens statewide	Economic development benefits for local communities	Protect our natural resources and maintain our investment in facilities	Preservation of significant wildlife habitat and open space
park.				

Key Issues for Decision Making:

General Fund cuts and revenue shortfalls have necessitated a focus on opportunities to maximize revenue. A business plan was completed for this park in FY 02-03 and updated during FY 03-04. The business plan was developed using a market-based model with the intention to create an operation that is completely self-sufficient and will guide development and operations. Essential elements of this plan include:

- a mix of facilities and amenities designed to generate revenue
- a staff position devoted solely to market the park and its programs and services
- the marketing effort is key to rapidly building a strong visitor base that will financially sustain the park.

Projected development costs of $20 million for the park will bring the total costs for this project, including acquisition, to roughly $36 million. It is important that these facilities be accessible to the State's citizens and maintained in a way that protects and enhances this public investment.

Assumptions and Calculations

Operating Costs

Personal Services – Total	$58,498
Park Manager II, including PERA and Medicare*	$20,069
Technician IV, including PERA and Medicare*	$21,008
Administrative Assistant III, including PERA and Medicare	$17,421
Operating – Total	$26,000
Operating costs for new staff - uniforms, training, mileage	$ 8,000

Maintenance and janitorial supplies Marketing Trash collection, communications costs, postage and other operating	$ 6,000 $ 5,000 $ 7,000
Utilities - Total Electricity, water and sewer	$ 11,484
Seasonal Work Program - Total Park Ranger III 12 months @ $9.25/hr x 173 hrs/mo plus PERA and Medicare Maintenance Tech III 18 months @ $7.99/hr x 173 hrs/mo plus PERA and Medicare Visitor Services Tech III 18 months @ $7.61/hr x 173 hrs/mo plus PERA and Medicare Program Tech 3 months @ $10.71/hr. x 173/hrs/mo plus PERA and Medicare	$ 81,848 $21,431 $27,767 $26,447 $ 6,203
Cash Funds	$121,830
Cash Funds Exempt – GOCO	$ 56,000
TOTAL ESTIMATED BUDGET – Cash Funds	$177,830

* Annualization of employees approved as part of the FY 2004-05 decision item

Estimated Annual Revenue Summary

Day Use – Daily, Annual and Aspen Annual pass sales	$262,420
Total Estimated Revenue	$262,420
Less revenue already in base budget	($137,162)
Estimated Revenue available for decision item	$125,258

Assumptions:

- Day Use, before opening- trail use only: 291 parking sites; 65% of visitors purchase daily pass, 21% are annual pass holders but only 5% would purchase pass at the park; 11% would be Aspen Leaf pass holders but only 2% would purchase pass at the park

Weekend Peak Season – May through September = 42 days x 291 sites x 135% load factor = 16,500 vehicles
65% x 16,500 x $6 daily = $64,349 in daily pass sales
5% x 16,500 x $55 annual = $45,374 in annual pass sales
2% x 16,500 x $27 Aspen annual = $8,910 in Aspen annual sales

Weekday Peak Season – May through September = 112 days x 291 sites x 40% load factor = 13,037 vehicles
65% x 13,037 x $6 daily = $50,844 in daily pass sales
5% x 13,037 x $55 annual = $35,851 in annual pass sales
2% x 13,037 x $27 Aspen annual = $7,040 in Aspen annual sales

Weekend Off Season – October through April = 63 days x 291 sites x 30% load factor = 5,500 vehicles
65% x 5,500 x $5 daily = $17,875 in daily pass sales
5% x 5,500 x $55 annual = $15,125 in annual pass sales
2% x 5,500 x $27 Aspen annual = $2,970 in Aspen annual sales

Weekday Off Season – October through April = 148 days x 291 sites x 5% load factor = 2,153 vehicles
65% x 2,153 x $5 daily = $6,998 in daily pass sales
5% x 2,153 x $55 annual = $5,921 in annual pass sales
2% x 2,153 x $27 Aspen annual = $1,163 in Aspen annual sales

Recommendation

Fund the request for operations of Cheyenne Mountain State Park to ensure the park is open to the public and revenue will be collected to support those operations costs. This request continues the phasing in of operations at Cheyenne Mountain State Park, as first approved under a FY 2004-05 decision item.

Schedule 6

CHANGE REQUEST for FY 2005-2006

Department:	**Department of Natural Resources**	**Dept. Approval by:** Will. S. Daley	**Date:** 10/25/04
Priority Number:	**5 of 28**	**OSPB Approval by:**	**Date:** 10/25/04
Division:	**State Land Board**	**Statutory Citation: CRS 36-1-101.5(6{(b}{(c});**	
Program:	**Various**	**36-1-120.5 (1) (2) (3); 36-1-122**	
Request Title:	**Business Improvement and Maintenance Funding**		

		1	2	5	6	7	10
Fund		**Prior Year Actual FY 2003-04**	**Appr. FY 2004-05**	**Base Request FY 2005-06**	**Decision/ Base Reduction FY 2005-06**	**Nov. 1 Request 2005-6**	**Change from Base in Out Year FY 2006-07**
State Trust Land Evaluations and Trust Asset Management and Analysis	**TF** **FTE** **CFE**	567,509 0.0 567,509	**567,509** **0.0** **567,509**	**567,509** **0.0** **567,509**	**500,000** **0.0** **500,000**	**1,067,509** **0.0** **1,067,509**	**500,000** **0.0** **500,000**

Letter Notation:
Cash Fund Name/Number: Administration Fund/Fund Number 162
IT Request: No
Supplemental and Budget Amendment Criteria: **Emergency** **Technical Error** **New Data** **Unforeseen Contingency**
Request for New or Replacement Vehicles: No
Request Affects Another Department(s): No

Efficiency / Effectiveness Analysis

Department of Natural Resources

Request Title:	Business Improvement and Maintenance Funding
Priority #:	5 of 28
Division:	State Land Board
Summary:	Provide $500,000 spending authority in order to increase revenue and improve and maintain Board asset value and revenue.
Evaluation:	Return on Investment and Rate of Return

Problem or Opportunity Definition

Problem Statement

The purpose of the Public School Trust lands entrusted to the State Land Board and as dictated by statute and the state constitution is to serve as an intergenerational trust for the support of K-12 education. This mission leads the Board towards the following management principles:

- Maintain or increase land value over time
- Generate reasonable and consistent revenue over time
- Minimize environmental impacts with a particular focus on Stewardship Trust parcels
- Provide a good model of land management

The Land Board manages approximately 2.9 million acres of land from which it derives nearly $12 million in lease revenues for K-12 per pupil funding. The Board also repositions its assets by selling less productive and/or less valuable land and purchasing land that has increased current or future value and/or revenue potential.

However, the Board has limited resources to actively increase land value and/or land revenue once the asset is acquired. There are a multitude of conservative opportunities that would provide quantifiable revenue and/or land value increases. Business improvement and maintenance funding would be used to help recognize these opportunities.

The Board currently manages over 50 "developable" parcels of land where business improvement and maintenance funding would provide significant land value and revenue enhancements with minimal risk. Investment in these lands would include anything from entitlement work (zoning and platting) to actual construction, such as water and sewer services or roadwork. The use of business improvement funding on developable lands would help prepare the land for a partnership with a developer(s). The initial stages of land development yield major increases in land value with relatively minor investment.

Also business improvement and maintenance funding would be used to further develop or redevelop the Land Board's "developed" commercial properties, which include buildings and parking lots. The estimated value of the Board's "developed" assets is around $30 million and generates around $4 million per year. While building revenues covers building operating costs, the Board is limited in its ability to improve developed land, such as transforming an underperforming duplex apartment into a paid parking lot or adding major improvements to a building that is currently vacant in order to attract new tenants.

There are also many opportunities on agricultural lands pertaining to water and water rights. The Board has 12 irrigated farm properties. Typical annual lease rates for grazing and dry crop are about $2.50 per acre and $14.50 per acre respectively. Annual irrigated crop leases range from $20 to $150 per acre depending on productivity of the soil and who owns the water and irrigation infrastructure – the Board or the lessee. The key to maintaining and/or increasing the return from agricultural leases is the availability of water and the systems that deliver the water to the crops.

Business improvement and maintenance funding would be spent in a targeted manner in order to identify parcels that would have a high level of return on investment and rate of return. These funds would be spent in a way that would maximize gains and minimize risk. The Board would fund proven concepts such as parking lots, entitlement services, and irrigation systems.

Available Alternatives

Alternative Number One: No Change - allow $500,000 in revenue to be deposited in the Permanent Fund – Earning a rate of return of 6.8 percent – Not Recommended.

A.) Description:
B.) Demonstrated 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.
C.) Objectives supported by this request: 2.2 Provide continuing oversight and stewardship of state land assets by developing and implementing appropriate management plans or leases for all parcels; 2.7 Assist land owners, water users and local governments in land-use planning and natural resource management by increasing the availability of relevant information and data and providing technical assistance; 2.8 Promote a systematic framework for addressing the changing values and opportunities on state lands which recognizes and utilizes the current potential of these properties while preserving and enhancing the qualities that will attract higher and better uses. These objectives may not be met with this alternative.

Alternative Number Two: $500,000 in Business Improvement and Maintenance Appropriation earning a rate of return of between 10 to 80 percent – Recommended

A.) Description:
B.) Demonstrated 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.
C) Objectives supported by this request: 2.2 Provide continuing oversight and stewardship of state land assets by developing and implementing appropriate management plans or leases for all parcels; 2.7 Assist land owners, water users and local governments in land-use planning and natural resource management by increasing the availability of relevant information and data and providing technical assistance; 2.8 Promote a systematic framework for addressing the changing values and opportunities on state lands which recognizes and utilizes the current potential of these properties while preserving and enhancing the qualities that will attract higher and better uses. All these objectives may be met with this alternative.

Analytical Technique

The analysis of this change request includes Return on Investment and Rate of Return. The change request begins with a comparison of the rate of return for each of the two alternatives and then examines the rate of return generated by each scenario.

Return on Investment is determined by comparing the initial value and/or investments to the final estimated value or total revenue. It is the return over the original investment. Each return on investment calculation provides a contrast between the current or anticipated status – the "do nothing" option – and the proposed project.

The **Rate of Return** is defined as the discount rate that makes the net present value of the initial value plus investment equal to zero. Rate of return is often identified as a "go no go" analysis technique. It compares the annual rate of return on a particular project to the annual return from another type of investment such as a government or corporate bond.

For evaluating revenue enhancement projects, the rate of return calculation uses the initial investment and improved annual revenue and discounts them over a given period of time in order to determine the rate of return. For evaluating land value enhancement projects, the rate of return calculation compares the initial land value and investments (e.g. improvements) to the final estimated land value over a given period of time.

The rate of return is therefore affected by the time frame where as return on investment is not. As the time period increases, the associated rate of return decreases and vice-versa. Each time period selected for the analysis is based on either the normal lease term or project time horizon. Generally, lease terms for agricultural leases are ten years and commercial leases are five years. Development project have varied time periods that are defined by specific circumstances, such as local government approval, water availability, commercial interests, abutting or related developments, developer timeline, etc.

Please note that return on investment and rate of return analysis does not compare the cost to acquire and carry (debt service and property tax) the property, similar to what a business does when it determines the return on investment and rate of return. These costs are generally not applicable to Board activities because the Land Board received land as a grant, does not borrow to buy land, and does not pay property tax.

Assessment of Alternatives

Background Information

The Land Board generates about $35 million each year from eight trusts. Over ninety percent of this revenue comes from the Public School Trust lands and assets. The School Trust revenue generated by the State Land Board is: (1) surface and mineral lease revenue that is part of the annual School Finance Act and (2) mineral royalty and timber revenue that is added to the School Trust Permanent Fund managed by the State Treasurer. Annual interest income on the Permanent Fund is also added to the School Finance Act.

Currently, the State Land Board's operating appropriation – $3.6 million in FY 2004-05 – is primarily funded by mineral royalties before the funds are deposited in the Permanent Fund.

The analysis of this change request compares the rate of return of spending $500,000 on Board Land for revenue enhancement and land valuation increases to the rate of return on Permanent Fund. The rate of return and return on investment for the Permanent Fund equals the interest rate.

Linkage of Budgetary Expenditures to Outcomes

Funding Alternative Number One: **Do not Fund the request – allow revenues to flow into the Permanent Fund**

Will negatively impact the future value and revenue of state trust lands and asset.
Will negatively impact the future revenue generating opportunities on state trust land.
Will negatively impact the Land Board's contribution to the state's public education system since 96% of the land managed by the SLB is a School Trust asset.

Funding Alternative Number Two: **Fund this change request with $500,000 in appropriated funds from mineral royalties and bonus revenue.**

Will provide a basis for an implementation strategy to begin to generate additional revenues for the Board.
Will result in additional funds being available for support of the state's K-12 educational system.
Will assist the State Land Board in carrying out its mandates as the trustee of the property.

Cost Assumptions and Calculations

Alternative Number One:

This alternative has no budgetary cost associated with it.

Alternative Number Two:

This alternative would add $500,000 to the State Land Board appropriation.

Benefits Assumptions and Calculations

Exhibit 1 below summarizes the benefits of the alternatives and associated examples.

Exhibit 1: Summary of Benefits and Cost of Investment Options

Alternative	Project	Cost	Return on Investment	Rate of Return
1	Permenant Fund	(500,000)	6.8%	6.8%
2	LODO Parking Lot	(48,600)	1252.9%	212.77%
2	Mason Street Remodel	(360,500)	228.5%	51.14%
2	Bijou Ditch Pivot Replacement	(80,000)	80.0%	12.42%
2	Riverside Ditch Pivot	(90,000)	73.3%	11.49%
2	6th and Kipling Offsite Improvements	(450,000)	42.6%	12.60%
2	48th and Tower Offsite Improvements	(3,000,000)	60.0%	10.70%
2	Falcon Entitlement	(277,880)	223.0%	79.60%

Alternative 1 – the do nothing option – does not add any budgetary cost and generates an interest income/rate of return of around 6.8 percent based on the five-year interest rate history of the fund and the future average interest rate yield of the fund. The return on investment is also 6.8 percent because none on the interest income is invested back into the fund (until FY 2003-04).

Alternative 2 – allowing the Land Board to invest funds – generates a return on investment of between forty to over two hundred percent (without LODO parking). The rate of return range is between ten and eighty (without LODO parking). The LODO parking lot, while a relevant example, is considered an outlier for purposes of establishing return on investment and rate of return ranges because of the specific market forces at play in its location.

Alternative 1 Analysis

Attachment 1 is the most recent quarterly report from the State Treasurer's Office. The report shows 6.8 percent as the five-year average book yield on the fund, which has been used for the rate of return and return on investment analysis. It is important to point out that future interest rates are not expected to be that high. For example the last two years (FY 2002-03 and FY 2003-04) show an interest rate of only 6.0 percent, which will affect the five-year average in the future.

Alternative 2 Analysis

The following analysis provides real examples of what the business improvement and maintenance funds would be used for. The examples cover both revenue enhancement, maintenance, and land valuation impacts.

Revenue Enhancement

- LODO Parking
- Mason Street Building Remodel
- Bijou Ditch Farm Pivot Replacement
- Riverside Ditch Pivot Purchase

Land Valuation Enhancement

- 6th and Kipling Offsite Improvements
- 48th and Tower Commercial Improvements
- Falcon Planning and Engineering Work

Alternative 2 Analysis (continued)

LODO Parking

Problem/Opportunity:

Turn underperforming asset into fee parking lot. This project would demolish the current dilapidated duplex building, install a new surface, and stripe a new 36,000 square foot fee parking lot with approximately 160 spaces. This property is three blocks from Coors Field so has very high revenue potential.

Background

The LODO property is a duplex apartment and two adjacent vacant lots (one next to the building and one across the alley). Half the duplex was rented last year (FY 2003-04) for $750/month. It is vacant currently.

Analysis:
Return on Investment

The following table represents a return on investment analysis for the parking lot proposal. The proposal would increase annual revenues by $134,500 beginning in year 2 and over $500,000 for the five year time period.

Exhibit 2: LODO Paid Parking Conversion ROI Comparison

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Current						
Revenue	$ 9,000	$ 9,000	$ 9,000	$ 9,000	$ 9,000	$ 45,000
Costs	(500)	(500)	(500)	(500)	(500)	(2,500)
Net	8,500	8,500	8,500	8,500	8,500	42,500
Proposed						
Revenue	$ 100,500	$ 163,000	$ 163,000	$ 163,000	$ 163,000	$ 752,500
Demolition	(14,600)					$ (14,600)
Asphalt	(34,000)					$ (34,000)
Operating	(15,000)	(20,000)	(20,000)	(20,000)	(20,000)	$ (95,000)
Net	$ 36,900	$ 143,000	$ 143,000	$ 143,000	$ 143,000	$ 608,900
Net Increase in Annual Revenue	**$ 28,400**	**$ 134,500**	**$ 134,500**	**$ 134,500**	**$ 134,500**	**$ 566,400**

Alternative 2 Analysis (continued)

Rate of Return

Based on the analysis presented in exhibit 2, the rate of return over the five-year time period is 212.77 percent and the return on investment is over 1,200 percent.

Exhibit 3: Rate of Return Calculation

Proposed **Return on Investment** **Rate of Return**	**1252.9%** **212.77%**					
Year	-	1	2	3	4	5
Net Income Stream	(48,600)	85,500	143,000	143,000	143,000	143,000
Present value	(48,600)	27,336	14,618	4,674	1,494	478
Net present value	0					

Risk

The risk of this project is minimal given the potential for revenue versus the costs. It is a prime location for a parking lot because it is only three blocks from Coors Field.

Assumptions:

- Net income stream is annual revenue minus annual operating.
- AMPCO System Parking provided cost and revenue estimates. The project would require formal bids that may alter the cost and revenue but will not significantly change the recommendation or the analysis.
- The lot can accommodate approximately 160 paid parking spaces.
- Baseball will continue to augment summer revenues
- Year 1 revenue assumes 3 months of baseball instead of six months because construction will occur during the summer months.
  - Monthly Baseball Revenue - $20,800
  - Monthly Non-baseball revenue - $6,500
- Annual operating costs are for a part time parking lot attendant. Hours will vary based on baseball games.
- Land valuation impact is not included in this analysis.

Alternative 2 Analysis (continued)

Summary:

The investment in converting the LODO property into a fee parking lot will be recouped in a little over two months. This project would increase revenues for K-12 by over $500,000 in five years and annual revenue by $134,500. The rate of return and return on investment greatly exceed the return generated by the Permanent Fund. While the return generated by this proposal is very high, the Board does not have the available funds to carry out this proposal without having to rely on vendor financing which would require sharing the revenue generated on the lot.

Alternative 2 Analysis (continued)

Mason Street Building Remodel

Problem/Opportunity:

The Mason Street Building in Fort Collins was recently vacated. The building is well located just off South College Avenue. It is in what is termed a "B" location, but the building does not have an elevator and needs some basic remodeling in order to attract new tenants.

Analysis:
Return on Investment

The following calculation compares the current status – vacant – to proposed status – three tenants – for the Mason Street building. The proposed status includes three tenants utilizing approximately seventy-five percent of the building (16,500 sq ft of 22,000 sq ft). This proposal increases revenue by $823,625 over a five-year time frame and $264,250 beginning in year 2.

Exhibit 4: Mason Street Remodel ROI Comparison

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Current						
Revenue	$ -	$ -	$ -	$ -	$ -	$ -
Maintenance Costs	(3,500)	(3,500)	(3,500)	(3,500)	(3,500)	$ (17,500)
Net	(3,500)	(3,500)	(3,500)	(3,500)	(3,500)	(17,500)
Proposed						
Lease 1 Revenue (2,500 SQ Feet @ $14.50/ft)	$ 18,125	$ 36,250	$ 36,250	$ 36,250	$ 36,250	$ 163,125
Lease 2 Revenue (4,000 SQ Feet @ $14.50/Ft)	$ 34,000	$ 68,000	$ 68,000	$ 68,000	$ 68,000	$ 306,000
Lease 3 (10,000 SQ Feet @ $17/Ft)	$ 85,000	$ 170,000	$ 170,000	$ 170,000	$ 170,000	$ 765,000
Tenant Finish Costs	(285,000)					$ (285,000)
Hallway and Lobby Remodel Costs	(5,500)					$ (5,500)
Elevator	(70,000)					$ (70,000)
Operating	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	$ (50,000)
Net	$ (233,375)	$ 264,250	$ 264,250	$ 264,250	$ 264,250	$ 823,625
Increase in Annual Revenue	$ (233,375)	$ 264,250	$ 264,250	$ 264,250	$ 264,250	
Cumulative Increase in Annual Revenue	**$ (233,375)**	**$ 30,875**	**$ 295,125**	**$ 559,375**	**$ 823,625**	

Alternative 2 Analysis (continued)

Rate of Return

Based on the analysis presented in exhibit 4, the rate of return over the five-year time frame is 51.36 percent and the return on investment is 228.5 percent.

Exhibit 5: Rate of Return Calculation

Proposed **Return on Investment** **Rate of Return**	**228.5%** **51.136%**					
Year	-	1	2	3	4	5
Net Income Stream	(360,500)	127,125	264,250	264,250	264,250	264,250
Present value	(360,500)	84,113	115,686	76,544	50,646	33,510
Net present value	0					

Risk

The building is in a good location off South College Avenue. Only minimal work will commence until the prospective tenants sign a minimum of a five-year lease.

Assumptions

- Cost and revenue estimates were provided by the Management Company – Bartell & Meitus – and represent preliminary discussions with potential lessees.
- Assume one half year lease revenue in year 1.
- The calculations above only represent the Board's share of the tenant finish work. Tenant finish work estimates:
  - Lease #1 – $10 per square foot
  - Lease #2 – $15 per square foot
  - Lease #3 – $17 per square foot
- Lease #3 requires an elevator in order to provide access to the second floor.
- Revenue analysis assumes per square foot rent ($14.50 per sq. ft.), which is comparable to similar class office space in Fort Collins.
  - Lease #3 is a medical clinic, which is charged a higher rent ($17.00 per sq. ft.).

Alternative 2 Analysis (continued)

- All new tenants are signed to a minimum of a 5-year lease – standard practice.
- Net income stream is annual revenue minus annual operating expenses.
- Land valuation impact is not included in this analysis.

Summary:

Remodeling the Mason Street building increases annual revenue by $264,250 and $823,625 over a five-year time period. The cost breakeven point is a little less than a year and a half (1.36 years). The rate of return and return on investment far exceeds the return generated by the Permanent Fund.

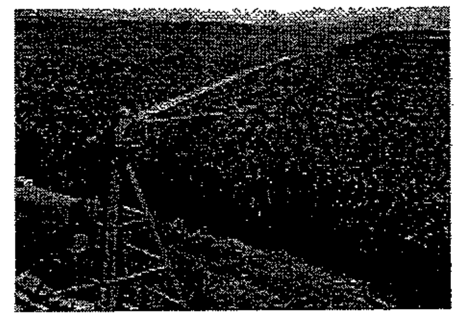
Alternative 2 Analysis (continued)

Bijou Ditch Farm Pivot Replacement

Problem/Opportunity

Maintain revenue-producing asset. Replace center pivot sprinkler.

Pivot Example



Background

The Bijou Ditch Farm property is located in Morgan County on a ditch system supported by the South Platte River. The rent for each irrigated property is a function of the property's particular circumstances including soil productivity and who owns the improvements (lessee or SLB). The annual lease rate for this property is $120 per acre because the Land Board owns the center pivot sprinkler system.

Bijou Ditch Farm property pivot sprinkler is 13 years old as of July 2004. A typical sprinkler life is between 10-15 years. The actual sprinkler section has not had any significant problems. However, the entire sprinkler unit has progressively degraded over time, which includes leaks in tubing from the well pump and the pivot section.

Analysis

Return on Investment

The following analysis compares the cost of replacing the sprinkler to the loss of revenue if the land would no longer be irrigated (due to loss of the sprinkler). "Current " represents the revenue yield of reverting the property to dry land crop due to lack of a replacement sprinkler. "Proposed" represents the costs and revenue if the sprinkler is replaced.

This analysis shows that over a ten-year time frame (10 years is the typical agricultural lease time period) the replacement of the Bijou Ditch Farm sprinkler will generate $33,940 in net annual revenue compared to converting the property to dry crop status due to a non-functioning sprinkler.

Exhibit 6: Bijou Ditch Farm Property Pivot Replacement ROI Comparison

	Current	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total
Current											
Irrigated Revenue (120 acres@$120/acre per year)	$ 14,400										$ 14,400
Dry Land Crop (120 acres @ $14.50/arce per year		1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	15,660
Net	14,400	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	30,060
Proposed											
Irrigated Revenue (120 acres@$12/acre per year)	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 144,000
Cost of Sprinkler Replacement		(80,000)									(80,000)
Net	$ 14,400	$ (65,600)	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 64,000
Net Increase in Annual Revenue	$ -	$ (67,340)	$ 12,660	$ 12,660	$ 12,660	$ 12,660	$ 12,660	$ 12,660	$ 12,660	$ 12,660	$ 33,940
Cumulative Increase in Annual Revenue	**$ -**	**$ (67,340)**	**$ (54,680)**	**$ (42,020)**	**$ (29,360)**	**$ (16,700)**	**$ (4,040)**	**$ 8,620**	**$ 21,280**	**$ 33,940**	

Rate of Return

Based on the analysis presented in exhibit 6, the rate of return over the ten-year time frame is 12.415 percent and the return on investment is 80 percent.

Exhibit 7: Rate of Return Calculation

Proposed											
Return on Investment	**80.0%**										
Rate of Return	**12.415%**										
Year	-	1	2	3	4	5	6	7	8	9	10
Net Income Stream	(80,000)	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400
Present value	(80,000)	12,810	11,395	10,137	9,017	8,021	7,135	6,347	5,646	5,023	4,468
Net present value	(1)										

Alternative 2 Analysis (continued)

Risk

The property has well defined water rights and a source of augmentation water required by a recent court ruling. If the current sprinkler were to become unusable during the growing season there would a minimum loss of $12,660 in lease revenue assuming no damage to the crop or the damage is covered by insurance.

Assumptions

- Revenue estimates are based on actual lease rates.
- Sprinkler pivot replacement costs provided by district manager and current lessee.
- By contract, lessees are required to pay maintenance of equipment; therefore, no annual maintenance costs are included.
- There will not be any drought related reductions for the property or any drought reductions would not affect irrigated and dry land crop lease rates equally.
- Dry land crop can be grown on the property. Alternatively the property would be reverted to a grazing land lease, which is $2.50/acre annual lease rate.
- Land valuation impact is not included in this analysis.

Summary:

Based on the return on investment analysis the breakeven point of the replacement pivot sprinkler is approximately 5.6 years. Over the ten-year lease, the replacement of the sprinkler would generate a net $33,940 versus reverting the land to a dry land crop lease. The rate of return and return on investment exceeds the return generated by the Permanent Fund.

Alternative 2 Analysis (continued)

Riverside Ditch Pivot System Purchase

Problem/Opportunity

Based on terms of a lease, the Board was able to purchase water rights to irrigate a 130-acre farm on the Riverside Ditch. Currently, the property is not irrigated but is under dry land agriculture. The center pivot sprinkler system includes a settling pond, electric pump, and pivot and sprinkler sections.

Background

This property is located in Morgan County on a ditch system supported by the South Platte River. The lease rate for each irrigated property depends on a property's particular circumstances including soil productivity and who owns the improvements (lessee or SLB). The annual lease rate for this property is $14.61 per acre. Based on similar properties in the area the annual lease rate for irrigating the Riverside ditch property would be $120 per acre.

Analysis
Return on Investment

The following analysis compares the current dry crop lease revenue to irrigated cropland lease plus the cost to install a center pivot sprinkler system. The analysis shows that over a ten-year time the pivot sprinkler would generate $47,007 in net revenue as opposed to leaving the property as a dry land crop lease. The pivot sprinkler pays for itself (breakeven) in 5.77 years.

Alternative 2 Analysis (continued)

Exhibit 8: Riverside Ditch Property Pivot Sprinkler Installation ROI Comparison

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Current											
Dry Land Crop (130 acres @ $14.61/arce per year	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	18,993
Net	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	1,899	18,993
Proposed											
Irrigated Revenue (130 acres@$120/acre per year)	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 156,000
Cost of Sprinkler System	(90,000)										(90,000)
Net	$ (74,400)	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 15,600	$ 66,000
Net Increase in Annual Revenue	$ (76,299)	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 13,701	$ 47,007
Cumulative Increase in Annual Revenue	**$ (76,299)**	**$ (62,599)**	**$ (48,898)**	**$ (35,197)**	**$ (21,497)**	**$ (7,796)**	**$ 5,905**	**$ 19,606**	**$ 33,306**	**$ 47,007**	

Rate of Return

Based on the analysis presented in exhibit 8, the rate of return over the ten-year time frame is 11.5 percent and the return on investment is 73.3 percent.

Exhibit 9: Internal Rate of Return Calculation

Proposed **Return on Investment** **Rate of Return**	**73.3%** **11.494%**										
Year	-	1	2	3	4	5	6	7	8	9	10
Net Income Stream	(90,000)	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600
Present value	(90,000)	13,992	12,549	11,256	10,095	9,055	8,121	7,284	6,533	5,860	5,255
Net present value	(0)										

Alternative 2 Analysis (continued)

Risk

The water rights on this property are good because these are "shares" in the Riverside Ditch Company and are senior water rights. The property's current lessee (leased since 2003) intends to continue to lease the land whether it will be irrigated or not, although irrigation would significantly increase his production. He is considered a good lessee and leases other state land.

Assumptions

- Revenue estimates are based on lease rates of similar Board properties in the area (e.g. Bijou Ditch Property).
- Pivot sprinkler costs provided by the Land Board's district manager based on local company estimate. Pivot purchase and installation would need to be subject to a formal bid. $90,000 covers a settling pond, electrical work, a pump, and the sprinkler assembly.
- Lessees are required to pay equipment maintenance and operating cost per lease contract, therefore, these costs are not included.
- Assumes that there will be no drought related reductions for the property or any drought reductions would affect irrigated and dry land crop leases equally.
- Assumes dry land crops can continue to be grown on the property. Alternatively the property would be reverted to a grazing land lease, which s $2.50 per acre annually.
- Land valuation impact is not included in this analysis.

Summary:

Based on the return on investment analysis the break-even point for installing the pivot sprinkler is 5.77 years. Compared to dry land agriculture, irrigation would increase the annual lease revenue by $13,701 and $47,007 over the entire ten-year time period. The rate of return and return on investment exceeds the return generated by the Permanent Fund.

Alternative 2 Analysis (continued)

6th and Kipling Offsite Improvements

Problem or Opportunity

The Land Board owns a 16-acre parcel of vacant land at 789 Kipling. 789 Kipling is located on the west side of Kipling and north of 6th avenue in Lakewood. This land is entirely surrounded by developed properties and is prime land for development. However, development is encumbered by a frontage road, which would need to be relocated in order to maximize the development potential and the land value.

Analysis
Return on Investment

In its current state, the property is appraised at $3,080,000. The relocation of the frontage road will cost around $450,000. Once the offsite improvements have been implemented, the land value is estimated to increase to $5,035,000. This is a net increase of **$1,505,000** in land value, which is a return on investment of 42.6 percent.

Current Est. Value:	$3,080,000
Frontage Road Infrastructure Costs:	$450,000
Total Board Equity:	**$ 3,530,000**
Est. Land Value with Frontage Road Improvements:	$5,035,000
Net Gain in Value	$1,505,000
Return on Investment	**42.6 %**

Rate of Return

Based on the return on investment calculations presented above, the rate of return is 12.6 percent over a three year time period.

Years to Complete Project:	3 years
Rate of Return:	**12.6 %**

Alternative 2 Analysis (continued)

Risk

The Kipling property is surrounded by development and commercial property. Ultimately, once the offsite work is done, the alternatives of either development of a long-term ground lease will be compared to a land sale in order to determine the next the best method to move forward.

Assumptions

- Before and after property value appraisal are accurate within an acceptable margin of error.
- Project requires a bid in order to establish the true cost of the improvement but this will not change the recommendation.
- Rate of return calculation assumes that it would take approximately three years to complete the project given the City of Lakewood approval process and actual construction.
- Revenue impact is not addressed in analysis. However, a proposed ground lease for the property requires the offsite improvements.

Summary

The land valuation increases allow the Board to grow the corpus of the school trust. The improvements made to the 6^{th} and Kipling property will also assist the Board in meeting its goal of entering a commercial 50-year ground lease for the site which would mean an increase in annual revenues. The rate of return and return on investment exceeds the return generated by the Permanent Fund.

Alternative 2 Analysis (continued)

48^{th} and Tower Commercial Improvements

Problem/Opportunity

The Board needs to fund infrastructure work on the 48^{th} and Tower property in order to realize a gain of $4 million in land value.

Background

Given its proximity to the Denver International Airport and Front Range Airport as well as Aurora's Gateway development, Tower Road has become a major development corridor. The Board has a 160-acre parcel at the corner of 48th and Tower. The first step to developing the property is to participate in the construction of the intersection and other related infrastructure improvements at 48th and Tower. The infrastructure improvements are required by the City and County of Denver in order to gain access to the property for further development.

Analysis

Return on Investment

The following is an analysis of the property, which shows the increased value from the investment. The appraised value of the property is currently $3.0 million and the cost of the infrastructure is $3.0 million. Once the infrastructure is complete, the estimated value of the property increases to $10 million, which is a return on investment of 60%.

Current Est. Value:	$3.0 million
Traffic Intersection and other Infrastructure Costs:	$3.0 million
Total Board Equity:	$6.0 million
Est. Land Value with Traffic Intersection:	$10.0 million
Net Gain in Value	$4.0 million
Return on Investment	**60.0 %**

Alternative 2 Analysis (continued)

Rate of Return

Based on the return on investment calculations presented above, the rate of return is 10.7 percent over a five year time period.

Years to Complete:	5 years
Rate of Return:	**10.7 %**

Risk

The Land Board is working closely with the Oakwood Homes and the City and County of Denver in order to align any development of the property.

Assumptions

- Before and after property value estimates are accurate within an acceptable margin of error.
- Rate of return calculation assumes that it would take approximately five years to complete this project given the City and County of Denver approval process and actual construction.
- The revenue impact is not addressed in the analysis. The property could then either be sold or be the subject of a ground lease or some combination of both.

Summary

The 48th and Tower property is part of a greater development area, which includes the new Green Valley Ranch subdivision. The infrastructure improvements are the first step towards increasing the lease revenue and/or selling the land. The rate of return and return on investment exceeds the return generated by the Permanent Fund.

Alternative 2 Analysis (continued)

Falcon Planning and Engineering Work

Problem/Opportunity

The Land Board owns a 160-acre unimproved parcel in Falcon. This land abuts several large housing and commercial developments. In order to attract a development partner, the land needs planning, entitlement, and engineering work. Given the lack of available funding, the Board need to find a company that will to provide these services but will not receive payment until a development partner is awarded the development contract for the property.

Background

Beginning in FY 2004-05, the Land Board was appropriated $92,000 for planning and entitlement services. However, the cost on the Falcon property exceeds the appropriated funds. This preliminary plan which will cost $277,808 will be done by an entitlement company which will not receive payment until a Request For Proposal (RFP) is issued and a development partner is awarded the development contract.

Because the company will not receive payment until the Land Board finds a developer, the company has added 20 percent or over $55,000 to its cost in order to cover its risk. Although the Board does not pay anything directly for the services, the 20 percent affects the land value and ultimately the sale proceeds when the land is sold.

Analysis

Cost-Effectiveness

The following cost-effectiveness analysis compares funding the cost of planning and entitlement on the Falcon property with Board funds to passing those costs on to the successful bidder on the property:

Scenario 1: Fund the planning and entitlement services with Business Improvement Funding and avoiding a 20 percent risk charged by entitlement and planning.
Scenario 2: Pass cost of planning and entitlement services on to the successful bidder on the property that includes a 20 percent risk charge by entitlement and planning contractor.

Alternative 2 Analysis (continued)

The analysis in Exhibits 10 shows that the project gains $55,579 gain in the net land value if the Land Board expends internal funds (scenario 1) as opposed to passing the costs on to the developer (scenario 2). If the Board was to directly pay for these services, the entitlement company will not take on a risk by fronting the services and hence will not charge the additional 20%.

Exhibit 10: Falcon Property Entitlement Cost Effectiveness Analysis

	Scenario 1	Scenario 2
Current Estimated Value based on Ave Agricultual Land Sale price ($1,978 per acre)	316,480	316,480
Planning Expenditures	132,000	132,000
Engineering Expenditures	86,880	86,880
Developer Expenditures	59,000	59,000
Additional reimburse due to 20 percent risk	-	55,576
Total Planning and Entitlement Costs	277,880	333,456
Estimated sale price of 160 acres based on average platted land ($55,458 per acre)	1,920,000	1,920,000
Net sale proceeds	1,642,120	1,586,544
Increase in Land Value	**1,325,640**	**1,270,064**

Rate of Return

Based on the analysis presented above, the rate of return and return on investment for each scenario is presented in Exhibit 11. The rate of return for scenario 1 is 79.6 percent and the return on investment is 223 percent.

Alternative 2 Analysis (continued)

Exhibit 11: Rate of Return Analysis
All Funding Sources (includes Business Improvement Funds)

	Scenario 1	Scenario 2
Years to Complete	2	2
Initial Land Investment	316,480	316,480
Planning and Engineering Services Funded by the Project	277,880	333,456
Final Land Value	1,920,000	1,920,000
Return on Investment	223.0%	195.4%
Rate of Return	79.6%	71.7%

Risk

Falcon is experiencing significant development activity. It is now the second fastest growing area in the state behind Douglas County. Since this project is preliminary planning, the risks are low and the explosion of development in the area also bolsters the property's development potential and reduces the risk. Furthermore, the Board has been able to secure water and wastewater services from the city, which is crucial to the development of this property.

Assumptions

- Average per acre value of the "As Is" land and the preliminary plan per acre value are based on a recent appraisal of the property
- If any other factors occur, they affect each scenario equally (e.g. the average price per acre remains the same whether funded by project developer or by SLB funds).
- The rate of return calculation assumes a two-year time frame based on Falcon's planning and zoning processes.
- The revenue impact is not addressed in the analysis. The property could either be sold or subject to a ground lease.

Summary

Scenario 1 avoids $55,576 in additional costs due to the elimination of the 20 percent charge and has very little risk associated with it. Sharing the land equity (e.g. scenario 2) in order to reduce risk does not appear to be the correct choice for this project. The rate of return and the return on investment of both scenarios exceed the return generated by the Permanent Fund.

Key Issues For Decision Making

There are several factors that the Land Board considers when making investment decisions. These include:

Benefit-Cost Analysis
Return on Investment and Rate of Return
Environmental Impacts
Local Impacts
Stewardship Trust Impacts
Strategic Considerations (e.g. repositioning of assets)

Descriptions of any omissions, biases, or uncertainties

None

Reporting

The Land Board will provide an annual report of its business improvement and maintenance activities. The Annual report would be submitted with the November 1 budget submission to the Legislature.

The report will cover (1) a plan for the current fiscal year and (2) results from prior year projects.

The report will include revenue enhancement, maintenance, and land value enhancement projects. For each project the report will provide:

- An opportunity/problem statement,
- Narrative description, and
- Three measures:
  - Rate of Return
  - Return on Investment
  - Break-even analysis (from revenue enhancement projects)

The report will also identify any risk associated with the project and other issues that may impact the project.

Recommendation

Funding this change request will allow the board to:

- Improve annual revenues
- Maintain annual revenue
- Increase Land Value

Schedule 6

BASE CHANGE REQUEST FOR FY05-06

Department: Natural Resources
Priority Number: 6 of 28
Division: Colorado Geological Survey
Program: Colorado Avalanche Information Center
Request Title: Avalanche Safety Education

Dept. Approval: Will. Shaley Date: 10/25/04
OSPB Approval: [illegible] Date: 10/25/04
Statutory Citation: C.R.S 24-65.1-103 (8); C.R.S. 34-1-101 (2); C.R.S. 34.1.103(k); House Bill 95-1314 (1995)

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	552,920	551,921		551,921	565,387	50,000			615,387	
	FTE	7.3	7.3		7.3	7.3	1.0			8.3	
	GF										
	CF	126,948	125,949		125,949	129,704				129,704	
	CFE	401,917	401,917		401,917	411,483	50,000			461,483	
	FF	24,055	24,055		24,055	24,200				24,200	
Line Item Name	Total	552,920	551,921		551,921	565,387	50,000			615,387	
Colorado	FTE	7.3	7.3		7.3	7.3	1.0			8.3	
Avalanche	GF										
Information	CF	126,948	125,949		125,949	129,704				129,704	
Center	CFE	401,917	401,917		401,917	411,483	50,000			461,483	
	FF	24,055	24,055		24,055	24,200				24,200	

Letter Notation:

Cash Fund name/Number, Federal Fund Name:

IT Request ☐ Yes ☐ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☐ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): ☐ Yes ☐ No (If yes, Name of other Department(s)____________)

REQUEST TO CHANGE THE BASE OPERATING BUDGET

PART B – EFFICIENCY AND EFFECTIVENESS ANALYSIS

COMMON IDENTIFICATION INFORMATION

Department:	Natural Resources
Priority Number:	6 of 28
Long Bill Group/Division	Colorado Geological Survey
Change Request Title:	Avalanche Safety Education
Statutory Citation:	C.R.S 24-65.1-103 (8); C.R.S. 34-1-101 (2); C.R.S. 34.1.103(k); House Bill 95-1314 (1995)

Summary of Request

Colorado is the most avalanche-prone state in the U.S. with the highest number of avalanche deaths since 1950: 201deaths in Colorado compared to 112 in Alaska, the second leading state. The Colorado Avalanche Information Center was created in 1983 as a program within the Colorado Geological Survey to reduce the impact of avalanches on recreation, industry, and transportation.

The request is for a base increase of $50,000 in the CAIC's Cash Exempt spending authority, and for one (1) additional FTE, so that the CAIC can continue its level of service. This request asks for no additional state funding—just the authority to spend more if the CAIC can raise more from donations. The CAIC's FTE has been fixed at 7.3 for 21 years. The CAIC has handled the increased workload by augmenting its permanent staff with temporary and/or contract employees. This has not been an efficient use of current staff because it takes approximately 300 hours to train a temp/contractor who will most likely not return the following season. It is extremely valuable to have permanent staff (rather than temporary staff or contractors) because they learn, through years of experience, the terrain and the behavior of snow that is unique to Colorado. Contractors and temporary staff are, by their very nature, for sale to the highest bidder. The CAIC invests valuable resources to train staff, and they may end up losing them the following year to a ski area or some other snow industry.

This safety program is working, as shown by these three measures:
(1) Each year the CAIC presents avalanche safety classes to more than 3,000 people: in the last ten years, 34,000 citizens have taken courses taught by the CAIC;

(2) Colorado's population has soared by more than 1.4 million people in the last 20 years, and winter sports—a large attraction for visitors to Colorado—have grown by large numbers as well. This should mean a corresponding rise in avalanche deaths. But in the 21 years of the CAIC's existence, Colorado's avalanche fatality rate–with a few ups and downs–has remained virtually unchanged at six per year, and the number of deaths per capita has fallen and continues to fall;

(3) In 1992, the CAIC entered into a contract with the Colorado Department of Transportation (CDOT) to improve avalanche safety along Colorado's highways by providing forecasting for all major avalanche zones and by providing training to CDOT maintenance personnel. There has not been a life-threatening highway avalanche incident since the inception of that agreement.

As population has grown, so has demand for the education and forecast services of the CAIC. Avalanche education is popular with the recreating public, and forecasting is necessary for safer highways and winter backcountry recreation.

Problem or Opportunity Definition

The Colorado Avalanche Information Center was created to promote safety by reducing the impact of avalanches on recreation, industry, and transportation in the State through a combined program of forecasting and education. Population growth in Colorado has resulted in more people in the avalanche-prone areas of the State, for both travel and recreation. Therefore, there is increased demand for forecast services and avalanche safety training.

Avalanche safety is promoted by reducing the impact of avalanches on recreation, industry, and transportation in the State through a combined program of forecasting and education. The CAIC provides high quality information to: (1) the users of Colorado's backcountry, in order to make recreation safer; (2) the ski industry to support their snow safety efforts at developed recreation areas; and (3) State agencies for the traveling public and State employees. This is to ensure that students learn to recognize avalanche terrain and conditions and learn to minimize their risk while traveling or working in potential avalanche terrain. The CAIC increases the awareness of avalanches through published and digital reports, maps, educational aids, avalanche-awareness courses, and provides expert advice for personal safety in times of high and extreme avalanche danger via the news media and hotlines.

Specifically, the CAIC fulfills its mission by:

- Providing daily avalanche hazard bulletins and safety training to reduce avalanche accidents to recreationists. These bulletins are delivered via telephone hotlines, fax, e-mail, and web site, which total more than 600,000 avalanche hazard send-outs per winter.
- Providing daily assessments of avalanche potential to CDOT for better highway safety.
- Executing a state-run, state-of-the-art avalanche program that is efficient and compatible with changing technology.
- Providing maximum protection to Colorado citizens and serving as a model to other avalanche protection programs.
- Assisting the Colorado ski industry by providing weather and avalanche forecasts to snow safety personnel at all major ski resorts and back-country guide services and assists in avalanche training for ski-area personnel.

The problem is that demand for the CAIC services of forecasting and training has outstripped the CAIC's ability to provide these services. The CAIC cannot meet the growing demand for its services without increased spending authority. Last fiscal year, the CAIC earned $116,230 in donation revenue. There are two reasons that this number is misleadingly low. First, due to constraints on the spending authority, the CAIC was forced to turn away $10,000 to $15,000 in donation revenue by denying requests to conduct additional avalanche safety courses. Second, last fiscal year the CAIC deferred almost $23,000 in FY 2003-04 revenue into this fiscal year. Specifically, the CAIC held checks (revenue) in the amount of $22,953.67 in order to deposit them at the beginning of this fiscal year (copies of the cash receipt and checks are attached.) CAIC deferred depositing these checks because: (1) unexpended CAIC donation revenue flows automatically from the Geological Survey Cash Fund into the CAIC donations account at the end of the fiscal year, and (2) the agency had been given guidance that funds in the donations account could not be used for personal services or personal service contracts. For this reason, any excess revenue became usable to the CAIC only for supplies and operating expenses – not to help pay for staff time. For the above two reasons, the CAIC believes they could have earned in excess of $150,000 in donation revenue last year. Further, there are reasons to believe future revenue may be significantly higher. Most importantly, the Friends of the Colorado Avalanche Information Center are currently exploring new funding conduits - including ways to make industry donations tax exempt - in order to encourage donations from industry groups. Finally, it should be noted that CAIC donations are TABOR-exempt. Hence, this decision item would not negatively impact the State's budget situation.

The higher level of donation revenue will allow CAIC to hire an additional permanent part-time forecaster (.80 FTE) and augment the forecast hours of the remaining staff. Because of the somewhat unstable nature of donations, the CAIC has always managed its staff hours/FTE in accordance with the flow of revenue. If donations are lower than normal, the entire staff (including the director and deputy director) scale back their hours to ensure that they do not over-expend revenue. If donations are higher than the initial estimate, then the staff will add forecasting hours. This is the way that the CAIC has always managed its personal services expenditures, and the staff know that their hours depend on the rate of donations. It is also important to note that the 7.3 FTE actually equates to 11 permanent part-time staff, plus three contractors (the average CAIC employee equates to 0.65 FTE). The number of CAIC FTE has not increased in over 10 years, while the demand for avalanche training and forecasting has increased. For example, demand has increased due to the fact that the use of the backcountry by snowmobilers has grown dramatically in the last several years, as evidenced by the increased number of snowmobilers caught and/or killed in avalanches. Since 1990, 80 snowmobilers have died by avalanche nationwide, far more than any other recreation group. This population group is more vulnerable to avalanches as the machines allow access to areas that were not easily accessed in the past, and also because the machine itself gives the driver a false sense of security – they believe that they will be able to outrun danger.

Given both actual and projected growth in donation revenue, the Department believes that this decision item is critical to meeting the level of service that the public demands and expects from the CAIC.

Linkage to Specific State of Colorado and Department of Natural Resources Objectives

This request supports the following DNR Strategic Objectives:

Funding this request furthers the following DNR Strategic Objectives (as listed in the FY 06 Budget Plan-Schedule 1 of the DNR Strategic Plan-Prioritized Objectives):
1.1 – Respond to the demands by providing services, information, and assistance.
1.6 – Provide and promote a variety of outdoor recreational opportunities for citizens and visitors.
1.7 – Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance, and regulatory enforcement related to statutorily authorized programs.

Available Alternatives

Alternative 1: Grant an increase in Spending Authority ($50,000) and an increase of one (1) FTE (Recommended)

Internal Benefits:
1. With one additional permanent staff, workload is spread more equitably.
2. Stress of long work days and weeks is reduced.
3. Cost savings from less overtime.
4. Cost savings from reduced repetitive training of temps or contractors.
5. Scheduling of forecaster shifts and/or lead instructors for safety courses is easier because all staff have equal skills.
6. Office efficiency is maximized because all staff are as nearly equally productive as possible.

External Benefits:
1. Increasing public demand for forecast and education services is met.
2. More safety courses available. An increase of 10-15 classes per winter is possible.
3. Gaps in forecast areas are reduced. For example, there is currently no reliable data from, or forecasting for, the Collegiate Range of Chaffee and Lake Counties. Additionally, there is currently only a minimal forecasting program in place for the Steamboat zone.
4. Users willing to pay for services are satisfied.
5. Forecasts and safety training are of highest quality because of skilled permanent professional snow-science staff.

Alternative 2: Grant the increase in Spending Authority, but deny the increase in FTE.

Internal Benefits:
1. With one or two additional temporary staff, workload is spread more equitably.
2. Stress of long work days and weeks is reduced.
3. Slight cost savings from less overtime, which would be offset by increased repetitive training of temps or contractors.

External Benefits:
1. Increasing public demand for forecast and education services is met.
2. More safety courses available.

3. Gaps in forecast areas are reduced.
4. Users willing to pay for services are satisfied.

Alternative 3: Status Quo (Not Recommended).

Internal Benefits:
1. Status quo. The CAIC staff functions with same workload as time and funds allow and would continue to limit the number of classes taught each winter.

External Benefits:
1. Status quo. The public receives the same level of service in forecasts available and number of safety courses offered. It is estimated that about 300 citizens per year are denied access to an avalanche safety course because the CAIC has neither the staff nor the resources to teach additional courses.

Analytical Technique

Benefit-cost Analysis has been selected because costs can be determined for the three alternatives while many benefits may be stated but cannot be easily quantified.

Benefit Analysis
The benefits of a State avalanche forecast and education program are hard to quantify, and there is no guarantee that an increase in spending will lead to a measurable increase in benefits, as one cannot place a value on human life. But if a single death were prevented, this additional spending authority would be more than justified. There is strong statistical evidence that the program run by the CAIC has been effective at saving lives. We have four measures of this success:

(1) Each year the CAIC presents avalanche safety classes to more than 3000 people;

(2) In the 21 years of the CAIC's existence, Colorado's avalanche fatality rate–with a few ups and downs–has remained virtually unchanged at six per year, and the number of deaths per capita has fallen and continues to fall;

(3) There has not been a life-threatening highway avalanche incident since 1992.

(4) Damage and direct property losses due to avalanche have remained quite low for a decade, averaging less than $100,000 per year. And economic losses (that result from road closures, business and resort closures, decreased tourism, etc) have been suppressed as well and average several million dollars per year.

To better understand the benefits that come from a professional avalanche program, consider the following two scenarios:
(1) A Boy Scout Troop Master will lead his troop on an overnight snowshoe trip. He had tried to sign up for an avalanche awareness course, but courses were few and all were already filled, so he was not able to get the training he needed. The group triggered an avalanche when the leader failed to recognize a dangerous slope and snow conditions.

(2) Because of inadequate forecasting, an unexpected large avalanche blocks Berthoud Pass at 7 a.m. on a Saturday. Though no cars are hit, the avalanche prevents 10,000 skiers from reaching Winter Park Resort. The economic loss sustained by the ski resort is substantial (perhaps $500,000), and there is no way for the resort to make up for the loss. (Note: The Colorado ski industry is and has always been a substantial contributor to the CAIC.)

Incidents similar to these two occur every winter. Additionally, it is estimated that several hundred people every day make or change recreation or work plans based on their avalanche education and/or the daily forecasts provided by the CAIC. The CAIC touches many lives, but the benefits are difficult to quantify. However, if the additional spending authority in this decision item is granted and a life is saved, the benefit will greatly outweigh the cost.

<u>Cost Analysis</u>
It is important to remember the conditional nature of this Decision Item Request. The increase in Spending Authority will take effect only if additional cash funds exempt (CFE) can be raised via grants and donations. No funds, no additional spending. There is no cost to the State with this arrangement.

Assessment of Alternatives

Alternative 1

As discussed above, the benefits are difficult to measure, but if a single death were prevented, this additional spending authority would be more than justified. Additional spending of up to $50,000 in CFE revenues and the skill and professionalism that comes with a permanent FTE State employee who has earned their forecasting and/or educational skills over many years and is dedicated to the program will benefit the citizens, businesses, and State agencies of Colorado.

This is the best possible alternative with the greatest possible benefit.

Alternative 2

The cost to the State associated with this alternative is zero. However, there will be an additional internal cost to the CAIC program in the form of training. There is frequent turnover in temporary employees or contractors, and this requires repetitious training by the senior CAIC staff. This is an inefficiency that increases cost.

Benefits would be similar to Alternative 1, but would overall be slightly lower. The reason is a temporary employee or contractor seldom brings the professional skills to the job that a permanent FTE would possess. The level of service in either forecasting or safety training would be marginally lower.

Alternative 3

The cost to the State associated with this alternative is zero. Benefits would be the lowest of the three alternatives. Public demand for services would continue to exceed the CAIC's abilities to provide service.

Recommendation

The recommendation is to implement **Alternative 1**, which provides for both an increase in Spending Authority from Cash Fund Exempt and an additional FTE. The State and its citizens and industries that use the services of the CAIC, would benefit the most from this alternative. The user pays. **Alternative 2** would satisfy the basic need of providing a higher level of service to meet demand. Again, the user pays. However, there are significant questions of the level of professionalism, the need for and cost of repetitive annual training, and the lack of continuity year to year of staffing with a temporary employee. **Alternative 3** is not recommended. It does not solve the problem of a State avalanche center that is under-funded and under-staffed to meet the needs of the State.

For these reasons, we recommend **Alternative 1**.

Schedule 6
CHANGE REQUEST for FY 05-06

Department: Department of Natural Resources
Dept. Approval: [illegible] Date: 10/25/04
Priority Number: 7 of 28
OSPB Approval: [illegible] Date: 10/25/04
Division: Executive Director's Office
Statutory Citation:
Program: Information Technology
Request Title: Information Technology Support Request

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
EDO - Information Technology - Personal Services	Total	1,510,047	1,471,751	0	1,471,751	1,471,751	58,231	1,529,982	0	1,529,982	58,231
	FTE	13.1	14.0	0.0	14.0	14.0	3.0	17.0	0.0	17.0	3.0
	GF		0	0	0.0	0	0	0	0	0	0
	CF	1,510,047	1,471,751	0	1,471,751	1,471,751	58,231	1,529,982	0	1,529,982	0
	CFE	0	0	0	0.0	0	0	0	0	0	58,231
	FF	0	0	0	0.0	0	0	0	0	0	0

Letter Notation: These funds shall come from Statewide and Departmental Indirect Cost Recoveries
Cash Fund name/Number, Federal Fund Name:
IT Request X Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Request for New or Replacement Vehicles: Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): Yes X No (If yes, Name of other Department(s)________________)

Efficiency / Effectiveness Analysis

Department of Natural Resources

Request Title: Executive Directors Office (EDO) Information Technology Support Request
Program Title: All Programs
Work Package: All Programs
Priority #: 7 of 28
Evaluation: Benefit/Cost Analysis

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1. Summary of Request
This request is to provide information technology support for the Department of Natural Resources (DNR), Information Technology Section (ITS). This request is for $58,231 to support critical imaging information technology (IT) infrastructure and to provide help desk support for the Department of Natural Resources (DNR). The request Is comprised of two distinct parts: 2.0 FTE for Help Desk Support and 1.0 FTE for technical imaging support.

<u>DNR Strategic Plan Objectives:</u>
This request meets the following objectives:

Essential Objectives:

1.1 Respond to demands by constituents by providing services, information, and assistance.

1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.

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

1.7 Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance and regulatory enforcement related to statutorily authorized programs.

1.8 Provide an effective, integrated information technology infrastructure capable of supporting the department's service delivery, regulatory, and information interchange responsibilities.

High Objectives:
2.4 Increase citizen knowledge and understanding of natural resource issues by expanding and enhancing public information and outreach efforts.

2.5 Improve customer service to the citizens of Colorado and visitors by demonstrating a 10 percent increase in customer satisfaction and implementing initiatives to improve access to department services to under-served populations.

2.6 Respond to a changing business environment and improve organizational efficiency, decision-making and data availability by modifying a current system or introducing at least one major technology initiative each year that meets business objectives and is consistent with industry standards.

2.9 To the maximum extent possible, utilize the states acquired Internet and e-Government capabilities to deploy customer service applications along with efficient means of delivering information to citizens and constituent groups.

Low Objectives:
4.2 Ensure that the Department's administrative functions are run efficiently, consistent with statewide efforts to review and improve administrative activities and procedures, by conducting a review of each administrative area by 2007.

Performance Evaluation Measure(s) for the Request:

1) Continued support of current levels of customer service delivery through public services such as access to DNR information and processing.
2) Maintenance of current departmental imaging infrastructure to support internal and external customers.
3) Cost avoidance associated with continual turnover of helpdesk staff.
4) Avoiding loss of data, documents, and increased staff down time of departmental imaging infrastructure.
5) Increased level of standard agency performance of employee support and constituent services.

2. Problem or Opportunity Definition.

The problem definition is characterized into two disparate parts. Each of these parts is an integral requirement to support IT service and functionality within the department.

Problem 1:

The Information Technology Section (ITS) within EDO provides IT help desk support for 230 employees located at 1313 Sherman Street, at the Parks Division Littleton Operations Center, and five State Land Board (SLB) remote sites outside the Denver Metropolitan Area. This help desk support includes responding to employee needs to restore service in the office at the desktop, services to supported employees working at home or on travel, providing solutions to local area network (LAN) communication outages impacting these employees, restoration of communications services beyond DNR facilities, dealing with virus protection and security needs of employees, installation of new hardware and software, disposal of old equipment, and securing service from IT vendors supporting DNR.

In January 2004, ITS recognized that the current staffing of help desk IT Professionals (1.0 FTE) was insufficient to meet the needs of these 230 employees. Services requests were found to be queued for extended lengths of time, user satisfaction was at a low ebb, critical IT projects were being delayed as available IT FTE resources were being reallocated to provide help desk support for customers (2.0 FTE), and new initiatives were stalled and remained on hold because resources were just not available. To rectify this problem and restore an adequate level of service, ITS hired two state temporary IT technical people to deal with the back log of requests and sustain an improved level of service desired by the users. This approach worked but it is temporary. Other initiatives were brought into play to help deal with the help desk service needs of users while the temporary IT help desk people were available. First, the Remedy Help Desk Application is being implemented to help manage user requests and improve the productivity of help desk personnel. A policy spotlight was put on the Acceptable Use Policy to communicate to employees what violation of the policy means to the safety and security of the IT systems as well as the burden it places on the help desk staff to remedy the results of unacceptable use. Finally, the two state temporary employees were instructed to spend a little more time with users to provide training on an individual basis.

Information technology is a means to end. The goal of successful information technology is to serve and support the business requirements of an organization. The Mid-Floor Local Area Network segment provides service to EDO, State Parks (locally), State Land Board, and the Colorado Geological Survey. Two additional (2.0) FTE to support the increasing requirements of these divisions is needed to ensure adequate support of their business requirements. ITS has a history of supporting these divisions without any additional FTE. In fact, ITS has only added one FTE in the last twenty-two years. Information technology has moved from the “computer room” to the desktop and the support of these desktops users on the Mid-Floor LAN segment is critical to meeting their business requirements. The benefits are clear. Prior to January 2004, ITS struggled to meet its commitment to provide help desk support to the users defined above. After the increase of two state temporary employees in January 2004, the workload was accomplished on time, user satisfaction was increased, and other critical support projects, heretofore waiting for resources to get started, were kicked off and completed to the benefit of Mid-Floor LAN users and enterprise customers throughout DNR.

As stated above, the current model within ITS to provide the required help desk support is to use six month state temporary positions or contractor support from the state overflow award. This approach is problematic due to the continual turnover associated with this staffing strategy. The table below illustrates the relative pros and cons of this staffing strategy:

Method	Pros	Cons
Permanent State FTE	Continuity, Lower Cost	
Six Month Temporary State FTE	Lower Salary Cost	Continual turnover, Productivity Loss
Contractor Support	Flexibility	Higher cost, Continual Turnover, Productivity Loss

The cost of turnover is well documented. According to Forrester Research, the cost of turnover has two elements: hiring costs and vacancy costs. Hiring costs are the hard costs associated with recruiting a new employee (advertising, screening, interviewing, and processing candidates). Vacancy costs are less obvious but include extra work assumed by existing staff, productivity losses, and loss of knowledge on unfinished projects. Forrester Research states that the average cost to hire ranges from 25 percent to 100 percent of a worker's annual salary (CIO Magazine: June 15,2004, By the Numbers, Jon Surmacz).

Help Desk Online, Investing in the Help Desk, (Karen Schoemehl) states the cost of turnover is seen to equal between 75 percent and 150 percent of a help desk workers salary. The key to minimize support costs is the retain staff and prevent turnover (http://www.helpdesk-online.com/oldsite/dec21/article2.asp).

An additional factor that elevates the cost of help desk support is the cost differential associated with the use of contract staff. Although the use of contract staff provides great flexibility, that flexibility is paid for at a higher cost. The cost of contract staff can range to be 30 percent to 70 percent higher than state FTE cost on an annual basis.

Problem 2:

Three divisions in DNR currently utilize the departmental imaging system that was initially installed in 1999. A fourth division, State Land Board (SLB), has an approved imaging project and will join the other three divisions starting in Fiscal Year 2004-2005. Like the other three divisions, SLB will require long term support once the imaging operations are integrated into their business processes. ITS performs the support contract management for the imaging infrastructure. However, ITS currently lacks the expertise to provide the divisions with not only day-to-day support of all imaging related systems, but also consultation for changes and future enhancements.

The request is for one (1.0) FTE to be added to the ITS staff who would be responsible for the operation and maintenance of the department's Imaging infrastructure. This position would be responsible for ensuring that Imaging related software systems are properly installed, functioning, and maintained and that appropriate databases are available to users. Additionally, this person would review, analyze, and make recommendations for future imaging and related technologies in the department.

Imaging application technical expertise at the departmental level does not exist. The divisions have implemented imaging processes and technology to a varied degree of integration into their workflow. A contractor must make even minor changes to the imaging system. Over $50,000 has been spent over the last two years. Additionally, the department has not been able to leverage the existing capabilities of the imaging system. For example, the departmental Imaging system provides workflow processes that only one division has utilized.

3. Available Alternatives

Problem 1: Help Desk Support

Alternative A:

Description: Status Quo – Continue with current staffing strategy of temporary state FTE. This will have higher cost of $50,579 due to staff turnover and employee productivity loss.

Does not meet Departmental Objectives. May result in loss of critical systems, both employee and public data, and interruption or loss of public and internal services.

Alternative B:

Description: Provide Contractor Funding – Fund contractor cost differential of $56,640 between cost of state temporary staff and projected contractor costs for departmental help desk support.

Meets Departmental Objectives. Will prevent loss of majority of critical systems, both employee and public data, and interruption or loss of public and internal services.

Alternative C:

Description: Staff ITS (Requested Alternative) – Provide 2.0 FTE for help desk support.

Meets Departmental Objectives. Will prevent loss of majority of critical systems, both employee and public data, and interruption or loss of public and internal services.

Link to Departmental Objective(s) met by funding requested alternative.

This request will allow the Department of Natural Resources (DNR) Executive Director's Office (EDO) to meet key department and state IT goals and objectives as well as accomplish the DNR IT Mission, support the DNR Strategic Plan and the Department IT Plan. It will enable the DNR to continue to provide the current level of service and support to the public and our employees. This alternative supports all the strategic objectives listed on pages two and three of this request.

DNR IT Goals and Objectives Met

- **Infrastructure**. DNR believes that it is essential to have a modern and robust network infrastructure in order to implement digital government and has a goal of establishing such an infrastructure. To that end, DNR will establish appropriate objectives such as implementing, over time, a modern service-oriented, multi-tiered (N-tier) architecture.
- **IT Management.** DNR has a goal of improving and strengthening its management of technology by following best practices for such vital areas as lifecycle management and project management. DNR will maintain appropriate objectives such as establishing a sound asset lifecycle management program and a project management office.
- **Communication.** DNR has a strong need for communication and has a goal of improving it on several fronts. Technically, the department needs to be able to communicate quickly and reliably with all its offices, employees and resources. In order to deliver services to its constituents in a wide range of methods, DNR also needs to be able to communicate with those constituents via a variety of methods, including over the Internet. DNR has a specific goal of improving education in the domain of natural resources. Appropriate objectives will be established in this area. DNR also seeks to improve the use of technology in the field through the use of such technologies as remote computing—and wireless communications.

4. Analytical Technique

Based on the type of request, DNR has completed a benefit-cost analysis to quantify the costs and benefits of each alternative. These benefits and costs reflect the ability to:

- Demonstrate reduced future expenditures by avoiding higher contractor costs.
- Demonstrate reduced future expenditures by avoiding staff turnover costs.
- Demonstrate increased staff productivity results by minimizing employee productivity loss.

5. Assessment/Analysis of Alternatives

Problem 1: Help Desk Support

Alternative A: Status Quo – Continue with current staffing strategy of temporary state FTE.

Assessment: **High Risk, High Cost**

Alternative A has two primary impacts that affect the support of the departmental help desk and the ability to provide desktop support. This status quo alternative prohibits any ability to improve either of these functions. The risks associated with this alternative are:

Continual Staff Turnover

- Productivity loss in IT operations staff due to instability in staffing caused by continual staff turnover. Continually replacing six-month state temporary staff has several costs. These are:
    1) Training time and training cost of new state temporary employees.
    2) Partial productivity (50 percent) of new state temporary while in training process.
    3) Partial productivity (50 percent) of permanent state IT FTE while providing training.
    4) State temporary employees training time is approximately one month or 17 percent of their total availability.
    5) Additional workload for the Human Resources personnel and IT management to manage the almost continual recruitment and staffing tasks associated with continual staff turnover.
    6) The average monthly cost of a state temporary help desk staff is $3800.
    7) The average IT management salary cost is $6983.

Annual State Temporary Staff Turnover Costs (2.0 Positions)

State Temporary Hiring Tasks	**Task Duration**	**Productivity Loss During Task**	**Monthly Salary Costs**	**Total Six-Month Turnover Cost per State Temp**	**Annual Turnover Cost per State Temp**	**Annual Turnover Cost, 2. 0 Positions**
Training - Temp Employee	1 month	50%	$3,800	$1,900	$3,800	$7,600
Trainer - IT Staff FTE	1 month	40%	$4,279	$1,711	$3,422	$6,844
Recruitment/Hiring – IT Management Time	0.5 month	30%	$6,983	$1,047	$2,094	$4,198
Totals				$4,658	$9,316	**$18,632**

Employee Productivity Loss

- Productivity loss of employees due to greater down time after incurring a computer problem. Greater down time can be associated with the one month transition time frame of new state temporary workers. Since state temporary workers tenures are limited to six months, the transition time frame occurs twice a year. The total transition time frame is then calculated to be a two-month period.

- Productivity loss can also be calculated during a transition time when there is no state temporary help desk support available. There is a historical perspective showing help desk support lag due to hiring and availability schedules. The estimate of this support gap is one month per year.
- The total transition time frame associated with training and availability for state temporary help desk support is calculated to be three months.
- As stated above, the IT help desk provides support to 230 DNR employees. The cost of down time can be calculated as:

  Average DNR employee salary: $4,630 per month
  Down Time: 1 percent of month (1.76 hours per month)
  Service Provision Impact: 3 months out of 12
  230 employees x ($4,630 salary x 3 month impact) x 0.01down time = $31,947 annual down-time cost for 230 DNR employees

Other Risks

- Greater risk to IT infrastructure operations environment due to continual staff turnover.
- Risk of finding experienced staff to accept a six-month temporary position. This risk is market-driven and can be quite difficult to mitigate.

Summary Table of Alternative A Costs

Risk	**Annual Cost**
Continual Staff Turnover	$18,632
Employee Productivity Loss	$31,947
Total	**$50,579**

Alternative B: Provide Help Desk with a Contractor - Fund contractor cost differential of $56,640 between cost of state temporary staff and projected contractor costs for departmental help desk support.

Assessment: **High Risk, High Cost**

Alternative B provides the opportunity to provide help desk and desktop support at a higher cost and with a stated legal risk. These risks and costs are:

Higher Contactor Cost

Salary Costs	Six Month Costs per Position	Annual Costs per Position	Annual Costs (2.0 Positions)
Contractor	($35 x 176 x 6) = $36,960	$73,920	$147,840
State Temporary Staff	($3800 x 6) = $22,800	$45,600	$91,200
	Cost Differential $14,160	$28,320	**$56,640**

- The cost to hire contractors is a 62 percent cost increase above the cost of state temporary staff ($56,640/$91,200 = 62 percent).

Other Risks

- Hiring contractors to provide help desk and desktop support has inherent legal risks. The state contracting rules have a personal services certification form that requires approval of the departmental Human Resources Office. This certification states that any service that can be provided by a state FTE should be and cannot be contracted. DNR has hired contractors to perform the help desk support role in the past. The Department of Personnel and Administration (DPA) contract administrator has advised DNR that DPA will not continue to approve a waiver for desktop support contract services.

Alternative C: Staff ITS (Requested Alternative) - Provide 2.0 FTE for help desk and desktop support.

Assessment: **Low Risk, Low Cost**

Alternative C asks for 2.0 FTE to provide help desk and desktop support. The permanent staffing of these positions will mitigate the existing staff turnover and employee productivity loss.

Summary Benefit/Cost Table for Problem 1 Alternatives

Alternative	Cost – Annual Cost 2.0 FTE	Benefit
A - Status Quo – Continue with current staffing strategy of temporary state FTE	Productivity Loss - $31,947 Turnover Cost - $18,632 Total Cost - $50,579	No staff costs for STD, Health, Life or Dental
B - Provide Contractor Funding – Fund contractor cost differential between cost of state temporary staff and projected contractor costs for departmental help desk support.	Cost Differential - $56,640 Total Cost - $56,640	
C - Staff ITS (Requested Alternative) - Provide 2.0 IT Professional II FTE for help desk support.	Total Cost - $92,970	No Productivity Loss - $31,947 No Turnover Cost - $18,632 Total Benefit - $50,579

Problem 2: Technical Imaging Support

Alternative A:

Description: Status Quo – Apportioned FTE to provide technical support.

Does not meet Departmental Objectives. May result in loss of critical systems, both employee and public data, and interruption or loss of public and internal services.

Alternative B:

Description: Provide Contractor Support – Fund contractor cost differential.

Meets Departmental Objectives. Will prevent loss of majority of critical systems, both employee and public data, and interruption or loss of public and internal services.

Alternative C:

Description: Staff ITS (Requested Alternative) – Provide 1.0 FTE for technical imaging support.

Meets Departmental Objectives. Will prevent loss of majority of critical systems, both employee and public data, and interruption or loss of public and internal services.

Link to Departmental Objective(s) met by funding requested alternative.

This request will allow the Department of Natural Resources (DNR) Executive Director's Office (EDO) to meet key department and state IT goals and objectives as well as accomplish the DNR IT Mission, support the DNR Strategic Plan and the Department IT Plan. It will enable the DNR to continue to provide the current level of service and support to the public and our employees. This alternative supports all the strategic objectives listed on pages two and three of this request.

DNR IT Goals and Objectives Met

- **Infrastructure.** DNR believes that it is essential to have a modern and robust network infrastructure in order to implement digital government and has a goal of establishing such an infrastructure. To that end, DNR will establish appropriate objectives such as implementing, over time, a modern service-oriented, multi-tiered (N-tier) architecture.
- **IT Management.** DNR has a goal of improving and strengthening its management of technology by following best practices for such vital areas as lifecycle management and project management. DNR will maintain appropriate objectives such as establishing a sound asset lifecycle management program and a project management office.
- **Communication.** DNR has a strong need for communication and has a goal of improving it on several fronts. Technically, the department needs to be able to communicate quickly and reliably with all its offices, employees and resources. In order to deliver services to its constituents in a wide range of methods, DNR also needs to be able to communicate with those constituents via a variety of methods, including over the Internet. DNR has a specific goal of improving education in the domain of natural resources. Appropriate objectives will be established in this area. DNR also seeks to improve the use of technology in the field through the use of such technologies as remote computing—and wireless communications.

4. Analytical Technique

Based on the type of request, DNR has completed a benefit-cost analysis to quantify the costs and benefits of each alternative. These benefits and costs reflect the ability to:

- Demonstrate reduced future expenditures by providing permanent technical staff support.

Problem 2: Imaging Technical Support

Alternative A:

Description: Status Quo – Apportioned FTE to provide technical support.

Currently, DNR uses a contract for technical system and application support. Additionally, support of the imaging effort is apportioned to several FTE as they function within their perspective divisions. The following table shows the current cost of supporting the imaging environment:

Apportioned FTE to Provide Technical Support

Division	FTE Class	Current Annual	Contract	Total
		FTE Cost *	Cost	Cost
EDO	IT Pro IV	$13,732		$13,732
OGCC	IT Pro V	$15,330	$13,000	$28,330
DMG	IT Pro III	$12,109	$13,000	$25,109
DWR	GP III	$9,793	$13,000	$22,793
CWCB	IT Pro II	$10,603	$13,000	$23,603
SLB	IT Pro IV	$9,994		$9,994
		$71,562	$52,000	**$123,562**

*Current Annual FTE cost is calculated as fifteen percent of actual annual loaded salary cost.
** Current contract cost with Integro, Inc.

-
- As the departmental imaging system grows the apportioned management of this system causes greater risk by not having a centralized technical support focus. Continuing without a specified technical support FTE will promulgate this risky situation.
- Lack of in-house technical resource leads to greater instability of the imaging infrastructure, which causes system down-time and employee productivity loss.

- Continued risk of external constituent complaints due to document system unavailability through the Internet. This risk is driven by system down-time.

Alternative B:

Description: Provide Contractor Funding – Fund contractor cost differential.

Alternative B provides the opportunity to provide technical imaging support at a higher cost with contractors. These costs are:

Higher Contactor Cost

Contract cost: $100 per hour
Contract term: 2080 hours per year

Total cost: $208,000

Alternative C:

Description: Staff ITS (Requested Alternative) – Provide 1.0 FTE for technical imaging support.

Staff ITS (Requested Alternative)

The addition of an FTE to provide technical support for the DNR Imaging Initiative will have the following impacts:

- Existing contract costs will be reduced approximately forty percent, from $53,000 to $20,000.
- Impact to Divisional FTE will be reduced by 10 percent as the new FTE provides technical system and implementation support.

Costs of New FTE for Imaging Technical Support

Division	**FTE Class**	**Current Annual FTE Cost**	**Contract Cost**	**Total Cost**
EDO	IT Pro III **New FTE**	$56,461		$56,461
EDO	IT Pro IV	$4,577		$4,577
OGCC	IT Pro V	$5,110	$4,000	$9,110
DMG	IT Pro III	$4,036	$4,000	$8,036
DWR	GP III	$3,264	$4,000	$7,264
CWCB	IT Pro II	$3,494	$4,000	$7,494
SLB	IT Pro IV	$3,331	$4,000	$7,331
		$80,173	$20,000	**$100,173**

* Current Annual FTE cost is calculated as five percent of actual annual loaded salary cost.
** Projected contract cost with Integro, Inc.

The projected annual savings in the first year are $23,389 or 18.9 percent of the current estimated support costs.

Summary Benefit/Cost Table for Problem 2 Alternatives

Alternative	Cost – Annual Cost 2.0 FTE	Benefit
A - Status Quo – Continue with current apportioned staffing strategy.	Apportioned FTE Cost: $71,562 Contract Cost - $52,000 Total Cost - $123,562	
B - Provide Contractor Funding – Fund cost of contractor staff.	Contractor Cost - $208,000 Total Cost - $208,000	
C - Staff ITS (Requested Alternative) - Provide 1.0 FTE for imaging technical support.	New FTE Cost - $56,461 Apportioned FTE Cost: $23,814 Contract Cost: $20,000 Total Cost: $100,455	Apportioned FTE Cost Reduction - $47,748 Contract Cost Reduction - $32,000 Total Benefit - $79,748

Conclusion:

Problem 1: Help Desk Support
The recommended alternative for this problem is Alternative C. The cost of Alternative C is the loaded salary costs for 2.0 FTE in an IT Professional II classification. Currently, ITS funds $91,200 of this cost through existing base funds. The actual costs and requested dollars are stated below in the *Summary Costs and Requested Dollars* table.

Problem 2: Imaging Technical Support
The recommended alternative for this problem is Alternative C. The cost is the loaded salary for 1.0 FTE in an IT Professional III classification. The actual costs and requested dollars are stated below in the *Summary Costs and Requested Dollars* table.

Other Key issues for decision Makers:

Summary Costs and Requested Dollars

Request	Help Desk Support	Help Desk Support	Imaging Support
Position	IT Professional II	IT Professional II	IT Professional III
Salary	$3,471	$3,471	$4,216
Months	12	12	12
Annual Salary	$41,653	$41,653	$50,592
PERA (@10.15%)	$4,228	$4,228	$5,135
Medicare (@ 1.45%)	$604	$604	$734
Total	$46,485	$46,485	$56,461
Grand Total for Problems 1 and 2			$149,431
Existing Base Fund Dollars Used to Pay State Temps			($91,200)
Amount Requested for Decision Item			**$58,231**

Omissions, Biases, or Uncertainties
None.

Schedule 6
CHANGE REQUEST for FY 2005-06

Department: Natural Resources
Priority Number: 8 of 28
Division: Water Conservation Board
Program: Flood Protection, Water Supply Planning & Finance, Instream Flow & Natural Lake Level, and Water Supply Protection Programs
Request Title: Severance Tax Projects Increase

Dept. Approval: [signature] Date: 10/25/04
OSPB Approval: [signature] Date: 10/28/04
Statutory Citation: C.R.S. 37-60-102, 106, Long Bill

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	577,335	585,000		585,000	585,000	255,000			840,000	0
	FTE										
	GF										
	CF	577,335	585,000		585,000	585,000	255,000			840,000	0
	CFE										
	FF										
Severance Tax	Total	577,335	585,000		585,000	585,000	255,000			840,000	0
	FTE										
	GF										
	CF	577,335	585,000		585,000	585,000	255,000			840,000	0
	CFE										
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Severance Tax
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)________________)

Efficiency and Effectiveness Analysis

Department: Natural Resources
Request: Severance Tax Projects Increase
Priority Number: 8 of 28
Division: Colorado Water Conservation Board (CWCB)

Summary of Requested Alternative:
To increase the funds available to the CWCB, its water supplier partners and local communities from the Severance Tax Trust Fund Operational Account by $255,000 to:

- Conduct water studies and prepare water resource plans;
- Produce maps;
- Facilitate water conservation;
- Provide educational information;
- Rehabilitate water infrastructure;
- Protect the environment;
- Reduce flood related hazards; and,
- Restore streams.

Problem or Opportunity Definition:
Unlike other DNR agencies, the CWCB does request Operational Account funds for annual operations. Instead, the CWCB annually solicits applications for projects. This process begins each January when grant applications are due, continues through March when each application for funds is reviewed, approved or modified, and ranked by the members of the CWCB. The state Minerals Energy and Geology Policy Advisory (MEGA) Board then reviews the projects and the rankings and forwards its recommendation to the DNR Executive Director.

For fiscal year 2005-2006, the CWCB received Severance Tax Trust Fund Operational Account grant applications for funding that exceed its currently authorized appropriation.

This is not surprising because Colorado is in the sixth year of a drought. The state, acting through the CWCB, has also been involved in several long-range planning processes – the Statewide Drought Assessment, a Covered Entities Technical Assistance Project and the Statewide water Supply Initiative (SWSI).

Each of these processes has identified that Colorado water suppliers, and citizens in general, want the CWCB to:

- Provide more technical assistance to deal with drought and water supply related problems;
- To educate citizens about water use, development and conservation;
- To mitigate the impacts of development by reducing flooding related hazards and mitigating this use and development of water through state-held instream flows;
- To generally encourage cooperation and planning among entities with water rights; and,
- Encourage the use of science and technology to solve complex problems.

The Severance Tax funds the CWCB receives help it meets the above demands by funding the projects that sponsors, often acting through the Board and its staff, have applied for or been encouraged to pursue.

For Fiscal Year 2005-2006 the CWCB received Severance Tax Trust Fund Operational Account grant requests totaling more than $1.7 million. However, the CWCB is only submitting a Change Request to allow it to fund those additional projects above the $585,000 base appropriation.

Because the Board has not been granted a Severance Tax increase for several years, the Board began ranking projects in terms of their importance to stay within a constant funding stream of $585,000 line item appropriation. Projects that would receive some funding, even if it were less than the full amount of the request, are ranked high. However, the Board has recommended consistently that Medium projects should be pursued – if not in the Fiscal Year of the request, than in a future Fiscal Year. Funding Medium ranked requests gives the CWCB a much better opportunity to meet the immediate demands that it faces in light of Colorado's existing water resource conditions. In addition, the CWCB has often funded Medium ranked projects using Construction Funds. However, this essentially takes Construction Fund revenues away from loans and long-term projects.

Available Alternatives:

1. No budgetary Change (Status Quo)
2. Increase Severance Tax Appropriation to benefit local and state water activities

Assessment of Alternatives:

1. **No budgetary change (Status Quo – Fund a Portion of the High Priorities) – (Not recommended)**
   a. **Description:**
   Maintain the CWCB's current appropriation of $585,000.

   b. **Department's authority to implement the alternative:**
   C.R.S. 39-29-109

   c. **Link to objectives:**
   This option allows the CWCB to study water availability, plan for droughts, promote the efficient use of water, identify and reduce flood risks, plan and manage instream flows, and fund local water study and demonstration projects. It does not allow the CWCB to meet a majority of the demands for funds for the above purposes, but it helps. The CWCB would be able to fund all or a portion of those projects ranked as having a "High" priority. These objectives correspond with objectives 1.1, 1.2, 1.5 and 1.7 of the DNR Strategic Plan.

2. **Increase the Severance Tax Appropriation by Amount That is Less Than the CWCB's Allocated Five Percent Share (Fund High and Medium Priorities) – (Recommended)**
   a. **Description:**
   Expand the use of severance tax by an amount that is less than the five percent share allowed by statute

   b. **Department's authority to implement the alternative:**
   C.R.S. 37-60-102, 106, Long Bill

   c. **Link to objectives:**
   This option allows the CWCB to study water availability, plan for droughts, promote the efficient use of water, identify and reduce flood risks, and plan and manage instream flows and fund those projects that were ranked as "Medium" priorities, based on the availability of funds. These objectives correspond with objectives 1.1, 1.2, 1.5 and 1.7 of the DNR Strategic Plan.

Analytical Technique:
The analytical technique used for this decision item is the multi-criteria method. This will allow the evaluation of performance against multiple objectives or criteria.

Assessment of Alternatives:
Background Information

Since July 1995, one-half of the severance tax receipts credited to the Severance Tax Trust Fund are placed in the Operational Account. The Operational Account must support programs that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water. The CWCB is allowed to request up to 5 percent of the funds in the account.

The severance tax revenue that the CWCB has received has been a valuable addition to the funding provided from the Construction Fund for local water planning activities and water project loans appropriated through the annual Water Projects Bill.

The projects (see Attachment A) recommended by the CWCB for funding are a mix of projects developed within the CWCB and projects proposed by outside interests or water user partners.

Link Budget Expenditures to the Full Range of Outcomes:

- The budget expenditures will benefit the state and help local water suppliers.
- There are no external costs to other government entities, private industry, or citizens.
- The main internal benefit is that the CWCB will be able to continue to effectively meet its goal of developing, conserving, protecting and managing water. There are also no other sources of funding for these projects.
- The external benefit is that the local water entities will receive funding, technical assistance, and materials to be able to meet their own water resource goals. The money in the Construction Fund is also preserved for use for loans.

Application of the Analytical Technique/Assumptions and Calculations:

Multi-Criteria Analysis

Option	Upgrade water protection data	Promote & Plan water projects	Flood Mitigation	Instream Flow Planning	Provide additional local water planning benefit	Comply with Severance Tax policy	Develop more water (in acre-feet)
Continued Funding	X	X	X	X	X	X	X
Increase Approp.	XX	XX	XX	XX	XX	XX	XX

• = does not achieve program objective
X = may achieve program objective
XX = will achieve or exceed program objective

As shown in the table above, the option of increasing the appropriation as the revenue increases best meets the criteria.

Budgetary Cost Assumptions and Calculations:
It is assumed that the severance revenue will produce adequate funds for the CWCB's use per S.B. 96-170.

Benefits, Assumptions and Calculations:
It is assumed that the majority of the expenditures and contracts for studies and projects will benefit local communities.

Key Issues for Decision Making:
Historical revenue collections have shown that Severance Tax revenues can fluctuate greatly. Therefore, studies, planning, grants, and coordinating efforts that can be completed within one year are very appropriate for this fund source. The key motivation behind creating this fund source was the need to mitigate the loss of valuable non-renewable energy resources as they are removed from the land. It was desired that a portion of the value of these resources should return to local communities and the state to be used to help mitigate the loss of these non-renewable resources.

Water may be Colorado's most valuable commodity and making more water available for growth, recreation and other purposes has been a key component in community planning. In fact, when the Severance Tax statutes were enacted, special consideration was given to using the revenues for water related activities.

Omission, Biases, or Uncertainties:
The main uncertainty is that if energy prices collapse, the revenue would decrease, but there is a statutory Severance Tax Trust Fund Operational Account reserve that will mitigate risks.

Recommendation:
Increase the amount of funds appropriated to the Colorado Water Conservation Board from the Severance Tax Fund to conduct and fund water studies, produce mapping projects, generate water plans, and facilitate water planning between multiple water organizations.

The four projects to be funded with this request follow.

Covered Entity Grants $60,000
The CWCB sponsored a "Technical Assistance to Covered Entities Project" effective FY03 to FY04. The project identifies covered entities required by statute to have conservation plans in order to obtain state financing. Phase I identified covered entities. Phase II increased the number of covered entities by providing technical assistance to those without plans. These funds will implement Phase III, which will assist covered entities to implement the plans developed in Phase II.

This project received a medium rating because the legislature had appropriated some funding for this initiative through the annual Projects Bill. However, since the passage of the new conservation bill (HB 04-1365) the demand for these funds will greatly intensify.

Groundwater Atlas $40,000
Work began on the Atlas in 2000. A non-technical soft cover was the first product. An Internet-based ground water atlas covering the entire state was to follow. This funding will make the atlas available electronically and linked to existing databases. Dependence on groundwater is increasing. Preparing the atlas electronically will allow the CWCB to coordinate the efforts of DWR, other DNR agencies, local groundwater management districts and others to collect information and make it available for local planning. Information will also be useful to mining and energy producing industries. This project received a medium recommendation only because the CGS was requested to produce a

groundwater storage study that took priority over the atlas. The CGS is now back on track and this funding is very important.

Chatfield Reservoir Reallocation Feasibility Study - Environmental Assessment $105,000

The funds would be used for a joint study to determine the availability of additional water supply storage in Chatfield. CWCB was involved in the Corps of Engineers Chatfield Reservoir Space Reallocation Study effective 1997. In 2003, the study was expanded to determine a partial reallocation of existing Chatfield Reservoir Storage Capacity for Municipal use. These funds would cover the cost above the Construction Fund bill that is CWCB's responsibility. CWCB Staff, Flood Protection Program, are the managing partners for the Chatfield Reservoir Reallocation Study. As such, this study will impact water planning for the Southern Denver Metropolitan and surrounding areas. This project received a medium recommendation because local partners had not yet committed to cost-share in the remainder of project. They have since agreed to come up with remaining $350,000 needed to complete the project and these funds are critical to meeting south metro area needs.

Designation Floodplain and Hazard Map $50,000

The funding will be used to provide a digital map that shows up-to-date designations of covered streams and areas of frequent flooding. CWCB has developed a Map Modernization Program and a statewide Floodplain Criteria Manual. The next tool needed is to fit hazard mitigation and protection activities within the priorities of local water planning. This project would provide a digital map, which would show by county, which streams are covered by an up-to-date designation and which are not. The map would also show high priority areas, for example areas where flooding frequently occurs. Floodplain protection is an integral part of water planning and management. This program would enable more communities to incorporate this as part of their water plans. This project only received a medium rating because it was thought that our funding would be limited to our current $585K appropriation. However, this project is very important and we have been asked to provide such a map for several years.

Attachment A

CWCB Program FY 05-06 Severance Tax Projects List

Project Name	Type of Project	Location & Beneficiary	Total Cost of Project (Estimated)	Funding Request	Brief Description of Project	Priority Ranking
Statewide Water Planning and Grants	Studies & Grants	Statewide	$ 250,000	$ 40,000	Studies, plans and projects that promote the development, conservation, protection and management of water.	**High**
Covered Entity Grants	Water Plan Implementation	Statewide	$ 120,000	$ 60,000	Assistance to Covered Entities to develop and implement conservation plans.	**Medium**
Groundwater Atlas	Product Implementation	Statewide	$ 80,000	$ 40,000	To link the Atlas to existing databases for Internet use.	**Medium**
Ground Water Mapping	Study	Statewide	$ 240,000	$ 40,000	Interactive internet based groundwater resource maps for use by water planners.	**High**
Native Species Conservation	Product Implementation	Statewide	$ 60,000	$ 50,000	To plan and implement projects designed to provide regulatory stability.	**High**
Base Flow Evaluation for South Platte Streams	Study	South Platte River Basin	$ 77,000	$ 50,000	Hydrograph recession analysis and base flow estimate to enhance water administration and resource planning.	**High**
Fountain/ Monument Creeks Transit Loss Study	Study	El Paso and Pueblo Counties	$ 300,000	$ 50,000	Update existing transit loss model to enable real time data incorporation.	**High**

Diversion Structure Inventory	Study	Colorado River - Div 5	$ 85,000	$ 85,000	Inventory of diversion structures encompassed by the Colorado River for evaluation and potential rehabilitation.	**High**
Lessons Learned from Drought	Study	Statewide	$ 30,000	$ 5,000	Follow-up report to the Drought Planning Assessment	**High**
Water Education	Product Implementation	Statewide	$ 90,000	$ 35,000	Conferences, brochures, displays, and the State Fair.	**High**
ISF Engineering Support	Data Gathering Analysis	Statewide	$ 75,000	$ 60,000	Engineering support for new appropriations, analysis of water rights transfers and other instream flow activities.	**High**
Natural Lake Level Data Collection and Water Rights Filings	Data Gathering Analysis	Statewide	$ 50,000	$ 40,000	To prepare natural lake level recommendations on 250 unprotected natural lakes.	**High**
Recreational In-Channel Diversion Support	Product Implementation	Statewide	$ 50,000	$ 30,000	To assist communities to get the engineering and technical support needed to get these water rights.	**High**
Chatfield Reservoir Reallocation Feasibility Study	Study	Denver, Arapahoe, Douglas, & Jefferson Counties	$ 3,162,309	$ 105,000	To determine the availability of additional water supply storage in Chatfield.	**Medium**
Multi-Objective Watershed Restoration Projects	Study	Statewide	$ 190,000	$ 25,000	To provide funding for watershed restoration projects to selected candidates to address watershed planning.	**High**

Floodplain Engineering Studies	Study	Statewide	$ 150,000	$ 35,000	To provide cost sharing funding to address local floodplain planning needs.	**High**
Improved Snowpack Forecasting	Study	Statewide	$ 120,000	$ 40,000	To develop the Snow Data Assimilation System which will provide a model for analysis of snowpack for water planning and flooding impact.	**High**
Designated Floodplain and Hazard Map	Product Implementation	Statewide	$ 50,000	$ 50,000	Digital map showing up-to-date designations of covered streams and areas of frequent flooding.	**Medium**
Totals			**$ 5,685,309**	**$ 840,000**		

Schedule 6
CHANGE REQUEST for FY 05-06

Department:	**Department of Natural Resources**	**Dept. Approval:** [illegible]	**Date:** 10/25/04
Priority Number:	**9 of 28**	**OSPB Approval:** [illegible]	**Date:** 10/28/04
Division:	**Minerals & Geology, Oil & Gas CC**	**Statutory Citation:**	
Program:			
Request Title:	**Emergency Response Funding**		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
DMG - Emergency Response Funding	Total	0	0	0	0	0	25,000	25,000	0		25,000
	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	GF	0	0	0	0	0	0	0	0		
	CF	0	0	0	0	0	25,000	25,000	0		25,000
	CFE	0	0	0	0	0	0	0	0		
	FF	0	0	0	0	0	0	0	0		
OGCC - Emergency Response Funding	Total	0	0	0	0	0	75,000	75,000	0		75,000
	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	GF	0	0	0	0	0	0	0	0		
	CF	0	0	0	0	0	75,000	75,000	0		75,000
	CFE	0	0	0	0	0	0	0	0		
	FF	0	0	0	0	0	0	0	0		

Letter Notation: These funds shall come from the Operational Account of the Serverance Tax Trust Fund
Cash Fund name/Number: Operational Account of Severance Tax
IT Request Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Request for New or Replacement Vehicles: Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): Yes X No (If yes, Name of other Department(s)____________________)

EFFICIENCY AND EFFECTIVENESS ANALYSIS

Department of Natural Resources
Request Title: **Emergency Response Funding**
Priority #: **9 of 28**
Division: **Minerals and Geology**

Summary:
Provide the Division of Minerals and Geology spending authority of $25,000 to fund emergency hazardous waste controls in the event of operator failure at a mine site, until other funds are secured.

Problem or Opportunity Definition

The Division is charged with the responsibility to foster and encourage the development of an economically sound and stable mining industry and to encourage the orderly development of the State's natural resources, while requiring those persons involved in mining operations to reclaim land affected by such operations so that the affected land may be put to a use beneficial to the people of the State. The Legislature also expects the Division to protect and promote health, safety, and general welfare of the people. If mining operators are unable to respond to an emergency situation, the Division needs to be able to respond immediately in order to prevent the spread of hazardous materials through water sources and other environmental media and thus endanger citizens, wildlife and habitat.

The Division of Minerals and Geology is seeking a line item of $25,000 to provide emergency funding for the Division to respond immediately to mine site emergencies. Such emergencies can be mitigated before hazardous materials spread from the site if adequate funding can be accessed immediately to hire mitigation contractors. A delay of even a few days can result in hazardous materials permeating waterways and soils beyond the boundaries of the mine site, jeopardizing public health conditions. The financial warranty/bond posted by the mine operator is often tied up in bankruptcy proceedings or is not readily available to banking transactions required to make the funds available to the State. Statutorily, the process for securing bond moneys for action at a mine site requires at least a 60-day process. The Mined Land Reclamation Act provides for the Mined Land Reclamation Board to attempt to recover Emergency Response Funds from the permitted operator. In severe situations, the U.S. Environmental Protection Agency will handle the environmental clean up actions at the site if the State is unable, which is not preferred due to the complexity of their processes.

The current method for seeking emergency supplemental funding is referred to as a "1331/Interim Spending Authority" process (see C.R.S. 24-75-111). According to budget instructions, departments submit 1331 supplemental requests four weeks before a JBC meeting in order to provide appropriate review by OSPB and JBC staff. In addition, the JBC must send a letter to the State Controller, who must then book additional spending in COFRS before additional spending authority is officially provided. Consequently, it takes as long as eight weeks between an emergency happening and emergency spending authority being booked by the State Controller's Office. We believe that potential public safety, health, and welfare risks often require the Division to respond more immediately to mitigate threats to public health.

During the 2004 Legislative Session, SB 03-271 (Augmentation of the General Fund through transfers of certain moneys) transferred $486,613 from the Division of Minerals & Geology Emergency Response Cash Fund to the State General Fund. This transfer effectively eliminated the fund balance in the Emergency Response Cash Fund. Therefore, DMG has no funds available to respond to emergency issues. In FY 02-03 $15,214 was spent from that fund for smaller hazardous waste problems at mine sites.

Statutory Authority

C.R.S. 39-29-109, Severance Tax Statute
C.R.S. 34-32-122, Mined Land Reclamation

Department Objectives:

1.1 Respond to demands by constituents by providing services, information, and assistance.
1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.
1.7 Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance and regulatory enforcement related to statutorily authorized programs.

Available alternatives:

Alternative 1: (Recommended)
Create a line item in the Division of Minerals and Geology for spending authority for emergencies related to mining activities.

Alternative 2: (Not Recommended)
Require divisions to expend funds from the Long Bill line item for Operating until a 1331 Emergency Supplemental is approved and booked into COFRS.

Analytical Technique

Switch point analysis is the selected technique since it is not possible to accurately determine the benefits of avoiding health, life and safety issues. Nor is it easy to calculate the costs associated with the potential spread of hazardous materials into the natural environment (including associated clean up costs). It is assumed, however, that benefits will exceed costs. It is also assumed that in cases where the responsible party can be identified the division will be reimbursed for expenditures.

Assessment of Alternatives

Background Information
The decision item provides the Division spending authority to draw up to $25,000 per year from the Operational Account of the Severance Tax Trust Fund. The historic costs for smaller mine emergencies is $5,000-$10,000 annually. Cost of mitigation at large mines far exceeded $25,000 per day in a past occurrence.

Assumptions/Calculations

The Division of Minerals and Geology responded to emergency situations and expended the following from their fund:

FY 00-01	$4,213
FY 01-02	$8,725
FY 02-03	$15,214

As demonstrated above, these expenditures have been doubling each year.

Given these recent expenditures, including the fact that emergency costs in DMG seem to be increasing, the Division is requesting $25,000 for this purpose. The requested appropriation prevents the Department, the Governor's Office, the General Assembly, and the State Controller's Office from having to address relatively small mine site emergencies through the supplemental process. As noted above, there have been small emergencies in each of the last 4 fiscal years. While the Division hopes not to have to expend any of the requested funding, it seems prudent to be prepared for at least a minimum level of emergency response needs.

<u>Key Issues for Decision Making</u>

Depending on when the emergency occurred in the fiscal year, there may not be sufficient funds in the Long Bill appropriation to pay for response costs. The intent of the request is not to fund the entire cost of responding to an environmental emergency, a response that might cost millions of dollars. Instead, the request is intended to provide enough funding to bridge the time between when an emergency happens and the 4 to 8 weeks it takes to receive additional spending authority through the emergency supplemental process. The request represents an amount that considers the increases that have occurred over the past three years in what the Division of Minerals and Geology has spent annually to respond to mine site emergencies.

EFFICIENCY AND EFFECTIVENESS ANALYSIS

Department of Natural Resources
Request Title: **Emergency Response Funding**
Priority #: **9 of 28**
Division: **Colorado Oil and Gas Conservation Commission**

Summary:

Provide the Colorado Oil and Gas Conservation Commission (COGCC) spending authority of $75,000 to fund emergency situations related to oil and gas operations, until other funds are secured if needed.

Problem or Opportunity Definition

The COGCC is charged with the responsibility to foster and encourage the development of an economically sound and stable oil and gas industry and to encourage the orderly development of the State's natural resources, while requiring those persons involved in oil and gas operations to reclaim land affected by such operations so that the affected land is restored to its original condition as nearly as possible. The Legislature also expects the COGCC to protect and promote health, safety, and general welfare of the people. If oil and gas operators are unable to respond to an emergency situation, the COGCC needs to be able to respond immediately, in order to prevent the spread of hazardous materials through water sources and other environmental media, thus endangering the public and environment.

The COGCC is seeking a line item of $75,000 to provide emergency funding for the agency to respond immediately to emergencies at oil and gas drilling and production facilities. Such emergencies can be mitigated before hazardous materials spread from the site if adequate funding is accessed immediately to investigate and collect various water and gas samples. A delay in identifying the source of contamination can result in hazardous materials permeating waterways and soils beyond the originally affected area, further jeopardizing public health and environmental conditions.

The current method for seeking emergency supplemental funding is referred to as a "1331/Interim Spending Authority" process (see C.R.S. 24-75-111). According to budget instructions, departments submit 1331 supplemental requests four weeks before a JBC meeting in order to provide appropriate review by OSPB and JBC staff. In addition, the JBC must send a letter to the State

Controller, who must then book additional spending in COFRS before additional spending authority is officially provided. Consequently, it takes as long as eight weeks between an emergency happening and emergency spending authority being booked by the State Controller's Office. We believe that potential public safety, health, and welfare risks often require the COGCC to respond more immediately to mitigate threats to public health and environment.

Statutory Authority

CRS 39-29-109(1)(a)(II) (Senate Bill 96-170) One-half of the severance tax receipts credited to the Severance Tax Trust Fund ...shall be credited to the Operational Account of the Severance Tax Trust Fund and used to fund programs established within the Colorado Oil and Gas Conservation Commission, the Colorado Geological Survey, the Division of Minerals and Geology, and the Colorado Water Conservation Board that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water...

CRS 39-29-109(1)(c)(I) ...The General Assembly may appropriate moneys from the total moneys available in the Operational Account of the Severance Tax Trust Find to fund recommended programs as follows:
(A) For programs or projects within the Colorado Oil and Gas Conservation Commission, up to forty-five percent of the moneys in the Operational Account...

CRS 34-60-102(1): Oil and Gas Conservation Act – declares it is to be in the public interest to foster, encourage, and promote the 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...

CRS 34-60-106(2)(d): The commission has the authority to regulate...oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, taking into consideration cost-effectiveness and technical feasibility.

Department Objectives:

1.1 Respond to demands by constituents by providing services, information, and assistance.

1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.
1.7 Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance and regulatory enforcement related to statutorily authorized programs.

Available alternatives:

Alternative 1: (Recommended)
Create a line item in the Colorado Oil and Gas Conservation Commission section of the Long Bill for spending authority for emergencies related to oil and gas activities.

Alternative 2: (Not Recommended)
Require the COGCC to expend funds from the Long Bill line item for Program Costs until a 1331 Emergency Supplemental is approved and booked into COFRS.

Analytical Technique

Switch point analysis is the selected technique since it is not possible to accurately determine the benefits of avoiding health, life and safety issues. Nor is it easy to calculate the costs associated with the potential spread of hazardous materials into the natural environment (including associated clean up costs). It is assumed, however, that benefits will exceed costs. It is also assumed that in cases where the responsible party can be identified, the COGCC will seek reimbursements for expenditures.

Assessment of Alternatives

Background Information
The decision item provides the COGCC spending authority to draw up to $75,000 per year from the Operational Account of the Severance Tax Trust Fund. A recent example justifying this figure is the April 2004 West Divide Creek gas seep near Rifle, Colorado. A 1331 Emergency Supplemental was requested and approved for $50,000. The total cost to the OGCC for this incident is expected to be at least $80,000. The time spent preparing the emergency request and moving it through the approval process took nearly four weeks, and could have taken considerably longer had key individuals not been immediately available to review the request.

Assumptions/Calculations

The COGCC often responds to emergency situations that cost the agency between \$5,000 and \$30,000 per incident. The agency can usually fund these within its exiting budget to avoid a supplemental request, but with oil and gas activity on the rise, the likelihood for emergency funding requests also increases.

The requested appropriation of \$75,000 prevents the Department, the Governor's Office, the General Assembly, and the State Controller's Office from having to address, through the supplemental process, relatively small oil and gas related emergencies that occur late in the fiscal year and cannot be absorbed. The request will also provide bridge funding for larger, more costly emergencies until additional funding is secured. While the COGCC hopes not to have to expend any of the requested funding, it seems prudent to be prepared for at least a minimum level of emergency response needs.

Key Issues for Decision Making

Depending on when the emergency occurred in the fiscal year, there may not be sufficient funds in the Long Bill appropriation to pay for response costs. The intent of the request is not to fund the entire cost of responding to a large and costly environmental emergency, a response that might cost millions of dollars. Instead, the request is intended to provide enough funding to bridge the time between the date of the incident and the 4 to 8 weeks it takes to receive additional spending authority through the emergency supplemental process. The amount of the request reflects recent expenditures incurred in responding to oil and gas related emergencies. The request is also intended, as discussed above, to provide funding for smaller, less expensive emergencies that occur late in the year and cannot be absorbed.

Schedule 6
Decision Item Request for FY 2005-06

Department: Natural Resources
Priority Number: 10 of 28
Division: Water Resources
Program: Water Administration
Request Title: Costilla Creek Compact Assessments

Dept. Approval: Date: 10/25/04
OSPB Approval: Date: 10/28/04
Statutory Citation: 37-80-102; ~~37-68~~-101

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	67,542	70,900	0	70,900	70,900	5,102	76,002	0	76,002	5,102
	FTE	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0
	GF	67,542	70,900		70,900	70,900	5,102	76,002		76,002	5,102
	CF										
	CFE										
	FF										
Line Item Name	Total	67,542	70,900	0	70,900	70,900	5,102	76,002	0	76,002	5,102
	FTE	0.0	0.0		0.0	0.0	0.0	0		0.0	0.0
Interstate	GF	67,542	70,900		70,900	70,900	5,102	76,002		76,002	5,102
Compacts	CF										
	CFE										
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name:
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes x No (If yes, Name of other Department(s)________________)

Efficiency and Effectiveness Analysis

Department: **Natural Resources**
Request Title: **Costilla Creek Compact Assessments**
Priority number: **10 of 28**
Division: **Water Resources**

Summary of Requested Alternative: The Division seeks additional General Funds of $5,102 to cover increases in Colorado's statutorily mandated contribution to the Costilla Creek Compact Administration.

At the annual meeting of the Costilla Creek Compact Administration on May 6, 2004, the budget for FY 2004-05 was approved. Colorado's share (50%) was increased from $47,652 to $52,754. This is an increase of 10.7% ($5,102) and reflects additional personnel, administrative, and operating costs.
The United States Government, pursuant to interstate compact agreements, assesses Costilla Creek Compact administrative costs. Failure to meet Colorado's compact obligations subjects Colorado to costly interstate compact litigation. The Division of Water Resources is therefore requesting the additional funding needed to meet Colorado's Costilla Creek Compact obligation.

Element No. 2 – Problem or Opportunity Definition.

The Division of Water Resources is required to pay this assessment to support the critical work of the Costilla Compact Commission. Our total interstate compact budget for FY 2004-05 is $70,900, which is allocated to finance this assessment and to cover travel expenses for Commission meetings associated with the administration of nine interstate compacts. The United States Government increased its assessment for FY 2004-05 due to rising Commission transportation expenses (including vehicle replacement) and growing demands of Compact administrators. We anticipated this increase in expense for FY 2004-05 and adjusted our activity and expenses, accordingly, on a temporary basis for one year; however, we cannot sustain these increases in program expenses in future years.

Pro-forma budget estimates provided by the United States Geological Survey during Costilla Compact briefing reveal ongoing annual increases of 10%. With no additional funding and ongoing annual increases, Costilla Creek Compact assessments could comprise as much as 90% of the interstate budget line by FY 2006-07, leaving almost no support for participation in Compact Commission meetings for the remaining eight compacts. The remaining compact meetings will deal with critical issues related to Colorado, New Mexico, Kansas, and Nebraska compact compliance and administration.

Outside of our interstate compact budget, no other funds are available from the allocation of Division funding. Utilizing funds from outside the compact budget to meet compact obligations would result in under-funding for other necessary operations, such as water administration for individual water users and interstate water delivery obligations. Many of these operations are, in fact, compact-related.

The Division's statutory interstate river compact obligations are set forth in the following statutes:

Title 37	Article 61	Colorado River Compact
Title 37	Article 62	Upper Colorado River Compact
Title 37	Article 63	La Plata River Compact
Title 37	Article 64	Animas-La Plata Project Compact
Title 37	Article 65	South Platte River Compact
Title 37	Article 66	Rio Grande Compact
Title 37	Article 67	Republican River Compact
Title 37	Article 68	Amended Costilla Creek Compact
Title 37	Article 69	Arkansas River Compact

The Department's prioritized objectives regarding interstate river compact obligations include:

1.2 Maximize efficient use of Colorado's water resources and comply with and enforce other states' compliance with interstate compacts.

2.3 Promote conservation and stewardship of state natural resources among landowners by providing technical assistance and incentives.

Element No. 3 – Available Alternatives

Alternative No. 1 (Recommended):

- Increase General Fund appropriation to cover rising Assessments. The additional funding would enable the Division to fulfill its Costilla Creek Compact Assessment, meet Costilla Creek Compact water-delivery obligations, and maintain appropriate water administration levels in that area. Maintaining appropriate administration levels provides the dollar benefit described in Alternative No. 3. Our Division therefore seeks additional General Funds of $5,102.
- The Division of Water Resources believes that this request is reasonable, given that there has been no operating increase since FY 1989-90 and that the compact was ratified by the Colorado General Assembly in 1963 and approved by the United States Congress.

Alternative No. 2 (Status Quo, Not Recommended):

- Do not fully fund the Assessment and do not deplete the Division's operating budget. Maintain existing water administration level, resulting in the dollar benefit described in Alternative No. 3.
- Failure to pay the federally assessed obligation would subject Colorado to the peril of interstate river compact litigation with exorbitant monetary costs, including attorney fees, penalties, and increased administrative expenses. The ability to protect water use and deliveries to Colorado water users would also be adversely affected.
- Based on prior litigation involving the Arkansas River and Republican River Compacts, such costs can be estimated at $1.5 to $3 million. These costs may be incurred in FY 2006-07 and beyond.

Alternative No. 3 (Not Recommended):

- Meet Costilla Creek Compact obligations and other compact needs by depleting funds for water administration, dam safety, and public safety. This would result in declining levels of public service and safety and would potentially injure Colorado property and water rights holders by virtue of ineffective administration of water rights.
- In terms of Costilla Creek administration, failure to effectively administer water rights in the basin could result in approximately a 20% reduction of water delivery to the appropriate holders of water rights. With 2,230 acres of agricultural land irrigated by Costilla Creek, and conservatively utilizing 20 tons of alfalfa per acre at $100 per ton, the basin's agricultural community would suffer a loss in annual revenue of $892,000. This is considered the baseline alternative, and thus reflects no cost or benefit. The annual revenue of $892,000 is reflected as benefits in Alternatives 1 and 2.
- This alternative has no direct cost to the Division.

Element No. 4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the value of the Costilla Creek property owners receiving the total amount of water to which they are entitled.

Element No. 5 – Assessment of Alternatives

There are three alternatives: 1) add requested funding; 2) do not add requested funding, do not re-allocate Division budgets, and do not pay the federal assessment; 3) reallocate Division services to the detriment of water administration and pay the federal assessment.

Alternative	Cost	Year	Benefit to Owners	Benefit-Cost Ratio
1	$5,102	1	$892,000	174.8
	$5,102	2	$892,000	174.8
2	$0	1	$892,000	-
	$1.5 - $3 M	2+	$892,000	.6 - .3
3	$0	1	$0	-
	$0	2	$0	-

Based upon the three alternatives, Alternative No. 1 is our recommendation. This protects the use of Costilla Creek waters by Colorado water users, thus maintaining the current benefit level without incurring substantial litigation expenses (Alternative No. 2). While Alternative No. 3 incurs no such litigation, its reallocation of Division services removes protection of water usage and the corresponding benefit of appropriate administration.

Schedule 6
CHANGE REQUEST for FY 2005-06

Department: Natural Resources
Priority Number: 11 of 28
Division: Colo Water Conservation Bd
Program: Water Supply Protection
Request Title: Compact Dues Increase

Dept. Approval: Will Shafroth Date: 10/25/04
OSPB Approval: Andi Day Date: 10/25/04
Statutory Citation: CRS 37-60-106-101; 37-62-101; 37-69-101

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	284,658	284,726		284,726	284,726	4,810			289,536	4,810
	FTE										
	GF										
	CF										
	CFE	284,658	284,726		284,726	284,726	4,810			289,536	4,810
	FF										
Interstate Compacts	Total	284,658	284,726		284,726	284,726	4,810			289,536	4,810
	FTE										
	GF										
	CF										
	CFE	284,658	284,726		284,726	284,726	4,810			289,536	4,810
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name: CWCB Construction Fund #424
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)______________________)

Efficiency and Effectiveness Analysis

Department: Natural Resources
Request Title: Compact Dues Increase
Priority #: 11 of 28
Division: Colorado Water Conservation Board (CWCB)

Summary of Requested Alternative
To pay the $4,810 increase in dues assessed by the Upper Colorado River.

Problem or Opportunity Definition
The State of Colorado assisted in developing four interstate water organizations to clarify Colorado's rights to water, help protect those rights, and establish appropriate levels of communication among state and federal officials. The four interstate water organizations are: 1) Upper Colorado River Commission, 2) Arkansas River Compact Administration, 3) Colorado River Basin Salinity Control Forum, and 4) Western States Water Council (WSWC). Two of the four organizations oversee federal operations of specific reservoir projects that provide water to Colorado water-users in accordance with Interstate Compacts, which are state statute, and the Governor's water priorities.

Each of the four interstate water organizations establishes a yearly operating budget, of which the State of Colorado pays an established percentage for dues and/or assessments in accordance with Sections 37-60-106, 37-62-101 and 105, and 37-69-101 and 105 of the Colorado Revised Statutes. The dues are funded each year through two separate line items (*Interstate Compacts* and *WSWC*) in the long bill. Based on previous years' budget increases, Colorado's portion of the Upper Colorado River Compact Commission assessment dues has increased by $4,810. Colorado pays 51.75% of the dues assessed to the four Upper Colorado River Basin States and receives a like portion of the water.

Available Alternatives:
1. No action (Status Quo): Do not fund this decision item as requested.
2. Request funding from another source.
3. Increase the compact dues/assessment line by the amount of $4,810.

Analytical Technique:
A qualitative benefit-cost analysis will be used to evaluate this change request.

Assessment of Alternatives:

1. **Alternative Number One:** Status Quo **(Not Recommended)**
   a. **Description:**
   Do not fund this decision item as requested.

   b. **Department's authority to implement the alternative:**
   - C.R.S. 37-62-101 Article VIII and 37-62-105 require the state to pay a portion of the Upper Colorado River Commission expenses based on the percentage of consumptive use apportioned to it (51.75%).
   - C.R.S. 37-69-101, Article VIII E (1) and (2) and 37-69-105 for the Arkansas River Compact Administration's level of assessment and the payment thereof, respectively.
   - C.R.S. 37-60-101 and C.R.S. 37-60-106(1)(a) and (b) provides for the state to pay its assigned share of the Colorado River Salinity Control Forum Assessments.

   The agency is given departmental authorization to determine the method of spending the remaining appropriation within the interstate compacts line item once obligated dues/assessments are paid.

   c. **Anticipated Outcome:**
   The CWCB's mission is to develop, conserve, protect and manage the state's water. To accomplish this, the CWCB must comply with and enforce other state's compliance with interstate compacts. Dues to organizations that oversee administration of interstate compacts have increased $12,727 from FY 2000 to FY 2005. During this same period, water issues have intensified in part due to the recent drought conditions. Colorado has not been able to have a representative attend all necessary meetings given the decreasing budget and an increased workload. As a result, the effectiveness in protecting Colorado's water interests has been reduced and the leadership role has diminished. Continuation of this course may ultimately result in a loss of water to Colorado and expensive interstate litigation. Conversely, full participation significantly reduces those possibilities.

2. **Alternative Number Two:** Request funding from another source. **(Not Recommended)**
   a. **Description:**
   Fund the increase in dues from the existing appropriation and request that the reduction of compact related travel be supported by donations from water-related organizations whose interests are represented by the state.

b. Department's authority to implement the alternative:

The department has the ability to enter into Intergovernmental Agreements (IGA's) that could arrange and provide for payment of state employees or travel costs by water-related organizations.

- C.R.S. 37-62-101 Article VIII and 37-62-105 require the state to pay a portion of the Upper Colorado River Commission expenses based on the percentage of consumptive use apportioned to it (51.75%).
- C.R.S. 37-69-101, Article VIII E (1) and (2) and 37-69-105 for the Arkansas River Compact Administration's level of assessment and the payment thereof, respectively.
- C.R.S. 37-60-101 and C.R.S. 37-60-106(1)(a) and (b) provides for the state to pay its assigned share of the Colorado River Salinity Control Forum Assessments.

c. Anticipated Outcome:

The CWCB's mission is to develop, conserve, protect and manage the state's water. To accomplish this, the CWCB must comply with and enforce other state's compliance with interstate compacts. It is unlikely that other water organizations would agree to such IGA's. Furthermore, if they agree to such an IGA, they would expect the state to be more vigorous in the protection of their specific interests and to advance their agenda where possible. Such bias from the state may be a disadvantage to smaller water organizations of the state. Some organizations already send outside representatives to meetings for that purpose and, at times, advocate positions that are contrary to the State's position.

3. Alternative Number Three: Increase the compact dues/assessment line by the amount of $4,810. **(Recommended)**

a. Description:

Increase the compact dues/assessment line by the amount of $4,810.

b. Department's authority to implement the alternative:

C.R.S. 37-62-101 Article VIII and 37-62-105 require the state to pay a portion of the Upper Colorado River Commission expenses based on the percentage of consumptive use apportioned to it (51.75%). C.R.S. 37-61-101 and C.R.S. 37-60-106(1)(a) and (b) provides for the state to pay its assigned share of the Colorado River Salinity Control Forum Assessments.

c. Anticipated Outcome:

The CWCB's mission is to develop, conserve, protect and manage the state's water. To accomplish this, the CWCB must comply with and enforce other state's compliance with interstate compacts. Funding this decision item will allow the state to:

- continue its participation in compact administration and compact-related matters,
- protect Colorado's interests,
- create opportunities to bring federal dollars to Colorado through the Salinity Control Program,
- continue the current base operation of the compact line item and prevent further cuts to meeting travel,
- allow Colorado to effectively protect Colorado's interests in the face of increasing efforts needed to limit other states to their compact apportionment, and
- allow the CWCB to maintain the relationships necessary to correct obstacles to water development.

In addition, this alternative to fund the request allows the CWCB to meet DNR objectives 1.2, 1.3, and 1.5.

Background Information

The Division has a statutory obligation to pay the amount assessed by the Upper Colorado River Commission, the Arkansas River Compact Commission, and the Colorado River Salinity Control Forum. Having the increase in dues funded will ensure that the agency meets its statutory obligation while being able to continue the program at its current level of travel and operation. The agency must travel to compact meetings in order to represent Colorado in compact activities and to participate in the Colorado River Salinity Control Program. The CWCB represents Colorado's interest by protecting Colorado's ability to develop its compact apportionments which in turn provides economic growth, monitoring the use of appropriated water rights to assure we remain within our apportionment, planning for future water projects and water rights to develop unappropriated water supplies, and ensuring that the full amount of water to downstream states is delivered and thus avoid possible multi-million dollar lawsuits. The agency also monitors water supply activities in other states to ensure that appropriations are not exceeded or that any of Colorado's appropriated water is not lost over time to downstream users. Continuing Colorado's full participation in interstate compact administration and related matters ensures the protection of allocations, enables Colorado to have a voice in compact activities, keeps water available for development of the State's agricultural, municipal, recreational, and wildlife activities and allows for economic growth.

The Colorado River Salinity Control Forum was established in 1973 to establish numeric criteria for salinity in the Colorado River and to implement a Colorado River salinity control program in response to passage of the 1972 Clean Water Act (P.L. 92-500) and Minute 242 of the International Boundary and Water Commission. The salinity control program is essential to assuring compliance with the salinity standards and Colorado's ability to continue to develop its compact entitlements.

Since FY 2000-01, dues to interstate organizations have increased from $218,945 to $231,672 in FY 2004-05, which is an increase of $12,727. These increases have been absorbed from the operations and travel portion of the line item. During this period, pressure to address California's overuse of Colorado River water and environmental issues associated with the Colorado River Delta have increased several fold. In addition, Nevada and New Mexico are approaching full use of their compact entitlements to Colorado River water, which requires attention. The agency can no longer absorb even modest increases in compact dues without sacrificing some portion of its ability to represent Colorado in interstate compact matters. This is now noticeable in decisions not to attend certain meetings involving compact matters.

<u>Linking Budgetary Expenditures to the Full Range of Outcomes:</u>

1. Alternative Number One: Do not fund this decision item (status quo)

1. Colorado would not attend certain meetings involving compact matters because of increased travel costs.
2. Colorado will begin to limit and lose institutional knowledge by foregoing attendance at meetings.
3. Colorado will begin to lose its position of leadership on interstate compact matters and thus its ability to fully protect the states compact entitlements.

2. Alternative Number Two: Request funding from another source

The items listed under alternative #1 apply to alternative #2 as well as the following:

1. Funding from other sources may tend to prompt agendas of the funding agencies, which may not always be in the best interests of the State as a whole.
2. Funding from other agencies would impact the budgets of those funding agencies.

3. Alternative Number Three: Increase the compact dues/assessment line by the amount of $4,810.

1. The <u>budget expenditures</u> will pay the Division's interstate compact dues.
2. There are no <u>external costs</u> to other government entities, private industry, or citizens
3. The main <u>internal benefit</u> is that the Division will be able to maintain efficient management of water issues and policies by continued participation in water compact discussions, monitoring, and decisions.
4. The <u>external benefit</u> is that the State's water supply is protected for the present and future generations.

Budgetary Cost Assumptions and Calculations:

1. **Funding Alternative Number One: Do not fund this decision item (status quo)**
   This alternative has no budgetary costs associated with it. There will be a decrease in operating expenditures as funding will go to the increase in dues, which will ultimately lead to a diminishment in Colorado's ability to fully participate in compact matters.

2. **Funding Alternative Number Two: Request funding from another source**
   This alternative has no budgetary costs to the State associated with it. Costs may or may not be covered by other non-state organizations. If covered, the funding agencies have certain agendas that they may like to see advanced, which may not always be in the best interests of the State as a whole.

3. **Funding Alternative Number Three: Increase the compact dues/assessment line by the amount of $4,810.**
   Assumptions:
   1. The budget line would be increased only by the amount of the increase in dues.
   2. Travel and operating would remain at previous fiscal year levels, which are now considered minimal given the increased travel costs.

Application of the Analytical Technique/Assumptions and Calculations:

	Alternative 1—Do not fund decision item (status quo)	**Alternative 2—Request funding from other organizations through MOU's.**	**Alternative 3 – Increase the line item by the amount of the dues increases**
	Probability	**Probability**	**Probability**
Fully participate in compact-related group and organization meetings	Low	Low to Medium	Medium to High
Represent Colorado at compact decision making opportunities	Medium	Medium to High	High
Improve community/water related organizational relations	Low	Low	Medium
Promote water development by government or private citizens.	Medium	Medium	Medium to High
Fully participate in salinity control projects and program decisions in the Colorado River Basin	Medium	Medium to High	Medium to High

Note: The probability factors used above are defined as follows:

None—There is no probability of accomplishing this objective.
Low— The probability of accomplishing this objective is low.
Medium—Part of this objective may be met.
High—This objective may be met.

<u>**Key Issues For Decision Making**</u>
The statutory provision for the CWCB's authority and responsibility to represent the State of Colorado in negotiating and entering into compacts and agreements between other states is listed in C.R.S. 37-60-109(1) and (2).

The current FY 2004-05 allocations for these dues and assessments will not cover the increases indicated below without impacting operations and travel and, therefore, the ability to effectively participate.

Assumptions and Calculations

Association	Dues 2000 – 2001	Dues 2001 – 2002	Dues 2002 – 2003	Dues 2003 – 2004	Dues 2004 – 2005	Dues 2005 – 2006
Upper Colorado River Commission	$149,000	$154,530	$160,270	$160,270	$160,270	$165,080
Arkansas River Compact Administration Association	$40,800	$40,800	$40,800	$40,800	$40,800	$40,800
Colorado River Basin Salinity Control Forum Assessment	$29,145	$29,145	$30,602	$30,602	$30,602	$31,520 *
Western States Water Council			$25,000	$25,000	$25,000	$25,000

- proposed

If the increase for dues is not approved and must be absorbed within the current appropriation again, the amount allocated for compact operations and travel will be reduced again, the level of participation in compact meetings will be reduced, and Colorado's representative may not be present to protect Colorado's interests when issues regarding allocations are discussed. If this trend in operation and travel reductions continues, Colorado's ability to defend its compact entitlements may eventually cease altogether.

Descriptions of any omissions, biases, or uncertainties
There are no unforeseen uncertainties about the request year, but there may be additional, small increases in compact dues for FY 2006-07.

Recommendation
The Colorado Water Conservation Board recommends alternative #3; that an increase in the appropriation be made in the amount of $4,810 for the purpose of meeting the costs associated with increased compact dues.

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department: Department of Natural Resources
Priority Number: 12 of 28
Division: Colorado Oil and Gas Conservation Commission
Program: Information
Request Title: Computer System Maintenance/Application Development and Support FTE

Dept. Approval: Will Whaley **Date:** 10/25/04
OSPB Approval: Andrew Day **Date:** 10/25/04
Statutory Citation:

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	2,695,755	2,732,859			2,732,859	143,803	2,876,662			140,334
	FTE	32.0	33.0			33.0	1.0	34.0			1.0
	GF										
	CF	2,695,755	2,232,859			2,232,859	143,803	2,376,662			140,334
	CFE		500,000			500,000		500,000			
	FF										
Line Item Name	Total										
Personal Services	FTE	28.0									
	GF										
	CF	2,108,462									
	CFE										
	FF										
	Total										
Operating Expenses	FTE										
	GF										
	CF	293,153									
	CFE										
	FF										

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Accelerated Drilling	Total										
	FTE	4.0									
	GF	0									
	CF	294,140									
	CFE	0									
	FF	0									
Program Costs	Total		2,732,859			2,732,859	143,803	2,876,662			140,334
	FTE		33.0			33.0	1.0	34.0			1.0
	GF										
	CF		2,232,859			2,232,859	143,803	2,376,662			140,334
	CFE		500,000			500,000		500,000			
	FF										

Letter Notation: The funds shall be from the Operational Account of the Severance Tax Trust Fund

Cash Fund name/Number, Federal Fund Name: Operational Account of the Severance Tax Trust Fund (Fund #170)

IT Request ☒ Yes ☐ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☐ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): ☐ Yes ☐ No (If yes, Name of other Department(s)____________________)

REQUEST TO CHANGE THE BASE OPERATING BUDGET

PART B - EFFICIENCY AND EFFECTIVENESS ANALYSIS

COMMON IDENTIFICATION INFORMATION

Department:	Natural Resources
Priority Number:	12 of 28
Long Bill Group/Division:	Colorado Oil and Gas Conservation Commission
Program Title/Work Package Title:	Information
Change Request Title:	Computer System Maintenance/Application Development and Support FTE
Statutory Cite:	CRS 39-29-109(1)(a)(II), CRS 39-29-109(1)(c)(I), CRS 34-60-102(1), CRS 34-60-106(1)(b), CRS 34-60-106(2)(d)

SUMMARY OF REQUESTED ALTERNATIVE

This request is for $143,803 from the Operational Account of the Severance Tax Trust Fund. $83,092 is for computer maintenance and updates for the Colorado Oil and Gas Information System (COGIS) necessary to meet State and Department standards requiring an asset management plan be implemented to address technology changes on a regular basis; and $60,711 and 1.0 FTE is requested to fund an IT Professional III and related operating expenses to allow the COGCC to focus on computer system maintenance and management of the Information Section.

PROBLEM OR OPPORTUNITY DEFINITION

The COGCC has determined that there is an ongoing annual cost of $174,747 for maintaining and updating COGIS. Of this amount, $91,655 is available through existing funding. This request, for the remaining $83,092 in ongoing annual costs, will keep the COGCC system current, and will result in avoidance of an expensive and disruptive information system replacement. The primary objective of the request is to enhance and protect the sizable investments that have been made in Information Management Systems for the COGCC by keeping the systems current with existing technology.

Cost Estimate of Computer System Maintenance			
Components	Life Cycle (yrs)	Total Cost	Annual Cost
Desktop Replacement	4	$90,000	$22,500
Desktop Software	4	$75,513	$18,878
Desktop Peripherals Replacement	4	$3,500	$875
Network Infrastructure	6	$46,727	$7,788
Servers	3	$41,964	$13,988
Network Peripherals	5	$103,869	$20,774
COGIS Infrastructure Software	4	$129,405	$32,351
Annual Maintenance	1	$57,594	$57,594
TOTAL		$548,571	$174,747
Current appropriation (deduct from total needed)			($91,655)
Request			**$83,092**

Currently, the Manager of the Information Section is responsible for work unit management, defining agency business processes, information system infrastructure, and application development and support. Due to the workload, none of the above described functions are performed at maximum efficiency. In order to protect the agency's investment in COGIS, the COGCC proposes to add an application development and support FTE. This would allow the existing Information Manager to focus on work unit management and improvement in business processes.

AVAILABLE ATERNATIVES

Description of Alternatives

Alternative 1: Increase funding for computer system maintenance by $83,092 and add 1.0 FTE IT Professional III at a cost of $60,711.

Cost Estimate: $143,803

Assumptions:

1. 1.0 FTE IT Professional III position would be filled for 12 months in FY 2006 and thereafter.
2. The new position would need desktop computer and software, office furniture, and on-going operating.
3. $83,092 additional funding is needed to fully fund computer system maintenance.

Calculations

1. 1.0 FTE IT Professional III @ $4,237/mo plus PERA @ 10.15% and Medicare @ 1.45% = $56,742
2. 1 desk top computer @ $1,157 plus software @ $291 = $1,448*
3. Office furniture @ $2,021*
4. Operating for 1 FTE @ $500/year

TOTAL	New FTE	$ 56,742
	Associated Operating	3,969
	Computer Maintenance	83,092
		$143,803

* These costs will be onetime costs incurred in FY 2005-06.

COGCC's Statutory Authority to Implement Alternative 1

CRS 39-29-109(1)(a)(II) (Senate Bill 96-170) One-half of the severance tax receipts credited to the Severance Tax Trust Fund ...shall be credited to the Operational Account of the Severance Tax Trust Fund and used to fund programs established within the Colorado Oil and Gas Conservation Commission, the Colorado Geological Survey, the Division of Minerals and Geology, and the Colorado Water Conservation Board that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water...

CRS 39-29-109(1)(c)(I) ...The General Assembly may appropriate moneys from the total moneys available in the Operational Account of the Severance Tax Trust Find to fund recommended programs as follows:

(A) For programs or projects within the Colorado Oil and Gas Conservation Commission, up to forty-five percent of the moneys in the operational account...

(It is important to note that the sum of all COGCC FY 05-06 funding requests from the Severance Tax operational account, including this request, is approximately 3.2 percent (3.2%) of the moneys forecast to be available in the operational account. 80.1% of available funds are uncommitted. Including requests from other DNR divisions, roughly 79.4% of available severance tax dollars remain uncommitted.)

CRS 34-60-102(1): Oil and Gas Conservation Act – declares it is to be in the public interest to foster, encourage, and promote the 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...

CRS 34-60-106(1)(b): The Commission has the authority to require...the making and filing with the commission of copies of well logs, directional surveys, and reports on well location, drilling, and production...

CRS 34-60-106(2)(d): The Commission has the authority to regulate...Oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, taking into consideration cost-effectiveness and technical feasibility.

Alternative 1 – Linkage to Specific Department Objectives:

Department of Natural Resources Strategic Objectives include:

1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.

2.6 Respond to a changing business environment and improve organizational efficiency, decision-making and data availability by modifying a current system or introducing at least one major technology initiative each year that meets business objectives and is consistent with industry standards.

Alternative 2: No Action.

ANALYTICAL TECHNIQUE – BENEFIT-COST ANALYSIS

ASSESSMENT OF ALTERNATIVES

Description of Background Information

The COGCC underwent an expensive and disruptive overhaul of its Information Systems technology in FY 1997-98 to replace an obsolete system. The new COGGC data system, COGIS, was deployed in 1999 with Internet query capability for the following data sets: Well Information, Electric Logs, Oil and Gas Production, Hearing Orders, Maps, and all of the paper data files were converted to digital image files. This system is used by the COGCC staff, the Public, and oil and gas operators.

Approximately $0.929 Million was invested in hardware and software to replace the antiquated database system with a modern Internet/intranet deployed data system. An additional $1.274 Million was invested in document imaging and geographic information system (GIS) hardware and software. The total estimated investment in COGIS is $2.203 million.

Now that full system deployment for COGIS has been completed, some unforeseen costs to maintain and update the system have been identified. COGCC has continued to increase its Internet presence and is providing service to a growing user base. Increased customer demand for Internet services requires COGCC to continue to improve its custom applications and upgrade existing hardware and software applications (see chart below). Software changes and the growing user base require COGCC to upgrade network servers to provide better service. Evolving Department and Statewide standards and manufacturer support for older software require additional funds for software and desktop upgrades.

	1999	2000	2001	2002	2003	2004
Average Monthly Internet Visitors	1,270	3,845	8,735	14,640	21,830	31,820
Average Monthly Public Room Visitors	135	105	77	60	51	44
Average Monthly Office Visitors	237	154	109	72	63	50

Linking Budgetary Expenditures to Beneficial Outcomes

The primary beneficial outcomes of Alternative 1 are:

Customer	Beneficial Outcome to Customer
Oil and Gas Industry Local Governments The Public COGCC Staff	• Continued high level of customer service in terms of efficient access to oil and gas data through well maintained, updated Information Management Systems. • Efficient customer service (well and facility permitting, etc.) by COGCC staff made possible through a continually updated

	Information Management System.

Application of Analytical Technique/Assumptions and Calculations

Alternative 1 – Computer System Infrastructure
10-Year Present Value of Benefits and Costs 2006$

Year	Present Value Costs	Present Value Benefits	Net Present Value
1	$ 143,803	$0	($143,803)
2	$140,334	$0	($140,334)
3	$140,334	$0	($140,334)
4	$140,334	$0	($140,334)
5	$140,334	$0	($140,334)
6	$140,334	$0	($140,334)
7	$140,334	$0	($140,334)
8	$140,334	$0	($140,334)
9	$140,334	$0	($140,334)
10	$140,334	$2,203,000	$2,062,666
Total	**$1,406,809**	**$2,203,000**	**$796,191**

Assumptions and Calculations:

- Assumes a 3% inflation and discount rate.
- Benefit in 10th year = avoided cost of complete future computer system overhaul – present value = $796,191
- Determined by actual cost of the most recent COGCC computer system overhaul between 1997-1998

Alternative 2 – No Action

10-Year Present Value of Benefits and Costs 2006$

Year	Present Value Costs	Present Value Benefits	Net Present Value
1	$0	$0	$0
2	$0	$0	$0
3	$0	$0	$0
4	$0	$0	$0
5	$0	$0	$0
6	$0	$0	$0
7	$0	$0	$0
8	$0	$0	$0
9	$0	$0	$0
10	$2,203,000	$0	($2,203,000)
Total	**$2,203,000**	**$0**	**($2,203,000)**

Benefit-Cost Comparisons

Alternative	Total Benefits	Total Cost	Benefit/Cost	Net Benefits
Alternative 1	$2,203,000	$1,406,809	1.57	$796,191
Alternative 2	$0	$2,023,000	0.00	($2,203,000)

Description of Key Issues for Decision Making

The key issues for decision making are as follows:

- Increased customer demand for Internet services requires COGCC to continue to improve its applications and upgrade existing hardware and software applications.

- Evolving Department and Statewide standards and manufacturer support for older software require additional funds for software and hardware upgrades.
- The need to protect the substantial monetary investment that has been made in COGIS by keeping the system current with existing technology.

Conclusion/Recommendation: Alternative 1 has a higher present value than the other alternative. The COGCC recommends that funding for Alternative 1 be approved.

Schedule 6

DECISION ITME REQUEST for FY 2005-06

Department: Natural Resources
Priority Number: 13 of 28
Division: Parks and Outdoor Recreation
Program: Park Management and Maintenance
Request Title: Utilities Appropriation for Established and New State Parks

Dept. Approval: Will S Daley **Date:** 10/25/04
OSPB Approval: Andy L Day **Date:** 10/28/04
Statutory Citation: CRS 33-10-101 to 33-15-112

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total		26,811,737			26,811,737	114,984	26,926,721		26,926,721	114,984
	FTE		250.6			250.6		250.6		250.6	
	GF		2,831,763			2,831,763		2,831,763		2,831,763	
	CF		18,150,983			18,150,983	114,984	18,265,967		18,265,967	114,984
	CFE		4,940,060			4,940,060		4,940,060		4,940,060	
	FF		888,931			888,931		888,931		888,931	
(A) Total Established State	Total		20,375,525			20,375,525	111,334	20,486,859		20,486,859	111,334
Parks Program Line	FTE		226.1			226.1		226.1		226.1	
(Total consolidation of establishe	GF		2,667,589			2,667,589		2,667,589		2,667,589	
state parks line items)	CF		15,527,976			15,527,976	111,334	15,639,310		15,642,946	111,334
	CFE		1,760,060			1,760,060		1,760,060		1,760,060	
	FF		419,900			419,900		419,900		419,900	
Program Costs	Total		16,336,724			16,336,724	111,334	16,448,058		16,448,058	111,334
	FTE		226.1			226.1		226.1		226.1	
	GF										
	CF										
	CFE										
	FF										
Seasonal Work Program	Total		4,018,931			4,018,931		4,018,931		4,018,931	

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Impact Assistance Grants	Total		19,870			19,870		19,870		19,870	
	FTE										
	GF										
	CF										
	CFE										
	FF										
(B) Total New State Parks Program Line	Total		1,031,971			1,031,971	3,650	1,035,621		1,035,621	3,650
(Total consolidation of new state parks line items)	FTE		12.5			12.5		12.5		12.5	
	GF		164,174			164,174		164,174		164,174	
	CF		492,797			492,797	3,650	496,447		496,447	3,650
	CFE		375,000			375,000		375,000		375,000	
	FF										
Program Costs	Total		826,171			826,171	3,650	829,821		829,821	3,650
	FTE		12.5			12.5		12.5		12.5	
	GF										
	CF										
	CFE										
	FF										
Seasonal Work Program	Total		205,800			205,800		205,800		205,800	
	FTE										
	GF										
	CF										
	CFE										
	FF										

Letter Notation:

Cash Fund name/Number, Federal Fund Name: Parks Cash Fund 172

IT Request ☐ Yes ☒ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)____________________)

Efficiency and Effectiveness Analysis

Identifying Information

Department:	Natural Resources – Division of Parks and Outdoor Recreation
Request Title:	Utilities Appropriation for Established and New State Parks
Priority number:	13 of 28
Summary of Requested Alternative:	This request is to fund costs of utility upgrades implemented at Colorado State Parks
Performance Measures:	Expand recreational opportunities to park visitors through improved amenities

Problem or Opportunity Definition

Colorado State Parks' has continued to see increases in electricity and other utility costs during the past two years. As our visitor base grows, costs will rise, not only due to price increases but increased demand for services. To respond to this demand, as well as, to enhance the Division's self-sufficiency, Colorado State Parks is in the process of adding/upgrading campgrounds with electrical units, which depend on utilities. While facilities will generate additional revenue, there are some operating costs incurred.

Surveys and polls indicate strong public preferences to preserve open space and invest in expanded recreational and park facilities. In this regard, Colorado State Parks providing of outdoor recreation with amenities is consistent with public expectations. In particular, seniors and young families, the fastest growing segments of the population, expect that State Parks will provide updated amenities such as showers, modern campgrounds, well designed trail systems, frequent safety patrols and environmental education. It is our responsibility to ensure facilities are adequately maintained, supported, and accessible to the public, who has paid for their development and use.

Utilities are generally a fixed cost and cannot be reduced without restricting visitor access to facilities. No budget adjustments were made in FY03-04 to cover utilities rate increases, experienced throughout the state. The utilities expenses associated with new facilities, on top of unfunded rate increases, are significant and cannot be absorbed within current spending authority.

Available Alternatives

Alternative #1- Increase Utility Appropriation for expanding State Park services

- Statutory authority for this alternative: CRS 33-10-101 to 33-15-112
- Specific Department objectives promoted by this alternative:
  - 1.1 Provide leadership in responding to population growth and increasing demands by providing services, information, and assistance to accommodate economic activity in conjunction with sound stewardship.
  - 1.6 Provide and promote a variety of outdoor recreational opportunities for citizens and visitors.
  - 2.4 Improve customer service to the people of Colorado and visitors by having a full array of services available to them.
- Create a positive revenue stream that fully supports the operation and staffing costs of this initiative, while helping State Parks achieve its goal to become more self-sufficient.

Alternative # 2 – Not approve the Utilities increase

- Specific department objectives promoted by this alternative: None of the objectives listed under alternative #1 would be advanced or promoted by this alternative.
- Citizens will not be provided the opportunity to use facilities constructed with significant amounts of public funding.
- A positive income stream that supports this initiative would be lost.

Linking Budgetary Expenditures to the Full Range of Outcomes

Stakeholders	**Beneficial Outcomes of Alternative #1**
Citizens	• A positive income stream that supports the park system • Personal and social benefits derived by citizens who use parks to enhance their lifestyle and health through outdoor recreation
Future Park Visitors	• Preserve the facilities and natural resources for future generations •

General types of potential benefits.
The visitors to the park will benefit in having a full array of services available to them. The local residents benefit through enhanced tourism and recreational opportunities and citizens' benefit statewide by this investment.

Potential reductions in budgetary costs.
This initiative requires no additional General Fund support and has the potential to generate a net positive cash flow.

Timely maintenance and care of facilities should avert major repairs in the future and will increase the life cycle.

Selected Analytical Technique

Benefit-Cost Analysis
The Division is already absorbing significant costs in operating line times. There is very little flexibility in the Division's operating budget to absorb additional costs as they are already attempting to absorb continued increases associated with utilities, sewer and water, and electricity.

Revenue generated by the increase/addition of electric utilities would offset the increased operating costs and help generate additional cash to support the park system.

Benefit-Cost Analysis FY 05-06 Utilities Request Colorado State Parks			
Description	**Revenue Projected Increase**	**Utilities Expense Increase**	**Net Increase (in base cash) Revenue**
New Electric Camp Sites			
Chatfield	120,107	30,756	89,351
Cherry Creek	49,190	10,060	39,130
Projected New Electric Camp Sites	169,297	40,816	128,481
Upgraded Camping - Add Electric			
Boyd Lake	8,924	6,919	2,005
Chatfield	31,800	19,328	12,472
Cherry Creek	57,832	19,171	38,661

Jackson Lake	11,982	3,017	8,965
John Martin	4,852	3,650	1,202
Lathrop	25,286	11,391	13,895
St. Vrain	10,140	9,963	177
State Forest	2,761	729	2,032
Projected Upgraded Electric Sites	153,577	74,168	79,409
Total Projected Change to Utilities	**322,874**	**114,984**	**207,890**

Assessment of Alternatives

Alternatives	Benefits and Objectives		
	Protect our natural resources and maintain our investment in facilities	Provide citizens with services and promote recreation opportunities	Develop positive revenue stream to improve State Parks' vision of self-reliance
Alternative #1 – Fund request	Yes	Yes	Yes
Alternative #2 – Do not fund request.	No	No	No

Key Issues for Decision Making:

General Fund cuts and revenue shortfalls have driven initiatives to create additional streams of revenue.
Utilities are generally a fixed cost and cannot be reduced without restricting visitor access to facilities. The utilities expenses associated with new/expanded facilities accompanied by unfunded rate increases are significant and cannot be absorbed within current spending authority. Our current appropriation will be inadequate to fully meet current visitor demand.

Assumptions and Calculations

Estimated Annual Revenue Summary

Camping (includes increases from new electric camp sites, upgraded camp sites)	$322,874
Total Estimated Revenue	$322,874

Estimated Annual Utilities Costs Summary

Camping (includes increases from new electric camp sites, upgraded camp sites)	$114,984
*Total Estimated Costs	$114,984

*Excludes Cheyenne Mountain State Park as submitted under separate FY05-06 Decision Item Request.

Assumptions:

Park Name: Boyd Lake

Upgraded Camping- Add Electric

May through September - Camping			**Occ**	**Occ**	**Incremental Fee**			
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**			
full hook-up								
week end	42	64	35.0%	941		$4.00	$3,763	No Aspen discounts
weekday	112	64	18.0%	1,161		$4.00	$4,645	Assume 10% Aspen discount
Aspen weekday	112	64	18.0%	129		$4.00	$ 516	

October through April- Camping			**Occ**	**Occ**	**Fee**			
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**			
full hook-up								
week end	63	64	0.0%	0		$4.00	$ -	These sites are closed in the off season
weekday	148	64	0.0%	0		$4.00	$ -	Assume 10% Aspen discount
Aspen weekday	148	64	0.0%	0		$4.00	$ -	

$8,924

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name: Boyd Lake
Increased Utility Costs
Upgraded Camping- Add Electric

May through September - Camping Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost Per site**	**Total Cost**	
full hook-up							
week end	42	64	35.0%	941	$3.01	$ 2,832	No Aspen discounts
weekday	112	64	18.0%	1,161	$3.01	$ 3,495	
Aspen weekday	112	64	18.0%	129	$3.01	$ 388	

October through April- Camping Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
full hook-up							
week end	63	64	0.5%	20	$3.01	$ 61	These sites are closed in the off season
weekday	148	64	0.5%	43	$3.01	$ 128	
Aspen weekday	148	64	0.5%	5	$3.01	$ 14	
						$ 6,919	

Assumptions:
Utility cost per site is based upon meter readings averaging $300/mo/loop.
Three loops = $900/mo. Divide by # of nights=299 nights = $3.01 cost/night.
Sites are closed in the off season; however minimum usage rate will be charged by utilities.

Park Name: Chatfield

New Electric Camp Sites

May through September - Camping							
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Fee Increase**	**Total Cost**	
full hook-up							
week end	42	81	75.0%	2,552	$ 20.00	$51,030	No Aspen discounts
weekday	112	81	35.0%	2,858	$ 20.00	$57,154	Assume 10% Aspen discount
Aspen weekday	112	81	25.0%	227	$ 10.00	$ 2,268	

October through April- Camping							
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Fee Increase**		
full hook-up							
week end	63	81	3.0%	153	$ 20.00	$ 3,062	No Aspen discounts
weekday	148	81	3.0%	324	$ 20.00	$ 6,474	Assume 10% Aspen discount
Aspen weekday	148	81	1.0%	12	$ 10.00	$ 120	
						$120,107	

Upgraded Camping- Add Electric

May through September - Camping							
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Incremental Fee Increase**		
full hook-up							
week end	42	120	25.0%	1,260	$ 8.00	$ 10,080	No Aspen discounts
weekday	112	120	15.0%	1,814	$ 8.00	$ 14,515	Assume 10% Aspen discount
Aspen weekday	112	120	5.0%	67	$ 6.00	$ 403	

Park Name: Chatfield

October through April- Camping			**Occ**	**Occ**	**Fee**			
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**			
full hook-up								
week end	63	120	3.0%	227	$	8.00	$ 1,814	No Aspen discounts
weekday	148	120	3.0%	480	$	8.00	$ 3,836	Assume 10% Aspen discount
Aspen weekday	148	120	1.0%	18	$	6.00	$ 107	
							$30,756	

Assumptions:
Expanding/upgrading 120 sites with full hookups plus adding 81 sites with electrical service
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Increased Utilities Cost

New Electric Camp Sites

May through September - Camping			**Occ**	**Occ**	**Utility**			
Camping	**# days**	**# sites**	**rate**	**nights**	**Cost per**			
full hook-up					**site**			
week end	42	81	75.0%	2,552	$	5.00	$12,758	No Aspen discounts
weekday	112	81	35.0%	2,858	$	5.00	$14,288	Assume 10% Aspen discount
Aspen weekday	112	81	25.0%	227	$	5.00	$ 1,134	

					Utility			
October through April- Camping			**Occ**	**Occ**	**Cost per**			
Camping	**# days**	**# sites**	**rate**	**nights**	**site**			
full hook-up								
week end	63	120	3.0%	227	$	5.00	$ 1,134	No Aspen discounts
weekday	148	120	3.0%	480	$	5.00	$ 2,398	Assume 10% Aspen discount
Aspen weekday	148	120	1.0%	18	$	5.00	$ 89	
							$ 31,800	

Park Name: Chatfield
Increased Utilities Cost

Upgraded Camping- Add Electric May through September - Camping Camping full hook-up	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
week end	42	120	25.0%	1,260	$ 5.00	$ 6,300	No Aspen discounts
weekday	112	120	15.0%	1,814	$ 5.00	$ 9,072	Assume 10% Aspen discount
Aspen weekday	112	120	5.0%	67	$ 5.00	$ 336	

October through April- Camping Camping full hook-up	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
week end	63	120	3.0%	227	$ 5.00	$ 1,134	No Aspen discounts
weekday	148	120	3.0%	480	$ 5.00	$ 2,398	Assume 10% Aspen discount
Aspen weekday	148	120	1.0%	18	$ 5.00	$ 89	
						$19,328	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name:Cherry Creek
New Electric Camp Sites

May through September - Camping			**Occ**	**Occ**			
Camping	**# days**	**# sites**	**rate**	**nights**	**fee**		
full hook-up							
week end	42	24	85.0%	857	$ 20.00	$17,136	No Aspen discounts
weekday	112	24	65.0%	1,572	$ 20.00	$31,450	Assume 10% Aspen discount
Aspen weekday	112	24	25.0%	67	$ 10.00	$ 605	
October through April- Camping			**Occ**	**Occ**			
Camping	**# days**	**# sites**	**rate**	**nights**	**fee**		
full hook-up							
week end	63	24	0.0%	0	$ 20.00	$ -	No Aspen discounts
weekday	148	24	0.0%	0	$ 20.00	$ -	Assume 10% Aspen discount
Aspen weekday	148	24	0.0%	0	$ 10.00	$ -	
						$49,190	

Park Name:Cherry Creek

Upgraded Camping- Add Electric

May through September - Camping			**Occ**	**Occ**	**Incremental Fee**		
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**		
full hook-up							
week end	42	100	27.0%	1,134	$ 4.00	$ 4,536	No Aspen discounts
weekday	112	100	10.0%	1,008	$ 4.00	$ 4,032	Assume 10% Aspen discount
Aspen weekday	112	100	3.0%	34	$ 2.00	$ 60	

October through April- Camping			**Occ**	**Occ**	**Fee**		
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**		
full hook-up							
week end	63	100	0.0%	0	$ 4.00	$ -	No Aspen discounts
weekday	148	100	0.0%	0	$ 4.00	$ -	Assume 10% Aspen discount
Aspen weekday	148	100	0.0%	0	$ 2.00	$ -	
						$57,832	

Assumptions:

Peak Season for Camping is May - September

Occupancy rate will vary by park -please indicate assumptions used to determine

Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf

50% of the sites will be reserved for average of three nights

Upgraded sites use incremental fee amount

New sites use current fee to calculate revenue increase

Park Name:Cherry Creek
Increased Utilities Cost
New Electric Camp Sites

May through September - Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Camping full hook-up							
week end	42	24	85.0%	857	$ 4.00	$ 3,427	No Aspen discounts
weekday	112	24	65.0%	1,572	$ 4.00	$ 6,290	Assume 10% Aspen discount
Aspen weekday	112	24	25.0%	67	$ 4.00	$ 242	

October through April- Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Camping full hook-up							
week end	63	24	0.5%	8	$ 4.00	$ 30	No Aspen discounts
weekday	148	24	0.5%	16	$ 4.00	$ 64	Assume 10% Aspen discount
Aspen weekday	148	24	0.5%	2	$ 4.00	$ 6	
						$10,060	

Park Name:Cherry Creek
Upgraded Camping- Add Electric

May through September - Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Camping full hook-up							
week end	42	100	27.0%	1,134	$ 4.00	$ 4,536	No Aspen discounts
weekday	112	100	10.0%	1,008	$ 4.00	$ 4,032	Assume 10% Aspen discount
Aspen weekday	112	100	3.0%	34	$ 4.00	$ 121	

October through April- Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Camping full hook-up							
week end	63	100	0.5%	32	$ 4.00	$ 126	No Aspen discounts
weekday	148	100	0.5%	67	$ 4.00	$ 266	Assume 10% Aspen discount
Aspen weekday	148	100	0.5%	7	$ 4.00	$ 30	
						$19,171	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
Sites are closed in the off season; however minimum usage rate will be charged by utilities.

Park Name: Jackson Lake

Upgraded Camping- Add Electric

May through September - Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Incremental Fee Increase**		
Camping full hook-up							
week end	42	109	27.0%	1,236	$ 4.00	$ 4,944	No Aspen discounts
weekday	112	109	10.0%	1,099	$ 4.00	$ 4,395	Assume 10% Aspen discount
Aspen weekday	112	109	2.0%	24	$ 2.00	$ 44	

October through April- Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Fee Increase**		
Camping full hook-up							
week end	63	109	3.0%	206	$ 4.00	$ 824	No Aspen discounts
weekday	148	109	3.0%	436	$ 4.00	$ 1,742	Assume 10% Aspen discount
Aspen weekday	148	109	1.0%	16	$ 2.00	$ 32	
						$11,982	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name: Jackson Lake
Increased Utilities Cost
Upgraded Camping- Add Electric

May through September - Camping							
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
full hook-up							
week end	42	109	27.0%	1,236	$ 1.00	$ 1,236	No Aspen discounts
weekday	112	109	10.0%	1,099	$ 1.00	$ 1,099	Assume 10% Aspen discount
Aspen weekday	112	109	2.0%	24	$ 1.00	$ 24	

October through April- Camping							
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
full hook-up							
week end	63	109	3.0%	206	$ 1.00	$ 206	No Aspen discounts
weekday	148	109	3.0%	436	$ 1.00	$ 436	Assume 10% Aspen discount
Aspen weekday	148	109	1.0%	16	$ 1.00	$ 16	
						$ 3,017	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount

Park Name: John Martin State Park
Upgraded Camping - Add Electric

May through September - Camping								
Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Incremental Increase**	**Fee**		
full hook-up								
week end	42	44	27.0%	499		$ 4.00	$ 1,996	No Aspen discounts
weekday	112	44	10.0%	444		$ 4.00	$ 1,774	Assume 10% Aspen discount
Aspen weekday	112	44	3.0%	15		$ 3.00	$ 44	

October through April- Camping								
Camping	**# days**	**# sites**	**Occ rate**	**Occ Nights**	**Fee Increase**			
full hook-up								
week end	63	44	3.0%	83		$ 4.00	$ 333	No Aspen discounts
weekday	148	44	3.0%	176		$ 4.00	$ 703	Assume 10% Aspen discount
Aspen weekday	148	44	0.1%	1		$ 3.00	$ 2	
							$4,852	

Park Name: John Martin State Park
Increased Utilities Costs
Upgraded Camping- Add Electric

May through September - Camping	# days	# sites	Occ rate	Occ nights	Utility Cost per site		
Camping							
full hook-up							
week end	42	44	27.0%	499	$ 3.00	$ 1,497	No Aspen discounts
weekday	112	44	10.0%	444	$ 3.00	$ 1,331	Assume 10% Aspen discount
Aspen weekday	112	44	3.0%	15	$ 3.00	$ 44	

October through April- Camping	# days	# sites	Occ rate	Occ nights	Utility Cost per site		
Camping							
full hook-up							
week end	63	44	3.0%	83	$ 3.00	$ 249	No Aspen discounts
weekday	148	44	3.0%	176	$ 3.00	$ 527	Assume 10% Aspen discount
Aspen weekday	148	44	0.1%	1	$ 3.00	$ 2	
						$ 3,650	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount

Park Name: Lathrop State Park

Upgraded Camping- Add Electric

May through September - Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Incremental Fee Increase**		
Camping							
full hook-up							
week end	42	80	70.0%	2,352	$ 4.00	$ 9,408	No Aspen discounts
weekday	112	80	32.0%	2,580	$ 4.00	$ 10,322	Assume 10% Aspen discount
Aspen weekday	112	80	32.0%	287	$ 2.00	$ 516	

October through April- Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Fee Increase**		
Camping							
full hook-up							
week end	63	80	25.0%	1,260	$ 4.00	$ 5,040	No Aspen discounts
weekday	148	80	0.0%	0	$ 4.00	$ -	Assume 10% Aspen discount
Aspen weekday	148	80	0.0%	0	$ 2.00	$ -	
						$ 25,286	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name: Lathrop State Park
Increase Utilities Costs
Upgraded Camping- Add Electric

May through September - Camping					**Utility**		
			Occ	**Occ**	**Cost per**		
Camping	**# days**	**# sites**	**rate**	**nights**	**site**		
full hook-up							
week end	42	80	70.0%	2,352	$ 1.75	$ 4,116	No Aspen discounts
weekday	112	80	32.0%	2,580	$ 1.75	$ 4,516	Assume 10% Aspen discount
Aspen weekday	112	80	32.0%	287	$ 1.75	$ 452	

October through April- Camping					**Utility**		
			Occ	**Occ**	**Cost per**		
Camping	**# days**	**# sites**	**rate**	**nights**	**site**		
full hook-up							
week end	63	80	25.0%	1,260	$ 1.75	$ 2,205	No Aspen discounts
weekday	148	80	0.5%	53	$ 1.75	$ 93	Assume 10% Aspen discount
Aspen weekday	148	80	0.5%	6	$ 1.75	$ 9	
						$ 11,391	

Park Name: St. Vrain State Park

Upgraded Camping- Add Electric

May through September - Camping			**Occ**	**Occ**	**Incremental Fee**		
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**		
Electric only							
week end	42	33	55.0%	762	$ 4.00	$ 3,049	No Aspen discounts
weekday	112	33	25.0%	832	$ 4.00	$ 3,326	Assume 10% Aspen discount
Aspen weekday	112	33	10.0%	37	$ 4.00	$ 148	

October through April- Camping			**Occ**	**Occ**	**Fee**		
Camping	**# days**	**# sites**	**rate**	**nights**	**Increase**		
Electric only							
week end	63	33	20.0%	416	$ 4.00	$ 1,663	No Aspen discounts
weekday	148	33	10.0%	440	$ 4.00	$ 1,758	Assume 10% Aspen discount
Aspen weekday	148	33	10.0%	49	$ 4.00	$ 195	
						$ 10,140	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name: St. Vrain State Park
Increased Utilities Cost
Upgraded Camping- Add Electric

May through September - Camping Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Electric only							
week end	42	33	55.0%	762	$ 5.00	$ 3,812	No Aspen discounts
weekday	112	33	25.0%	832	$ 5.00	$ 4,158	Assume 10% Aspen discount
Aspen weekday	112	33	10.0%	37	$ 5.00	$ 185	

October through April- Camping Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Utility Cost per site**		
Electric only							
week end	63	33	20.0%	416	$ 2.00	$ 832	No Aspen discounts
weekday	148	33	10.0%	440	$ 2.00	$ 879	Assume 10% Aspen discount
Aspen weekday	148	33	10.0%	49	$ 2.00	$ 98	
						$ 9,963	

Park Name: State Forest

Upgraded Camping- Add Electric

May through September - Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Incremental Fee Increase**		
Camping full hook-up week end	42	32	27.0%	363	$ 4.00	$ 1,452	No Aspen discounts
weekday	112	32	10.0%	323	$ 4.00	$ 1,290	Assume 10% Aspen discount
Aspen weekday	112	32	3.0%	11	$ 2.00	$ 19	

October through April- Camping	**# days**	**# sites**	**Occ rate**	**Occ nights**	**Fee Increase**		
Camping full hook-up week end	63	32	0.0%	0		$ -	No Aspen discounts
weekday	148	32	0.0%	0		$ -	Assume 10% Aspen discount
Aspen weekday	148	32	0.0%	0		$ -	
						$ 2,761	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase

Park Name: State Forest
Increased Utilities Cost
Upgraded Camping- Add Electric

May through September - Camping								
Camping full hook-up	# days	# sites	Occ rate	Occ nights	Utility Cost per site			
week end	42	32	27.0%	363	$ 1.00	$	363	No Aspen discounts
weekday	112	32	10.0%	323	$ 1.00	$	323	Assume 10% Aspen discount
Aspen weekday	112	32	3.0%	11	$ 1.00	$	10	

October through April- Camping								
Camping full hook-up	# days	# sites	Occ rate	Occ nights	Utility Cost per site			
week end	63	32	0.5%	10	$ 1.00	$	10	No Aspen discounts
weekday	148	32	0.5%	21	$ 1.00	$	21	Assume 10% Aspen discount
Aspen weekday	148	32	0.5%	2	$ 1.00	$	2	
						$	**729**	

Assumptions:
Peak Season for Camping is May - September
Occupancy rate will vary by park -please indicate assumptions used to determine
Aspen Leaf will receive 50% discount on camping during week - 10% of weekday camping will be Aspen Leaf
50% of the sites will be reserved for average of three nights
Upgraded sites use incremental fee amount
New sites use current fee to calculate revenue increase
Sites are closed in the off season; however minimum usage rate will be charged by utilities.

Schedule 6
CHANGE REQUEST for FY 2005-06

Department:	Natural Resources	**Dept. Approval:**	Will [signature] Daley **Date:** 10/25/04
Priority Number:	14 of 28	**OSPB Approval:**	[signature] **Date:** 10/25/04
Division:	Colo Water Conservation Bd	**Statutory Citation:**	CRS 37-60-106(1)(c), 31-23-301, 30-28-111, 37-60-106(1)(c), 24-65.1-403(3)
Program:	Flood Protection Program		
Request Title:	Floodplain Mapping Staff		

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	86,471	2,631,048		2,631,048	2,631,048	99,248			2,730,296	59,649
	FTE	30.0	30.0		30.0	30.0	1.00			31.0	1.00
	GF										
	CF										
	CFE						24,812				13,941
	FF	86,471	86,471		86,471	86,471	74,436			160,907	45,708
Personal Services	Total	2,603,269	2,544,577		2,544,577	2,544,577	13,941			2,558,518	13,941
	FTE	29.0	29.0		29.0	29.0	0.25			29.25	0.25
	GF										
	CF										
	CFE	2,603,269	2,544,577		2,544,577	2,544,577	13,941			2,558,518	13,941
	FF										
Operating	Total	0	0		0	0	10,871			10,871	0
	FTE										
	GF										
	CF										
	CFE						10,871				
	FF										
FEMA	Total	86,471	86,471		86,471	86,471	74,436			160,907	45,708
	FTE	1.0	1.0		1.0	1.0	0.75			1.75	0.75
	GF										
	CF										
	CFE										
	FF	86,471	86,471		86,471	86,471	74,436			160,907	45,708

Letter Notation:

Cash Fund name/Number, Federal Fund Name: Construction Fund (CFE) #424, Federal Emergency Management Assistance (FF)

IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)__________)

Efficiency and Effectiveness Analysis

Department: Natural Resources
Priority Number: 14 of 28
Division: Colorado Water Conservation Board (CWCB)
Request: Floodplain Mapping Staff

Summary of Requested Alternative:
The Colorado Water Conservation Board requests 1.0 FTE and associated spending authority of $99,248 for a State Floodplain Mapping Coordinator (Physical Science Researcher/Scientist II). Of the total amount, 25% or $24,812 would be funded from the Construction Fund (CFE). The remaining 75%, or $74,436, would be paid from federal funds. The Federal Emergency Management Agency's (FEMA) cost share is 75% federal funding with a 25% state match. The federal funds will come from FEMA's newly created Map Modernization Management Support (MMMS) program. The CWCB has submitted an application to FEMA and this request has already received verbal approval form the federal government with written approval pending.

The position will oversee the expenditure and management of increased federal funding to states for updating floodplain maps. The adoption of accurate maps is a condition for participation in the National Flood Insurance Program (NFIP). The NFIP is the only program that provides federally backed flood insurance policies to flood prone communities. The NFIP offers many benefits to Colorado communities and financial assistance to the CWCB. An estimated $3-$5 million in annual federal funding will be provided to the State, which will need to be "matched" by state and local entities with cash or in-kind activities. The CWCB will cooperate with Colorado communities to provide the required match. In addition, FEMA is assisting states and their communities to develop digital and electronic mapping programs that are web-based, user-friendly, and more easily distributed and updated.

Problem or Opportunity Definition:
Water Planning Relationship: State statutes require the CWCB to assist in the prevention of flood damages and to designate 100-year floodplain areas in Colorado. Many floodplain maps are outdated and in need of revision or replacement due to physical changes in the basin, along the stream, or other reasons.

The CWCB has identified at least 113 communities in Colorado that need updated floodplain maps. FEMA released information that states will begin receiving federal funding, which can be used to fund a "State Floodplain Mapping

Coordinator" position. The CWCB believes that there is an opportunity to have significant oversight in the management, technical guidance, development of electronic and digital mapping standards and completion of updated floodplain maps and studies for communities throughout Colorado. This will be through a financial investment by the State that is only 25% of the cost of this position. This position will help utilize more of the federal funding on behalf of local governments, ensure that larger quantity and higher quality studies are completed through improved local/state/federal coordination efforts.

The following statutory authorities direct the CWCB Flood Protection Section and help formulate its goals and program elements.

- Section 37-60-106(1)(c), CRS requires the CWCB to assist in the prevention of floods and flood damages.
- Sections 31-23-301 and 30-28-111, CRS provides that legislative bodies of local jurisdictions may provide zoning regulations for land uses on or along any storm or floodwater runoff channel or basin only after designation and approval by the CWCB.
- Section 37-60-106(1)(c), CRS directs the CWCB to designate and approve storm or floodwater runoff channels or basins and to make such designations available to legislative bodies of local jurisdictions.
- Section 24-65.1-403(3), CRS directs the CWCB to coordinate all floodplain studies activities in the State that are conducted by federal, local or state agencies.
- An August 1, 1977 Executive Order requires the CWCB to provide assistance to entities in meeting the requirements of the National Flood Insurance Program.

Available Alternatives:

1. No budgetary change (a) – minimal state involvement in floodplain mapping initiative
2. No budgetary change (b) – place mapping coordinator responsibilities on current FTEs and eliminate other responsibilities of those FTEs which is not acceptable due to a number of new and existing statutory workload responsibilities (new responsibilities include Recreation In-Channel Diversions, Weather Modification Permitting and studies, Stream Restoration project granting and project management, AND FEMA Cooperating Technical Partner roles).
3. Fund 25% of the new FTE – significant state involvement and management in federal, state, and local floodplain mapping with increased federal funding to Colorado for much needed floodplain maps and related studies.

Analytical Technique:
The analytical techniques used for this decision item are the multi-criteria and benefit-cost analyses. It is assured that one person completely dedicated to the FEMA floodplain mapping initiative will ensure the success of Colorado's efforts.

Assessment of Alternatives:

1. **No budgetary change (a) – minimal state involvement in floodplain mapping**

   a. Description:
   As the state agency with the statutory responsibility for floodplain management, the CWCB has an obligation to work with communities outside the Denver Metro Area to provide technical assistance and funding for floodplain mapping needs. (*Within the Denver Metro Area, the Urban Drainage & Flood Control District handles these responsibilities but coordinates with the CWCB through the FEMA - Cooperating Technical Partners Program.*) Floodplain maps serve as the basis for floodplain management, provide guidance for wise land use decisions, and assist with emergency operations and planning for flood events and eligibility to participate in the NFIP.

   b. Department's authority to implement the alternative:
   - Sections 37-60-106(1)(c), 31-23-301, 30-28-111, Section 37-60-106(1)(c), and C.R.S. Section 24-65.1-403(3)
   - August 1, 1977 Executive Order requires the CWCB to provide assistance to entities in meeting the requirements of the National Flood Insurance Program.

   c. Anticipated Outcome:
   The CWCB has minimal map funding to assist communities with floodplain studies and development of maps and only has in-house capability through staff time and the use of consultants to complete 2-3 floodplain studies per year. Without budgetary change, the state's communities will continue to have a minimum level of funding and technical assistance. The age and relevance of the floodplain maps will continue to be more unrepresentative of actual conditions, and the loss of life and cost of damages from flood losses will continue to grow. Changes to maps carried out by FEMA will have a very low level of local and state acceptance without a leading role by the CWCB.

2. **No Budgetary change (b) – place mapping coordinator responsibilities on current FTEs**

   a. Description:
   The State has a statutory responsibility to designate 100-year floodplain information. The Board reviews and approves all floodplain delineation contained in floodplain information reports. The Board action allows all Colorado

communities to adopt legally enforceable floodplain information for regulatory purposes. The Board's Flood Protection Section provides technical and engineering assistance for flood mitigation planning activities, multi-objective projects, weather modification permitting and scientific studies and watershed and stream restoration initiatives. The Board's technical actions assures that reasonably uniform standards are applied to 1) hydrologic and hydraulic study investigations, 2) identification and designation of all floodplains, and 3) the design and construction of flood control projects.

b. The Department's authority to implement the alternative:

- Sections 37-60-106(1)(c), 31-23-301, 30-28-111, and 37-60-106(1)(c), C.R.S.
- August 1, 1977 Executive Order requires the CWCB to provide assistance to entities in meeting the requirements of the National Flood Insurance Program. Currently, the Flood Protection Program has a backlog of nine county wide digital flood insurance studies that need a technical review and program implementation activities.

c. Anticipated Outcome:

It would not be feasible to place the responsibilities of a mapping coordinator on current FTE. The Flood Protection Section has 5.0 FTE and is currently engaged in 65 flood related projects, 9 watershed/stream restoration studies, sixteen weather modification projects/permits, two scientific studies of statewide concern and impact, and four Recreational In Channel Diversion (RICD) projects. At least 38% (or 25) of these projects (or 1.0 FTE per year) would need to be tabled in order to manage a project of the magnitude of the FEMA Map Modernization Initiative. The Flood Protection Section also has many other customer service/project duties, aside from floodplain mapping, which would have to be reevaluated.

3. **Fund 25% of the new FTE – significant state involvement in floodplain map modernization initiative**

a. Description:

The FEMA Map Modernization Initiative (MMIP) has allowed for 75% federal funding with a 25% state match to fund a position to manage studies to meet FEMA and state programmatic goals. It is anticipated that \$3-\$5 million will be allocated to Colorado in the Federal Fiscal Year 04-05 budget. Funds will be available to complete a significant number of floodplain map updates and create maps for communities. The Colorado Flood Map Modernization Business Case Plan dated March 2004 outlines \$58,500,000 in funding needs to complete all the floodplain mapping requests from local communities. The MMIP has received a Congressional five-year authorization with an annual funding approval.

The following are the goals of the creation of the position of State Floodplain Mapping Coordinator:

1. Reduce the average age of Colorado's Flood Insurance Rate Maps (FIRMs) from 14 years to 6 years.
2. Develop FIRMs for half of the unmapped flood prone communities in Colorado.
3. Convert at least 15% of the FIRMs to digital format for the highest priority flood prone areas in Colorado.
4. Ensure compliance with CWCB technical standards for floodplain delineations
5. Ensure that studies within the Denver Urban Drainage & Flood Control District (UD&FCD) meet UD&FCD technical standards
6. Provide for meaningful local/state participation in the planning for and implementation of floodplain studies throughout Colorado
7. Ensure that floodplain studies are completed according to schedule and within budget
8. Ensure that unique hydrologic and hydraulic conditions experienced in Colorado are properly considered as part of all floodplain studies
9. Maintain current performance levels by Flood Protection Section staff for other section responsibilities
10. Provide digital floodplain maps to the many end users and customers that require such information

b. The Department's authority to implement the alternative:
Section 37-60-106(1)(c), C.R.S.

c. Anticipated outcome:
State contributed funding at 25% for the new FTE would greatly enhance the State's ability to effectively lead and manage mapping of floodplains in Colorado and to achieve FEMA mapping initiative program goals. It is no coincidence that 84 communities participated in the CWCB's floodplain mapping workshops in 2002. Many communities' maps are outdated, do not reflect community growth and are largely ineffective for floodplain management. The items listed below, under the heading "link to Specific Department Objectives," explain the goals of FEMA and the State, which could be accomplished by funding this position. Previous experience with FEMA has shown that proactive and efficient work for FEMA enables the CWCB to get additional funding from other Region 8 states that were not able to meet FEMA goals. In short, funding this position will allow us to more fully utilize Colorado's entitlement to FEMA mapping funds and then access other neighboring state funds that were turned back into FEMA Region VIII.

Having a new FTE dedicated to this initiative will support many facets of managing this initiative such as: contracting, developing scopes of work, coordination with local governments, quality control and project management, public meeting and local/state floodplain information adoption processes. The new FTE would likely increase the CWCB's capacity to participate in 4-6 new countywide floodplain studies per year and will increase the likelihood of additional FEMA grant dollars. This will, in turn, allow the State and local governments to produce quality products at a faster pace and access more of the FEMA mapping initiative federal funds. This new FTE will also ensure that reports meet state standards and will assist in the state level adoption process known as "Colorado's floodplain designation and approval process". The CWCB Floodplain Informational System includes 620 floodplain information reports, of which many need to be converted to digital format. The new floodplain mapping funds will assist with the conversion of these existing reports. Of the FEMA Region VIII western states, Colorado has experienced unprecedented population explosion and community growth along streams and flood prone areas. Colorado is the third fastest growing state in the nation, which has brought about significant new development and infrastructure to handle the increasing population and community needs. Increasing the State's capability to produce new and more accurate floodplain maps will be the cornerstone of good local/state floodplain management and produce many benefits for Coloradoans.

This alternative allows the CWCB to meet DNR objectives 1.1 and 1.7.

Link to Specific Department Objectives:
The proposed budget expenditures of alternative 3 allow the Flood Protection Section to further its goals and also effectively meet the goal of the FEMA Map Modernization Plan. The Flood Protection Program is directed to prevent flood damages, review and approve floodplain designations prior to adoption by local government entities, and provide local jurisdictions with technical assistance and floodplain information. Approval of alternative 3 would assist the Flood Protection Section in achieving their goals and objectives. The following list contains the floodplain management program objectives and goals:

- Hazard Identification: Enables the State to identify and map communities that have no flood hazard mapping
- Floodplain Designations & Regulations: Establishes the linkage between updating the maps and creating flood reports for the adoption by Board action
- Community/Basin Planning: Enables the State to provide technical assistance for flood mitigation planning activities based on hazard identification.
- Project Implementation: Enables the Board to identify and provide technical assistance for the design and funding of flood mitigation and prevention projects as well as pursue non-structural measures for the reduction of flood risks to life and property.

- Flood Preparedness: Enables the Board to assist communities in flood preparedness activities. Accurate floodplain maps enable county emergency managers to adequately assess problem areas and evacuation procedures.
- Engineering/Technical Assistance: Ensures that new floodplain studies and maps will be consistent with state technical standards regarding hydrologic and hydraulic analyses for Colorado streams and watersheds.
- Federal-State Program Coordination: Directly accomplishes the CWCB Flood Protection Sections mission of coordinating with federal government and making federal resources easily attainable for local governments.

Application of the Analytical Technique/Assumptions and Calculations:

Multi-Criteria Analysis

Flood Protection Section / FEMAs Map Modernization Plan goals									
Program Alternative	**Reduce floodplain maps age (1)**	**Map ½ of unmapped flood prone areas (2)**	**Convert 15% of flood maps to digital flood maps (3)**	**Compliance with CWCB floodplain study standards (4)**	**Compliance With UDFCD floodplain study standards (5)**	**Meaningful State involvement and coordinatio n (6)**	**Ensure studies are on schedule and within budget (7)**	**Ensure best hydrology and hydraulic conditions are considered (8)**	**Ensures Program maintains levels in other responsibilities (9)**
Alternative 1 **No budgetary change – minimal state involvement in floodplain mapping**					♦				♦
Alternative 2 **No Budgetary change – mapping coordinator responsibilities on current FTE's**				♦♦	♦	♦		♦	
Alternative 3 **Fund 25% of the new FTE – significant state involvement in floodplain mapping**	♦♦	♦♦	♦♦	♦♦	♦♦	♦♦	♦♦	♦♦	♦♦

Key: Does not meet goal; ♦ Minimally meets or may meet goal; ♦♦ Meets or exceeds goals

Benefit-Cost Analysis

Alternative	Cost to implement	Amount of Federal Funds the State would utilize annually	Allows the State to update old maps & prevent flood threat and damage by 50%	Allows the State to avoid lawsuits for bad data	Risk for Loss in NFIP (Nat'l Flood Ins. Program)	Updating designated Floodplains interval
1: No budgetary change – minimal state involvement in floodplain mapping	$0.00	$0.00	No	No	High	35-yr interval
2: No Budgetary change – mapping coordinator responsibilities on current	$0.00	$600,000	A portion	Crises Only	Moderate	15-yr interval
3: Fund 25% of the new FTE – significant state involvement in floodplain mapping	$99,248 (25% CF/CFE) (75% FF)	$2.5 million	Yes (see item "A" below for ratio benefit info of 8:1)	Yes, Programmatic Process	No-risk (fully-operational program)	less than 5-yr interval

Item "A": The following numbers are compiled on the basis of the State's experiences from the 100-year frequencies for floods over five different areas. The average flood event causes $8.2 million in damage. However, the State experiences an average annual flood loss of $49.0 million. Approving alternative #3 would allow the State to update floodplain maps (at an average of four to five counties per year – 5%), prevent the flood threats, and reduce flood damages by 50%. Using the previously mentioned facts, the State shall receive a benefit of 5% x $8.2 million x 50% damage prevention = $205,000 benefit. With an annual State cost of $25,000, which yields a cost-benefit ratio of 8:1 to the State.

The benefit-cost analysis above shows that with approval of alternative #3, funding the new FTE, the State would be able to utilize $2.5 million per year to update and modernize floodplain maps. This would, in turn, prevent lawsuits against the State for having bad data, allow 243 communities to maintain their insurance eligibility, and provides for a less than 5-year interval that the State updates floodplain maps.

Budgetary costs Assumptions and Calculations:
Due to the nature and complexity of hydrology and hydraulics in floodplain studies, it is anticipated that a minimum of a degree in a water resources profession or related field is required and that a Physical Science Researcher/Scientist II (PSRS II) has been identified as the classification to hire the individual with the specific technical skills to be the State Floodplain Mapping Coordinator.

The Mapping Coordinator will ensure the preparation of adequate topographic information, hydrologic information, hydraulic information, and a GIS presentation that meets local, state and federal needs. The Mapping Coordinator will have a lead project management role and will, therefore, be meeting with local officials and consultants throughout Colorado. In order to support those functions of the position, it is proposed that additional computer software and hardware be made available, that GIS training be provided, and that additional equipment be purchased. In addition to one-time expenses, it is proposed that there be annual expenses for travel and for the use of a vehicle from the State Motor Pool or a private rental agency for travel to meetings.

PERSONAL SERVICES:

Physical Scientist Researcher II	$49,968
PERA @ 10.15%	5,072
Medicare	724
Total	**$55,764**

OPERATING:

I. Annual ArcView licensing fee:		$ 1,000
II. Estimated travel costs:		
• 20 overnight trips – lodging @ $75/night		$ 1,500
• 20 overnight trips – per diem @ $34/day x 2 days		$ 1,360
	SUBTOTAL	$ 2,860
III. Vehicle rental (State Motor Pool or State vendor)		
• 20 trips x 2 days per trip @ $58 per day		$ 2,320
Total		**$ 6,180**

Operating and Capital Outlay Costs (one-time):

I. Computer software and hardware:

• ArcIMS Software to allow web access to GIS information	$ 9,000
• An ArcView license for creation and accessing of GIS layers	$ 6,500
• A server for ArcIMS web distribution of GIS information	$ 7,000
• A computer for all work functions, including GIS	$ 1,715
• Additional Hardware to run GIS	$ 1,400
• Laptop computer, printer, software	$ 3,368
TOTAL	$29,983

II. GIS training @ $1,000 per class x two classes (one-time cost): $ 2,000

III. Equipment (one-time cost):

• GPS survey equipment	$ 3,500
• Digital camera	$ 800
TOTAL	$ 4,300

IV. Office Furniture $ 2,021

GRAND TOTAL **$99,248**

Key issues for decision-making:
The federal funds now being appropriated for floodplain mapping represent a 10-fold increase compared to previous years' floodplain mapping budgets. The CWCB has never had an annually funded program for floodplain studies to address statewide floodplain mapping requests, although funds were provided in recent years from grants from the Severance Tax Operational Account and the Construction Fund. Having FEMA provide funding for 75% of the cost of map and study updates and a State Floodplain Mapping Coordinator will increase the ability of the smaller communities in Colorado either to identify flood hazards through new maps or update maps to meet current conditions. Colorado has seen significant growth over the last 20 years and the conditions of communities along streams have changed drastically. The new federal commitment to updating maps provides a great opportunity for Colorado to update maps that are, in many cases, as much as 20 years old.

Omissions, Biases, or Uncertainties:
A number of components to prepare floodplain mapping are experiencing an ongoing rapid rate of change. These include computer hardware, surveying and cartographic equipment; topographic mapping, hydrologic, hydraulic, and GIS software; and technology for topographic mapping, hydrologic analysis, hydraulic analysis, and GIS. The pace of change creates a stronger need for management of floodplain mapping activities in Colorado. The program is being designed to incorporate as much technical and methodological flexibility as possible to accommodate future needs and changes.

There is a significant degree of variability in local GIS capabilities among the 332 counties, cities, and towns in Colorado. Flexibility is the key when accommodating future changes in mapping technology and methodologies, but a high level of uniformity must also be present in all mapping projects. The program is being designed to accommodate the full range of local GIS capabilities, from no capability to a very advanced capability.

Recommendation:
Fund the State's 25% share of the requested FTE, including the operational expenses and the one-time capital outlay, as described in Alternative 3.

Schedule 6
Decision Item Request for FY 2005-06

Department: Natural Resources
Priority Number: 15 of 22
Division: Water Resources
Program: Water Administration
Request Title: Water Administration Service Personnel

Dept. Approval: William Daley Date: 10/25/04
OSPB Approval: [illegible] Date: 10/26/04
Statutory Citation: 37-80-102; 37-92-502; 37-92-501

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	16,784,077	18,780,539	0	18,780,539	18,048,924	191,192	18,240,116	0	18,240,116	188,883
	FTE	218.5	250.6		250.6	250.6	0.0	250.6		250.6	0.0
	GF	12,322,164	14,545,938		14,545,938	13,823,265	191,192	14,014,457		14,014,457	188,883
	CF	4,377,570	4,157,940		4,157,940	4,149,030		4,149,030		4,149,030	
	CFE	82,888	76,661		76,661	76,629		76,629		76,629	
	FF	1,455									
Line Item Name	Total	15,678,085	17,324,509	0	17,324,509	16,558,583	172,267	16,730,850	0	16,730,850	172,267
	FTE	218.5	250.6		250.6	250.6	0.0	250.6		250.6	0.0
Personal	GF	11,425,430	13,642,357		13,642,357	12,888,471	172,267	13,060,738		13,060,738	172,267
Services	CF	4,251,200	3,666,260		3,666,260	3,654,252		3,654,252		3,654,252	
	CFE		15,892		15,892	15,860		15,860		15,860	
	FF	1,455									
Line Item Name	Total	908,800	1,245,373	0	1,245,373	1,239,017	16,711	1,255,728	0	1,255,728	7,760
	FTE	0.0	0.0		0.0	0.0	0.0	0		0.0	0.0
Operating	GF	707,339	719,036		719,036	712,680	16,711	729,391		729,391	7,760
Expense	CF	118,573	465,568		465,568	465,568		465,568		465,568	
	CFE	82,888	60,769		60,769	60,769		60,769		60,769	
	FF										
Line Item Name	Total	197,192	210,657	0	210,657	251,324	2,214	253,538	0	253,538	8,856
	FTE	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0
Vehicle	GF	189,395	184,545		184,545	222,114	2,214	224,328		224,328	8,856
Lease	CF	7,797	26,112		26,112	29,210		29,210		29,210	
Payments	CFE										
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name:
IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☒ Yes ☐ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)
Request Affects Another Department(s): ☐ Yes x No (If yes, Name of other Department(s)________________)

Efficiency and Effectiveness Analysis

Identifying Information

Department:	**Natural Resources**
Request Title:	**Water Administration Service Personnel**
Priority number:	**15 of 28**
Division:	**Water Resources**

Summary of Request

This request is for $191,192 general funds to provide additional field water administration in response to a growth in workload. Each request is described and justified separately as an individual efficiency & effectiveness analysis.

Problem or Opportunity Definition

Increased water administration workload has been identified in specific areas of the state. This workload is directly related to the population growth experienced in those areas, and a commensurate increase in the complexity of water administration necessary to meet increasing water demands for a limited resource.

Available Alternatives

1. **Recommended:** Add funding to meet the increased demands for service. Many water administration services have been or will soon have to be reduced to sub-standard levels in order to meet the most critical demands. In some cases, the public has had to provide its own water administratio resulting in the state's inability to properly validate and reasonably enforce the prior appropriation doctrine.
2. **Status Quo:** Continue current service level with existing staff. Reallocate staff to meet the most critical demands, cutting less-critical – yet still statute-required – public services.

Department Objectives

1.1, 1.2, 1.7, 2.1, 2.3, 2.6, 2.7

Analytical Technique Used

An individual benefit-cost analysis has been performed for each specific request. Most often, the benefits are measured in added value of entitled water delivered to senior water rights holders. One exception, in Division 5, is noted in the table on the next page.

Assessment of Alternatives

An individual assessment has been provided for each specific request.

Cost Calculations and Assumptions

Detailed cost components have been provided for each specific request, including personnel services costs , operating, mileage expectations of the speci position, first-year capital costs, and in two cases, a state leased vehicle. [See table on next page.]

Request: Job Title Requested:	Div 5 PE 1	Div 1 EPSA 3	Div 5 EPST 2	Div 3 EPST 3	Div 4 EPSA 2	Total
Monthly Salary	4,589	2,444	3,494	4,805	2,573	17,905
Months	12	5	4	12	6	39
Salary	55,068	12,220	13,976	57,660	15,438	154,362
PERA (@10.15%)	5,589	1,240	1,419	5,852	1,567	15,667
Medicare (@1.45%)	798	177	203	836	224	2,238
Total PS	$ 61,455	$ 13,637	$ 15,598	$ 64,348	$ 17,229	$ 172,267
Miles to be driven:	0	5,833	6,000	13,000	5,000	
per mile cost:		0.26	0.32	0.30	0.32	
Cost of miles:	-	1,524	1,920	3,842	1,600	8,885
Operating cost:	500	-	-	500	250	1,250
Total Operating including mileage	$ 500	$ 1,524	$ 1,920	$ 4,342	$ 1,850	$ 10,135
Capital						
Office furniture	2,021	-	-	2,021	-	4,042
Computer & Software	1,267	-	-	1,267	-	2,534
Other						-
Total capital	$ 3,288	$ -	$ -	$ 3,288	$ -	$ 6,576
Leased vehicle:	-	$ 1,107	-	1,107	$ -	$ 2,214
Total (first year)	$ 65,243	$ 16,268	$ 17,518	$ 73,085	$ 19,079	$ 191,192
Total (2nd year)	$ 61,955	$ 18,169	$ 17,518	$ 72,162	$ 19,079	$ 188,883
Benefits:						
1st year $ benefit:	$ 970,000	$ 2,000,000	$ 150,000	$ 975,000	$ 375,000	$ 4,470,000
2nd year $ benefit:	$ 1,870,000	$ 2,600,000	$ 158,400	$ 975,000	$ 375,000	$ 5,978,400
			(see notes below)			
1st year B/C ratio:	14.9	122.9	8.6	13.3	19.7	23.4
2nd year B/C ratio:	30.2	143.1	9.0	13.5	19.7	31.7

Due to widely varying water costs, and difficulty in measuring incremental water volume,
Division 5 EPST II benefits are based on legal and engineering fees required to develop augmentation plans.
The resulting lower benefit-cost ratio relative to other positions reflects the assessment method,
rather than the significance of this position.

Glossary of Terms:

Alluvial Well:

Those wells located near a stream, consisting of alluvium (clay or silt or gravel carried by rushing streams and deposited where the stream slows down), whose depletion has a direct negative impact on streamflow.

Augmentation:

A plan for augmentation allows an out-of-priority water right to continue to divert by providing replacement water to senior water rights affected by the junior diversion. Pooling of water resources, exchanges of water, substitute supplies of water, and/or development of new supplies of water may be means of augmentation. The plan is confirmed in a Water Court case, which may result in changes to established water rights, and/or adjudication of new water rights. In many cases, an accounting method is decreed which is then used to compute and record the proper application of the decreed plan.

Diversion:

The physical redirection of water flowing in a natural stream, into a ditch, canal, pipeline, or other conveyance structure. A diversion is the typical exercise of a water right by a water right owner.

Interstate Compact:

Colorado's unused water ultimately ends up in a downstream state. In all the river basins of our state, water flows downstream to a series of other states and is subject to one or more interstate compacts. An interstate compact specifies how much water Colorado may consume before delivering the water at the stateline for downstream use by one or more states. The specification describing this apportionment varies from compact to compact. The result is that every interstate compact is in effect a downstream water right that must be satisfied, just as downstream water rights must be satisfied in Colorado, provided that the right is currently "in priority".

On call:

This term describes a stream that cannot supply sufficient water to satisfy all water rights demanding water. A "call" consists of a call date – the priority date of a water right which is not fully satisfied, and a location on the stream. Any stream system, from the uppermost tributary to the stateline downstream, may have multiple calls in place simultaneously.

Streamflow:

The amount of water flowing in a stream at any given time. The amount is difficult to judge without a measuring device, normally a calibrated gage placed at a stream location from which readings may be taken and flow computed. Currently, many streamflow data readings are transmitted via satellite to a central site in Denver, flows computed, and streamflow amounts are subsequently made available via a variety of media within minutes or hours to water users and water administrators.

Water Administration:

This activity is performed primarily by field personnel called "water commissioners" (classified as engineering technicians and engineering assistants). These personnel access real-time streamflow data for their hydrologic area and determine which water rights are in priority and which are out of priority, based upon a list of quantified water rights ordered by seniority. This ensures that the proper senior water rights who are in priority and wanting water receive their water, and those who are out of priority do not. The process is performed by water commissioners by visiting headgates, water users, and/or by telephone. It may be either passive – the water user is informed of their proper headgate change and expected to make the change him/herself, or active - by actual physical adjustment of the headgate, sometimes including the application of a chain and lock, and a headgate "order", directing that no change is to be made by others. Records of diversions and changes are kept, and settings may be adjusted more than once daily. The variation of stream conditions from upstream to downstream, and the dispersion of water rights over the hydrologic area – upstream and downstream, on the main stream and tributaries – plus the varying nature of hydrologic conditions within the area, such as the amount, timing, and location of irrigation return flows, for example, make this process complicated. A good water commissioner requires a high degree of knowledge, computational ability and judgment, and benefits greatly from local experience and good interpersonal skills.

Water right:

In Colorado, a water right is a property right, established by physically applying water to beneficial use. A water right is specified by a location, an amount, a priority date (normally the date of first use of the water), and the types of use allowed for that water right. A water right is perfected by having it adjudicated in a court process (now performed by district courts designated as Water Courts). A water right may be changed in use and location, while maintaining its priority date. It may also be transferred from one owner to another, separately from the water right change process.

Department: Natural Resources
Request Title: Division 5 Water Administration Engineer for Augmentation Plans/Hydrographer (PE I)
Division: Water Resources

Summary of Requested Alternative: The Division seeks $65,243 to assist in water administration on the upper Colorado River. An added Professional Engineer for Division 5 would be appointed 1/3 Hydrographer and 2/3 Augmentation Plan Administrator for the upper half of Division 5.

Population growth in Division 5 (Glenwood Springs office) and rising demand for diversions to the Front Range have substantially increased our water administration responsibilities. This demand is reflected in the number and complexity of Water Court decrees and in the rising number of diversion structures requiring state oversight. The gap between existing staffing levels and the staffing needed to meet our statutory requirements continues to widen. Increasing complexity of water rights (particularly augmentation plans) and the addition of 400-450 new decrees each year (including 35 to 70 new plans for augmentation) necessitates adding an Engineer to supervise and support Water Commissioners.

The joint use of facilities such as reservoirs and ditches for both irrigation and municipal purposes has added to the difficulty of administering the waters of the upper Colorado River. Any new development within the basin will need a plan of augmentation to develop a reliable water supply. Even without the continuous addition of new water rights and detailed plans of augmentation, the present needs for water administration and oversight of complex plans exceed the current personnel resources in Division 5. The area of particular concern is in the headwaters of the basin, where local development and Front Range cities compete with established downstream senior water rights. The areas include Grand, Summit, Eagle, and Pitkin Counties, where the majority of Colorado's water supply resides. These counties also include the majority of Colorado's ski industry, a growing number of golf courses, and a steady conversion of agricultural lands to other uses, most notably residential. In some instances, providing for a reliable water supply can involve purchasing water at over $20,000 per acre-foot while incurring legal and engineering fees of up to $40,000. Proper administration is therefore critical in ensuring that these dollars are well spent.

Additionally, heightened demand for a limited water supply has increased to at least 1.33 FTE's the Hydrographic duties in Division 5, though currently only 1.0 FTE is staffed. With an ever-tightening water supply, stream gaging and water administration measurement will be more frequent and critical, approaching the need for 2 FTE's in the Colorado River Basin in the near term.

The Division of Water Resources is therefore requesting an additional Professional Engineer I. The requested monthly salary of $4,589 represents the entry-level salary for this position. [1]

[1] FY 2004-05 Compensation Plan.

Element #2 – Problem or Opportunity Definition:

Professional Engineer for Augmentation Plans (67% of this request):

Division 5 does not have adequate staffing to administer plans of augmentation and other complex decrees. We struggle to not only manage and account for the complex changes of water rights, exchange plans, and augmentation plans associated with the East Slope Diversions by Denver Water, Northern Colorado Water Conservancy District, Golden, Colorado Springs, Aurora, and Westminster, but must also handle the rapidly growing needs of Eagle, Summit, and Grand Counties (including Water Districts 36, 37, and 51). It is important to track the diversions and accounting as required by the Water Court in over 500 decreed augmentation plans in these Water Districts to assure that users are operating within their court-decreed limitations, thus preventing injury to vested senior water rights. Using an Engineer to supervise and support Water Commissioners offers the most feasible means of accomplishing these tasks.

The last four years of drought have required fair and equitable accounting for both East Slope and West Slope demands for this most valuable source of water. The many changes of water rights have lead to complex augmentation plans and exchanges. Examples of this complex water accounting include:

- A 2004 water court case allowing water that originates in the Arkansas River drainage at the Arkansas Well to exchange through Dillon to Williams Fork Reservoir and then through the Williams Fork Project Tunnel to Clear Creek, before being used by Golden. The Arkansas Well water is also decreed for use in Eagle, Summit, and Grand Counties, thus complicating the accounting process for the Arkansas Well.

- The reservoirs in Grand and Summit Counties are used to help mitigate the impacts to the Endangered Species in the 15 Mile Reach. The Endangered Species mitigation pools in these reservoirs are the last to fill within the reservoirs. The depletions associated with the augmentation plans and exchanges, therefore, impact the endangered species if not properly administered. Thus far, Colorado has avoided Section 7 Consultation[2] for these Endangered Species based on a recovery program that relies on these mitigation pools. If endangered species were impacted, development of water in the Colorado Basin would be significantly curtailed and would become lengthy and expensive due to Section 7 Consultations.

- The Water Commissioners in Water Districts 36, 37, 38, and 51 receive complicated accounting of water diverted by multiple water users. These users include many East Slope and West Slope cities, and other entities with complex accounting and delivery methods such as the Middle Park Conservancy District, Clinton Ditch and Reservoir Company, Eagle Park Reservoir Company, the Colorado River Water Conservation District, the USBR, the Basalt Water Conservancy District, and the West Divide Water Conservancy District. Accounting for the prior summer and fall depletions often does not occur until mid-winter.

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[2] Section 7 of the Endangered Species Acts requires a consultation, directed by the United States Fish & Wildlife Service, on the status of an endangered species. If the USFWS determines that the species is no longer making reasonable progress, the agency can issue a jeopardy opinion on the species and halt future water development.

Water Commissioners have a full workload, devoting all their time to traditional water rights administration of irrigation and the historic non-irrigation uses. Today's water court decrees not only add to the sheer number of rights that must be administered, they also increase the areas that are over-appropriated, and they continue to evolve in complexity. This requires innovative approaches to water administration that is not expected of the traditional Water Commissioner. Programs to track accounting for augmentation plans and exchanges are too complex for water commissioners to create and continually modify with the addition of water rights. This position will develop and maintain systems to monitor water court changes, thus supporting Water Commissioners in their daily activities and preventing injury to existing water uses on the East and West Slopes.

Integrity of the Prior Appropriation Doctrine through equitable distribution of the water of the basin is an absolute necessity for orderly use and development of existing and future supplies. To allow further widening of the gap between the capabilities of Division 5 and the needs of the water users will lead to distrust and an uncooperative spirit in the water community.

Hydrographer (33% of this request):

Division 5 hydrographic duties are extensive and include:

- Stream flow measurements, publishing, and repair of ten published stations. By decree and stipulation, the Division is required to provide full hydrographic service to eight of these stations, all located on the Fryingpan River. These stations serve many critical functions, including data provision that saves millions of dollars in additional waste water treatment by Aspen Consolidated Sanitation District, snowmaking diversions to ski resorts, and exchanges of some of the state's most highly-valued water. Currently, our Hydrographer is able to handle only the most critical needs of these stations.
- Satellite monitoring systems at 25 permanent stations that require annual maintenance, upgrades, monitoring; satellite monitoring systems at 12 stations with shared maintenance responsibilities.
- Coordination with cooperator agencies, planning, and budgeting; data requests, from within DWR and from the public; and gaging record input, personnel training, equipment maintenance, and other administrative duties.

Due to current man-hour shortages, only the more critical functions have been completed during the past two years. For example, approximately 90 total published station measurements per year have been made, out of 190 needed.

Additional tasks that would be undertaken with added personal services:

- Publish an additional 2-6 existing stations and 100 published station measurements.
- Add new rated stations with chart or satellite monitoring.
- Requests for new temporary or permanent gaging stations come in each year from the public and from water commissioners.

To accomplish all of the mandated services, a part-time Hydrographer is needed in addition to the current 1.0 FTE. The value of these added services can be very conservatively calculated in terms of the price of a published station. Including monitoring, publishing, and repairs, water districts pay approximately $10,000 annually for one such station (the United States Geological Survey charges about $15,000). Pro-rating the annual workload of the current Hydrographer, complete maintenance of one station consumes 100 hours. One third FTE (690 hours) therefore could be conservatively valued at $70,000. This excludes the value of abiding by court decrees and avoiding litigation. This also understates the value of administering water to the owners of water rights who have incurred the publishing station cost only as a portion of the total cost of obtaining their water.

Though the needs for Augmentation Plan Administration and Hydrographic duties require more than the proposed additional personal services, the merging of these duties into one position offers the most feasible option. The Division of Water Resources is therefore requesting an additional Professional Engineer I with computer programming skills, knowledge of water rights, and hydrographic skills. The new staff person will review the existing accounting systems currently administered by water users, and then develop improved spreadsheets, accounting processes, data exchange processes, and verification methods that will ensure the increased complexity and volume of these decrees are properly administered and do not injure other water rights. This individual will also operate gaging stations with satellite monitoring equipment, make stream-gaging measurements, rate measuring devices, and develop official gaging records.

These functions of the Division are authorized in the following statutes:

Title 37	Article 80	Water Rights and Irrigation
Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Streams),
Title 37	Article 83	Exchange of Water and Transfer From One Stream To Another
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water)
Title 37	Article 87	Reservoirs (Administration of Water Storage and Release from Reservoirs).
Title 37	Article 92	Water Right Administration and Distribution

Element #3 – Available Alternatives:

Alternative No. 1 (Recommended):

- Add an Engineer to our staff to develop and operate efficient automated systems to account for the use of the surface water of the upper Colorado River. This includes daily reporting and verification of diversion and return quantities of water by suppliers in accordance with Water Court decrees. The Engineer will provide coordination between the various water users and the affected Water Commissioners to assure that water is administered timely.
- The request includes operating and data processing support sufficient to effectively perform the functions in a timely manner.
- At this time, minimal travel is anticipated for the new position.

- Tangible benefits of adding this Engineer include maximizing the use and inherent economic value of water used for municipal and domestic water supplies, ski areas including snowmaking, golf course development, other local industries, and crop irrigation. Intangible benefits are centered on the reliance that water users have upon an unbiased state authority to regulate limited upper Colorado River water supplies in strict accordance with water right decrees. This reliance has a proven record of lessening dissension among competitive water users and the potential for contentious and/or unnecessary litigation, and of protecting the integrity of water law.
- There is a cost to senior water right owners if water is not administered in a timely and efficient manner. For economic reasons, every effort should be made to get more timely and accurate administration. The projections of greater competition for the water supply in the Colorado River Basin guarantee increased complexity and a growing list of water court decrees.
- A calculation of the dollar value of these benefits includes providing assurance of water delivery to the holders of senior water rights, that in today's market have a value of at least $250 an acre-foot in the lower part of the basin, where water is least valuable. This position would be responsible for preventing holders of junior water rights and others from diverting water to which they are not entitled. Any water diverted by these entities, which exceeds their entitlement, has a direct impact on the senior water right holders equal to the value of the water rights they own. It is estimated that if this position is funded, senior water rights will receive a maximum additional 12,000 acre feet of water per year to which they are entitled. The 12,000 acre-feet estimate is based on the replacement supply of only the largest sources that do not report timely. This added delivery resulting from increased staffing is estimated at 30% of 12,000 in the first year, 60% in the second year, and 90% in succeeding years.

Alternative No. 2 (Not Recommended):

- Continue to accept delayed and incomplete water supplier reports on the amount of water taken and returned to the Colorado River basin with limited validation of the accuracy of the reporting.
- Because the upper Colorado River is over-appropriated, senior water rights will be injured by this lack of more detailed, timely administration in accordance with court decrees.
- There is no direct cost to the state for this alternative.
- There is a negative value in the loss of the property of the senior water right holders if the situation on the upper Colorado River is not addressed. The senior owners will continue not to receive water to which they are entitled and will suffer the economic consequences.

Element #4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the added value to the property owners receiving the total amount of water to which they are entitled. The value of the water selected is water lost to downstream senior rights on the mainstem of the Colorado River, as they are the least valuable and easiest to quantify. The value of water in the Headwaters areas or any tributary of the Colorado River is extremely variable, and yet much more valuable than in the lower basin. Additionally, only the easiest sources of replacement have been identified. Therefore, every assumption uses the most conservative estimates and results in the conservative benefits-to-cost in Element #5. Finally, this analysis does not attempt to quantify the potential water user litigation expenses transpiring from failure to administer water rights nor the value of maintaining the peace and integrity of the Prior Appropriation Doctrine.

Element #5 – Assessment of Alternatives

There are two alternatives: 1) Add an Engineer position and resolve the problem; 2) do not add the Engineer position and subject Colorado's water rights system to increasing abuse.

Alternative No. 1 shows the expenditure of $65,243 and assumes that 30% of all municipalities will report daily in regards to all diversions that they make within Year One. In succeeding years, the percentage of municipalities and water users that report daily diversions will be increased to 60%, in the second year and 90% in the third year. The value to the senior water rights owners who receive water to which they are entitled is therefore conservatively estimated at $900,000 if only 3,600 acre-feet of additional water is delivered during the first year. The added benefit of $70,000 for hydrographic services is added to reach $970,000. Alternative No. 2 is to add no additional resources and to deal with the problem with current staffing levels. There is no direct cost to the state. However, there is a continuing cost to the downstream senior water rights owners. Because this is the base scenario, zero benefit is assigned.

Alternative	Year	Cost		Benefit to owners	Ratio of benefit/cost
# 1	1	$65,243		$970,000	14.9
	2	$61,955		$ 1,870,000	30.2
# 2	1	0		0	0
	2	0		0	0

Recommendation:
Increase appropriation to the Division of Water Resources by $65,243 to fund a water administration Engineer in the upper Colorado River.

Breakdown of Costs:

PE I

Salary/mo	$ 4,589
Months	12
Salary	$ 55,068
PERA (10.15%)	$ 5,589
Medicare (1.45%)	$ 798
Total PS	**$ 61,455**
Total Operating	**$ 500**
Capital	
Office Furniture	$ 2,021
Computer & Software	$ 1,267
Total Capital	**$ 3,288**
Total First year	$ 65,243
Benefits	$970,000
B/C ratio	14.9
Total Second Year	$ 61,955
Benefits	$1,870,000
B/C ratio	30.2

Department: Natural Resources
Request Title: Division 1 Deputy Water Commissioner (Districts 8, 9, 80 - Cherry Creek, Plum Creek, Bear Creek, North Fork of the South Platte) (EPSA III)
Division: Water Resources

Summary of Requested Alternative: Increase water administration for water rights in the Douglas County and Jefferson County area by adding $16,268 to fund 5 additional months of work.

The Division of Water Resources, Water Division 1 (Greeley office), is not able to keep up with all the water rights administration issues associated with the expansive growth in the area south of Denver, a region with very limited water resource availability. The combination of growth and limited resources has dramatically increased the competition for water and need to administer this resource to prevent injury to senior rights.

Specifically, the rapid growth of municipal users along Cherry Creek, Plum Creek, and Bear Creek has created more complex water diversion systems and accounting. To prevent injury to senior users, it is important to verify the diversions of these users and assure that the accounting for the users is accurate and in accordance with statutes and water court decrees. Presently, we have insufficient funding to establish the accounting needed to utilize such information as structure identification numbers, decree limits, case numbers, and well permit numbers. With an established accounting system, our staff could monitor and obtain the appropriate information. The additional months of personnel time would allow staff to begin to verify that the actual diversions are correct and to review the accounting for accuracy.

To properly administer water rights for municipal users, we must improve our monitoring of stream flows so that administrative decisions may be based on accurate information. Cherry Creek and Plum Creek, in particular, must be closely monitored due to the difficulty in maintaining an accurate stage discharge relationship arising from the channel conditions of the two small streams.

In addition to growing numbers of municipal diversions, this area has witnessed substantial rural residential growth, requiring added need for well inspections and other administrative duties. Meeting ongoing irrigation demands within these basins has also become increasingly difficult, as our staff has been stretched to deal with more complicated municipal diversions.

Not only must commissioners keep track of municipal and rural surface and ground water usage, they should also keep records associated with the use of Denver basin wells to assure that they are complying with statutory requirements concerning aquifer life. Presently, we are not able to achieve this function, but would like to be able to in the future, as these rights too should be administered.

Currently, a part time person is involved in assisting in these Districts, but is not able to provide the backup necessary to the lead commissioners in these areas. The specific need in this area is sufficient funding of an Engineering Assistant III (upgrading a part-time position to full time) to conduct many of the field investigations and monitor flow conditions. These field investigations will include responding to complaints concerning illegal water usage, investigating well applications, and recording well and ditch diversion amounts. This will free supervisory staff to focus on the larger issues associated with setting up and reviewing complex accounting and assuring that users comply with the conditions specified in their decree and statutes. This will also provide the lead commissioners the ability to adequately respond to the many questions from municipal users, homeowners associations, and other public interests. Having a full-time person will also allow the continuity necessary to have a person furnish adequate support to the lead commissioner and will provide adequate succession training in the event the lead water commissioner leaves the area. Training a person for this position is a large investment of time and effort on the part of the lead water commissioner and it is highly imperative that a full-time status of this deputy position be assigned if we have any hope of retaining a fully competent person.

The Division of Water Resources is therefore requesting to upgrade an existing seven-month Engineer Physical Science Assistant III to full-time status. With continued urban and semi-urban growth in these districts, we presently do not have sufficient resources to adequately respond to administrative demands. The requested monthly salary of $2,444 represents the entry-level salary for this position.[3]

Element #2 – Problem or Opportunity Definition:

Douglas and Jefferson counties have experienced dramatic municipal and rural residential growth since 1990. Census 2000 data indicates that the population of Douglas County grew by 191% from 1990 to 2000 (1990 population = 59,541 and 2000 population = 172,718). Douglas County's January 1, 2003 population estimate is 215,226. Census 2000 data for Jefferson County indicates a 20.2% population increase from 1990 to 2000 (1990 population = 438,430 and 2000 population = 527,056). Jefferson County's latest population estimate is 529,401. The increase has substantially heightened the demand for services from the Division of Water Resources both to administer and to respond to complaints concerning water use in the area. Not only is administration necessary between users in these drainages, but most water rights along Plum Creek, Cherry Creek, Bear Creek and the North Fork of the South Platte are junior to users on the main stem of the South Platte and adequate administration is necessary to prevent injury to these users.

Municipal users have had to develop sophisticated plans to deliver to their customers adequate water resources supplied by Denver basin aquifers, limited surface streams, and their associated alluvial aquifers. Since 1999, the number of augmentation plans has increased by 252 from 111 to 363 (327% increase), while the number of decreed water rights has increased by 3,266 from 12,076 to 15,342 (27% increase). Also since 1999, the number of wells permitted has increased by 9,927.

In addition to municipal growth, rural residential populations have expanded within this area. This has resulted in increased needs for field inspections so that users comply with their well permits. There has also been a significant increase in the number of complaints associated with small illegal dams, expansion of use of exempt wells, and with other surface water related problems. Present staff covers an area extending from Woodland Park in the south, Grant in the west, and the south edge of Denver in the north in addition to eastern cities Castle Rock, Franktown and Parker. All regions are rapidly expanding in population. One field trip to the Woodland Park area takes a full day to investigate diversions and potential water use violations.

There still remains a small active irrigation demand within these basins. Our office is tasked with administering both surface and ground water rights within the area. At the present time, we are not always capable of administering all the surface water rights on some of the tributaries in this area due to lack of personnel. This allows injury to senior appropriators to occur within these Districts. In addition, inadequate records of diversion

[3] FY 2004-05 Compensation Plan

hurt the property value of senior users who cannot verify their historic use in change cases. Likewise, we have not had the staff to effectively administer alluvial wells in this area to assure they are augmenting and not injuring senior rights.

These functions of the Division are authorized in the following statutes:

Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Streams)
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water)
Title 37	Article 87	Reservoirs (Administration of Water Storage and Release from Reservoirs)
Title 37	Article 92	Division Office Function and Responsibilities/Augmentation Plans and Water Court

Element #3 – Available Alternatives:

Alternative No. 1 (Recommended):

- Adding $16,268 in personal services funding will allow this full-time assistant to complete field inspections of well and surface water usage, to assess compliance of decrees and well permits, to collect diversion information on the river, and to monitor stream flow data.
- A calculation of the dollar value of these benefits includes potential injury to the holders of senior water rights, which in today's market have a value worth up to $2,000 an acre-foot annually. This position would help properly administer augmentation plans and make certain that junior water rights or others do not divert water to which they are not entitled. It is estimated that if this position is funded Colorado water rights owners may receive a minimum additional 2,000 acre feet of water per year to which they are entitled, assuming the increase in deliveries are 50% in the first year, 65%, 80%, and 90% in succeeding years.
- The request includes operating and data processing support sufficient to effectively perform the functions in a timely manner.
- At this time, some travel on rough roads within and out of the Division is anticipated for the new position.
- Tangible benefits of increased funding include better administration of water resources in this area through protection of senior water rights. Intangible benefits include improved response time to the multitude of complaints and inquiries of users in Douglas and Jefferson Counties. Water users who depend upon an unbiased state authority to regulate water supplies in strict accordance with water right decrees and statutes have less potential for contentious litigation between themselves.
- Having a full time person will also provide the training and continuity necessary to adequately support the lead commissioner and to provide adequate succession training in the event the lead water commissioner leaves the area.

Alternative No. 2 (Not Recommended):

- Continue to accept inadequate administration in this area with the associated loss in water to those who have senior water rights and are entitled to the water.
- Risk worsening response time to complaints and inquiries, increasing disputes between individual water users, delayed and incomplete water supplier reports outlining the amount of water taken pursuant to the augmentation and exchange plans in Water Districts 8, 9, and 80, and declining accuracy of the reporting.
- Because Bear Creek, Cherry Creek, Plum Creek and North Fork of the South Platte are all over-appropriated, senior water rights will be injured by this lack of detailed, timely administration in accordance with Water Court decrees. There is no direct cost to the state for this alternative.
- There is a negative value in the loss of the property of the decreed water right holders on Bear Creek, Cherry Creek, Plum Creek and North Fork of the South Platte. The senior water rights owners will not receive all of the water to which they are entitled and will suffer the economic consequences.

Element #4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the value to the property owners of receiving the total amount of water to which they are entitled.

Element #5 – Assessment of Alternatives
There are two alternatives: 1) provide additional funding to resolve the problem; 2) do not provide additional funding and allow inappropriate diversions to continue to the injury of senior rights. There is not an attempt to project the cost of additional litigation under Alternative No. 2.

Alternative No. 1 shows that the expenditure of $16,268 will ensure better administration and response to users within Division 1. The value to the senior water rights owners who receive water to which they are entitled is conservatively estimated at $2,000,000 and $2,600,000 in years one and two, respectively, assuming 50% and 65% of 2,000 acre-feet are respectively delivered.

Alternative No. 2 is to add no additional resources and allow the illegal diversion and use to continue. There is no direct cost to the state (absent the costs of potential litigation). However, there is an ongoing injury to the decreed senior water rights owners. As this is the base scenario, zero benefit is assigned.

Alternative	Year	Cost		Benefit to owners	Ratio of benefit/cost
# 1	1	$16,268		$2,000,000	122.9
	2	$18,169		$2,600,000	143.1
# 2	1	0		0	0
	2	0		0	0

Based upon the two alternatives, Alternative No. 1 is our recommendation due to the beneficial impact to the decreed water right owners and well owners in Water Division 1.

Breakdown of Costs:

EPST III	Year 1	Year 2
Salary/mo	$ 2,444	$ 2,444
Months	5	5
Salary	$ 12,220	$ 12,220
PERA (10.15%)	$ 1,240	$ 1,240
Medicare (1.45%)	$ 177	$ 177
Total PS	**$ 13,637**	**$ 13,637**
Operating:[4]		
Miles to be Driven (person.)	(2 mos.) 2,333	(7 mos.) 8,000
Cost/mile (4X4 reimburse)	$ 0.32	$ 0.32
Cost of Miles	$ 747	$ (2,560)
Miles to be Driven (lease)	(3 mos.) 3,500	(12 mos.) 14,000
Cost/mile	$ 0.222	$ 0.222
Cost of Miles	$ 777	$ 2,664
Operating cost	$ 0	$ 0
Total Operating	**$ 1,524**	**$ 104**
Leased vehicle ($369/mo.)[5]	**$ 1,107**	**$ 4,428**
Total Expense	**$ 16,268**	**$ 18,169**
Benefits	$2,000,000	$2,600,000
B/C Ratio	122.9	143.1

[4] Assumes vehicle lease begins April 1, 2006. Personal vehicle utilized prior to that date. $.32 and $.222 per mile are the current costs for FY 2004-05. Year 2 reflects negative personal miles because current personal miles will be converted to fleet miles.

[5] Lease estimate of $369 monthly provided by Ron Clatterbuck, New Vehicle Coordinator, State Fleet Management, for a ½ ton 4x4 pickup, appropriately equipped.

Department: Natural Resources
Request Title: Division 5 Colorado River Mainstem (District 5) Water Commissioner (EPST II)
Division: Water Resources

Summary of Requested Alternative:

The Division seeks $17,518 to improve administration of water rights, plans of augmentation, delivery of reservoir storage, collection breakdown and analysis of complex data from municipalities and other sophisticated users, and to improve service to the public regarding well permitting and water use related to development.

The Water District 51 position is currently eight man-months, and works 2/3 of each month. This request constitutes four man-months to make this position full-time. Water District 51 is the headwaters of the Colorado River in Grand County. It includes the towns of Winter Park, Fraser, Granby, Grand Lake, and Hot Sulphur Springs. It has two ski areas, many golf courses, and extensive development on the majority of the private land in east and north Grand County. The Water District has five transmountain diversion projects: the Colorado Big Thompson, Grand River Ditch, Berthoud Pass Tunnel Canal, Moffat Tunnel System, and the Williams Fork Project. These carry 60% of all transmountain water in the State of Colorado.

The District has changed from primarily agricultural to primarily recreation and commercial. The ever-diversifying local uses of water include snowmaking, golf course irrigation, and numerous lakes, ponds, and other water amenities for rural and mountain development. The remaining agriculture, either part of a trophy ranch or on five to 40 acre tracts, requires more attention from Water Commissioners than traditional agriculture. Therefore, the nature of the job has changed from one where focus is on the irrigation season to one with intensive year-round demands. Growth statewide creates an incremental increase in demands each year on the water resources of the Division, extensively in Water District 51.
The Division of Water Resources is therefore requesting additional personal services funding and an upgrade to Engineering Physical Sciences Technician II. The requested salary of $3,494 represents a 10% increase above the entry-level amount of $3,176[6] due to the need for understanding and experience in municipal, recreational, and agricultural water administration.

Element #2 – Problem or Opportunity Definition:

With growth comes a heightened demand for water and a rising number of water delivery systems that rely on ever-increasingly complex legal mechanisms. Water District 51 acquires 25-30 new water right decrees (including 5-10 plans of augmentation) each year. These structures or plans can be very large and complex, or very small and difficult to detect. With both, more time is demanded of our field personnel. The upper Colorado River Basin is over-appropriated 10-12 months per year. The Windy Gap Firming Project, Denver Water's plans to increase Fraser River and Williams Fork depletions, and the eventual build-out of existing exchange plans will all require daily decisions on streams that currently need less frequent administration. The competition for the dwindling surplus creates an ever-increasing value for the water and requires more and more vigilant administration. This increased workload continues to shift to intensive year-round scheduling, as opposed to the historic high demands in

[6] FY 2004-05 Compensation Plan

the irrigation season and diminishing winter workload. To accomplish our statutory duties, the job requires a year-round Water Commissioner, instead of the current eight man-month position. Division 5 has reorganized and adjusted man-months for the past 20 years. We have reached the point where this can no longer be accomplished without creating an equally large problem in those areas that sacrifice man months.

Not only has the position evolved into a 12-month responsibility, but the level of complexity and purpose of contact have for some years necessitated an upgrade from an Engineering Physical Science Tech I to a Tech II. Located two and a half to three hours from the Glenwood Springs Division 5 office, the position operates independently. The individual in this position must therefore be capable of covering very contentious, complex, and critical issues with infrequent support or supervision.

These functions of the Division are authorized in the following statutes:

Title 37	Article 80	Exchange of Water
Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Streams),
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water)
Title 37	Article 87	Reservoirs (Administration of Water Storage and Release from Reservoirs).
Title 37	Article 92	Division Office Function and Responsibilities/Augmentation Plans and Water Court

Element #3 – Available Alternatives:

Alternative No. 1 (Recommended):

- Increase the Water Division 5 funding by $17,518 for position number 2117 in Water District 51, making it a full-time position.
- The request does include additional operating cost for travel.
- Benefits of adding these man-months include (1) maximizing the use and economic value (which can be among the highest in the state) of water for irrigation, domestic, stock, snowmaking, power and municipal purposes; (2) ensuring the fair distribution of the resource through the monitoring of augmentation plans and curtailment of unadjudicated and junior water users; and (3) providing improved public service related to water use development and well permitting.
- Proper administration reduces personal and legal conflict between competing water users.
- The value of water and the amount of administration required will fluctuate widely throughout the district. Therefore, this analysis calculates benefits based on the cost of the augmentation plans rather than the value of the water appropriated. The most basic augmentation plan has a minimum legal fee of $7,500. Engineering fees can equal legal fees. The value of the water and infrastructure needed to deliver the augmentation water adds greater costs. Complex plans cost tens of thousands of dollars in legal fees alone. Improper administration of these plans suggests to the water user that his expenditure cannot be justified, and therefore develops distrust and a tendency to attempt to circumvent the prior appropriation system.

Alternative No. 2 (Not Recommended):

- Maintain existing staffing levels in Division 5.
- Identify and eliminate customer service that is not specifically required by statute.
- Rely more heavily on water users' self-administration of their water rights. This creates distrust and disputes, which may generate a larger workload on staff in the Glenwood Springs office, and consequentially added non-compliance; as distrust increases, so does non-compliance. For example, failure to enforce one household use permit mushrooms into many out-of-compliance wells. Failure to properly administer one out-of-priority pond leads to the construction of many ponds without water rights and equipment to administer them. This also reduces perception that the Division of Water Resources is capable of doing its job.
- There is no direct cost to the state for this alternative; however, increased costs to defend against future litigation may be incurred.
- There is a negative value in the loss of the property of the senior water right holders if the situation is not addressed. The senior owners will continue not to receive the water to which they are entitled and will suffer the economic consequences. Additionally, these owners will spend time and money on legal efforts to enforce their water rights and to pressure the Division to fulfill its responsibilities.

Element #4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the cost of an augmentation plan. Using a somewhat different approach in this case, this benefit/cost analysis assumes the money to develop the existing augmentation plans was money well spent.

Element #5 – Assessment of Alternatives

Using a minimum cost of $15,000 for legal and engineering fees (note the legal fees can be many times larger than this number) applied to the existing 125 plans in Water District 51, the benefit in administering these plans has a perpetual value of $1,875,000 or an annualized value at 8% of $150,000. Assuming we gain seven similar plans each year, the benefit would increase by $8,400 annually. This analysis excludes the cost of the water for the augmentation supply (which can range from $400 per acre-foot to $25,000 per acre-foot), but assumes 100% of the value is realized under each alternative.

Alternative	Year	Cost	Benefit of Owners	Ratio Benefit/Cost
#1	1	$17,518	$ 150,000	8.6
	2	$17,518	$ 158,400	9.0
#2	1	0	0	0
	2	0	0	0

Based upon the two alternatives, Alternative No. 1 is our recommendation. The measured value placed on the augmentation plans by their holders alone far outweighs the cost of filling this position. Far greater than the measured value of these plans, however, is the beneficial impact to all water users, the prevention of future litigation, and integrity of the state's water administration system.

Breakdown of Costs:

EPST II

Salary added	$ 3,494
Months	4
Total Salary	$ 13,976
PERA (10.15%)	$ 1,419
Medicare (1.45%)	$ 203
Total PS	**$ 15,598**
Operating:	
Miles to be Driven	6,000
Cost/mile	$ 0.32
Cost of Miles	$ 1,920
Operating cost	$ 0
Total Operating	**$ 1,920**
Total	**$ 17,518**
Benefits	$150,000
B/C ratio	8.6

Department: Natural Resources
Request Title: Division 3 Supervising Water Commissioner (EPST III)
Division: Water Resources

Summary of Requested Alternative: The Division seeks $73,085 to assist in the administration of water rights, augmentation plans, and interstate compact delivery requirements.

Currently, the Division of Water Resources is finding it difficult to effectively supervise the administration of water rights, adequately account and verify augmentation plans, and efficiently apportion water flows to rights in concert with delivering interstate compact requirements.

All major rivers in Division 3 (Alamosa office) are on call from March through October each year. The two largest rivers, the Rio Grande and Conejos, are on call all year due to compact delivery obligations. Additional decrees are being sought for recharge and storage during the winter months on both the major and minor drainages. There is an increasing number of court actions to change the use of agricultural wells to add structures for commercial purposes. As these court actions are completed, the Water Commissioners must add these new rights to the list of structures to be administered and accounted for. Additionally, more augmentation plans are filed every year, each of which must be administered in order to insure that there is no injury to vested water rights.

The increasing population growth of the other compact states (New Mexico and Texas) and of Mexico is raising scrutiny on Colorado administration. Attempts to alter the administration of the compact in the other states requires more time for the Division staff to assure that the rights granted to Colorado under the compact are not subverted. The time taken for these activities reduces the time available for the Division supervisors to spend assisting water commissioners, developing accounting methodologies, investigating complaints, and streamlining the water administration process.

The Division of Water Resources is therefore requesting funding for an additional Engineering / Physical Sciences Technician III. This position will assist water commissioners in dispute resolution and water supply operations, investigating change of use cases, determining the day-to-day compact delivery methods and obligations, reviewing water court cases to determine workable accounting procedures, investigating illegal diversions and changes of use of water rights, and accounting for augmentation plans. It is estimated that 500 acre-feet of augmentation water and 2,000 to 5,000 acre-feet of compact water is at stake for estimated benefits of up to $975,000 for Colorado.

The requested monthly salary of $4,805 exceeds the entry-level salary for this position of $3,501[7] due to the specific requirements for skilled expertise in water administration. The individual must arrive with knowledge of water rights, augmentation plans, and interstate compact delivery requirements, gained through approximately ten years of related work experience.

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[7] FY 2004-05 Compensation Plan

Element No. 2 – Problem or Opportunity Definition

The growth of population in the Rio Grande watershed has created a strain on an over-appropriated water system. The Division has 40 to 50 new water court filings every year, each of which must be inspected, be reviewed, and have suitable conditions of approval drafted to prevent injury to senior water users. A lack of staffing has caused a backlog in reviewing/recommending conditions of settlement of Water Court cases. Often each case requires unique accounting methods that must be tracked and accounted for in the water records to prevent injury to other water users. Augmentation water is a high value commodity and allows for continued growth in the area. Mis-accounting for this type of water can lead to either shortages in water for development or shorting of senior water rights with consequent financial injury to the water right owner.

The explosive population growth of downstream states and the diminution of endangered species in those states has put Colorado water in the spotlight. There is increasing scrutiny of Colorado's administration of water and compact deliveries with an eye toward gaining water for downstream states. An over-delivery of water to downstream states injures Colorado citizens through missed opportunity. An under-delivery could cause interstate litigation to be initiated by the downstream states or the Federal Agencies.

The Division's statutory obligations are set forth in the following statutes:

Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Stream)
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water)
Title 37	Article 87	Reservoirs (Administration of Water Storage and Release from Reservoirs)
Title 37	Article 92	Division Office Function and Responsibilities/Augmentation Plans and Water Court
Title 37	Article 66	Rio Grande Compact
Title 37	Article 68	Amended Costilla Creek Compact

Element No. 3 – Available Alternatives

Alternative No. 1 (Recommended):

- The addition of a Lead Water Commissioner, who is experienced in water rights disputes, compact delivery obligations, and the requirements of water case filings and augmentation plan accounting will allow the Division to again adequately cover these duties. This position will be responsible for assisting water commissioners in dispute resolution and water supply operations, investigating change of use cases, helping to determine the day-to-day compact delivery method and obligation, reviewing water court cases to determine workable accounting procedures, investigating illegal diversions and changes of use of water rights and accounting of augmentation plans.
- The request includes operating data processing support sufficient to effectively perform the functions in a timely manner.
- In-state (in-Division) travel only is anticipated for this position.
- The benefits of adding this position include maximizing the use and inherent economic value of water used for domestic and crop irrigation in Colorado. Additional benefits accrue from water users having a reliable and unbiased state authority to regulate water supplies in strict accordance with water rights decrees and Interstate Compacts.
- A calculation of the dollar value of these benefits include providing assurance that the holders of senior water rights – that in today's market have values up to $1,500/acre-foot for augmentation water and $45/acre-foot for agricultural use – receive their full entitlement of water. This position would be responsible for assuring that augmentation waters are delivered and administered properly and that Interstate Compact obligations are neither over- nor under-delivered. It is estimated that 500 acre-feet of augmentation water should be delivered and 2,000 to 5,000 acre-feet of compact water is at stake for estimated benefits of up to $975,000 for Colorado.

Alternative No. 2 (Not Recommended):

- Continue current service level with existing staff, allow water court case backlog to increase, and potentially injure either Colorado water users or downstream states/Federal Agencies by either over- or under-delivering on Compact obligations. Potentially injure Colorado property and water rights holders with ineffective accounting of augmentation waters.

Element No. 4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the value of the property owner receiving the total amount of water to which they are entitled.

Element No. 5 – Assessment of Alternatives

There are two alternatives: 1) add a lead Water Commissioner to solve the problem; 2) do not add the position and potentially allow excessive diversions, and excess Interstate Compact deliveries (Alternative No. 2 does not attempt to project the cost of potential litigation).

Alternative No. 1 shows that the expenditure of $72,975 will ensure stricter administration, enforcement and accounting of augmentation plans, and speedier evaluation of water court applications

Alternative No. 2 is to add no additional resources and deal with the escalating problems using current staffing levels. There is no direct cost to the state (indirect costs include potential litigation). However, there is a continuing cost to the decreed senior water rights owners equal to the amount estimated in Alternative No. 1.

Alternative	Cost	Year		Benefit to Owners	Cost-Benefit Ratio
1	$73,085	1		$975,000	13.3
	$72,162	2		$975,000	13.5
2	$0	1		$0	
	$0	2		$0	

Based upon the two alternatives, Alternative No. 1 is our recommendation due to the beneficial impact to the decreed water right owners in the Division.

Breakdown of Costs:

EPST III	Year 1	Year 2
Salary/mo	$ 4,805	$ 4,805
Months	12	12
Salary	$ 57,660	$ 57,660
PERA (10.15%)	$ 5,852	$ 5,852
Medicare (1.45%)	$ 836	$ 836
Total PS	**$ 64,348**	**$ 64,348**
Operating:[8]		
Miles to be Driven (person.)	(9 mos.) 9,750	
Cost/mile (4X4 reimburse)	$ 0.32	
Cost of Miles	$ 3,120	
Miles to be Driven (lease)	(3 mos.) 3,250	(12 mos.) 13,000
Cost/mile	$ 0.222	$ 0.222
Cost of Miles	$ 722	$ 2,886
Operating cost	$ 500	$ 500
Total Operating	**$ 4,342**	**$ 3,386**
Leased vehicle ($369/mo.)[9]	**$ 1,107**	**$ 4,428**
Capital		
Office Furniture	$ 2,021	
Computer & Software	$ 1,247	
Total Capital	**$ 3,288**	
Total Expense	**$ 73,085**	**$ 72,162**
Benefits	$975,000	$975,00
B/C Ratio	13.3	13.5

[8] Assumes vehicle lease begins April 1, 2006. Personal vehicle utilized prior to that date. $.32 and $.222 per mile are the current costs for FY 2004-05.

[9] Lease estimate of $369 monthly provided by Ron Clatterbuck, New Vehicle Coordinator, State Fleet Management, for a ½ ton 4x4 pickup, appropriately equipped.

Department: Natural Resources
Request Title: Division 4 Granby Cabin (District 40) Deputy Water Commissioner (EPSA II)
Division Water Resources

Summary of Requested Alternative: Increase water administration service on the west end of the Grand Mesa by adding $19,079.

A Deputy Water Commissioner has historically served the Granby Cabin area of the Grand Mesa. Recent development and subsequent water administration demands in the Telluride area necessitated a shift of this part-time position from Grand Mesa to the San Miguel River. With the Grand Mesa position vacated, work there was shifted to local water users. But important responsibilities involving both water administration and dam safety remain for this position. The water commissioner is required to physically check and administer approximately two dozen reservoirs in this over-appropriated basin on a regular basis during the period of May through October. Development of diversion records would require some additional time upon completion of the irrigation season.

The Division of Water Resources is therefore requesting an additional Engineering/Physical Sciences Assistant II with knowledge of water rights. The new staff person will assist the Senior Water Commissioner in the administration of the Grand Mesa water rights systems. The requested monthly salary of $2,573 exceeds the entry-level salary for this position of $2,113[10] due to the specific requirements for skilled expertise in water administration. This position often works independently and has a great deal of responsibility with regards to public safety. It is the first line of defense in protecting lives and property from flooding as a result of dam failure.

Element No. 2 – Problem or Opportunity Definition

Division 4 recently experienced a vacancy in one of its three positions on the Grand Mesa. We used this opportunity to transfer the position to the San Miguel Valley, where the growth in population has created an increasing demand for water and has resulted in a greater need for our resources. In 1991, there were 1,231 surface water rights in the valley (District 60). Currently there are approximately 2,050 surface water rights, an increase of 67 percent in 13 years.

The transfer of a position to the San Miguel helped solve one problem, but left the duties and responsibilities of the Granby Cabin area largely uncovered. Our absence in this area forced local water users to hire their own individual to perform some of the duties of our water commissioner. Unfortunately, this non-state employee does not have the authority or experience to perform any water administration duties. Furthermore, this individual is not trained in dam safety observations, nor could he be expected to always offer an objective viewpoint when assessing the safety of the users' dams. This is particularly important because several of these dams are Class I, meaning that there is a strong potential for loss of life if the dam were to fail.

[10] FY 2004-05 Compensation Plan.

The restoration of a Water Commissioner position at the Granby Cabin would alleviate concerns regarding the equitable distribution of water and would assist our Dam Safety Engineer in receiving accurate observations on the performance of dams in the area.

These functions of the Division are authorized in the following statutes:

Title 37	Article 82	Appropriation and Use of Water (Administration of Water in Natural Surface Streams).
Title 37	Article 84	Responsibility of User and Owner (Administration of the Diversion and Measurement of Water).
Title 37	Article 87	Reservoirs (Administration of Water Storage and Release from Reservoirs).

Element No. 3 – Available Alternatives:

Alternative No. 1 (Recommended):

- Add $19,079 for a 6-month Water Commissioner to administer the surface water structures and reservoirs in the Granby Cabin area of the Grand Mesa. This includes daily reporting and verification of diversion structures and reservoir releases.
- The request includes performing data processing activities so the core job functions are performed as efficiently as possible.
- At this time, private vehicle mileage is needed for this position, which is expected to drive approximately 5,000 miles per year. The position will use existing office furniture and computer equipment.
- Tangible benefits of adding this Engineering Assistant (water commissioner) include maximizing the use and inherent economic value on the water used for domestic water supplies and to irrigate crops. Intangible benefits are centered on the reliance that water users have upon an unbiased state authority to regulate limited Grand Mesa water supplies in strict accordance with water right decrees. This reliance has a proven record of lessening both dissension among competitive water users and the potential for contentious and unnecessary litigation.
- A calculation of the dollar value of these benefits includes providing assurance that the holders of senior water rights receive their water, which in today's market have a value worth at least $1,500 per acre-foot. This position would be responsible to make certain that junior water rights or others do not divert water to which they are not entitled. Any diverted water that exceeds this entitlement has direct impact on the senior water right holders equal to the value on the water rights they own. It is estimated that if this position is funded, senior water rights could receive an additional 500 acre-feet of entitled water per year.

Alternative No. 2 (Not Recommended):

- Continue at a substandard level of administration of surface and storage rights, with reliance on the private sector to fulfill water commissioner duties.
- Because the Grand Mesa area is over-appropriated, senior water rights will be injured by this lack of timely administration.
- There is no direct cost to the state for this alternative.

- There is a negative value in the loss of the property of the senior water rights holders if the situation in the Grand Mesa area is not addressed. The senior owners will continue to lose the water to which they are entitled and will suffer the economic consequences.

Element No. 4 – Selected Analytical Technique

The selected technique is to compare the cost of each option to the value to the property owner of receiving the total amount of water to which they are entitled.

Element No. 5 – Assessment of Alternatives

There are two alternatives: 1) add an engineering assistant (water commissioner) and resolve the problem; 2) do not add the engineering assistant and allow the abuse of Colorado's water rights system to worsen.

Alternative No. 1 shows that the expenditure of $19,079 for a 6-month position would ensure that all structures would be administered. The value to the senior water rights owners who receive water to which they are entitled is conservatively estimated at $375,000, assuming only 50% (250 acre-feet) is delivered during the first two years.

Alternative No. 2 is to add no additional resources and deal with the problem using current staffing levels. There is no direct cost to the state. However, there would remain an ongoing injury to the downstream senior water rights owners. As this is the base scenario, zero benefit is assigned.

Alternative	Year	Cost	Benefit of owners	Ratio benefit/cost
# 1	1	$19,079	$375,000	19.7
	2	$19,079	$375,000	19.7
# 2	1	0	0	0
	2	0	0	0

Based upon the two alternatives, Alternative No. 1 is our recommendation due to the beneficial impact of the senior water right owners in the Granby Cabin area of the Grand Mesa.

Breakdown of Costs:

EPSA II

Salary/mo	$ 2,573
Months	6
Salary	$ 15,438
PERA (10.15%)	$ 1,567
Medicare (1.45%)	$ 224
Total PS	**$ 17,229**
Operating:	
Miles to be Driven	5,000
Cost/mile	$ 0.32
Cost of Miles	$ 1,600
Operating cost (.5)	$ 250
Total Operating	**$ 1,850**
Total	**$ 19,079**
Benefits	$375,000
B/C ratio	19.7

Schedule 6

CHANGE REQUEST for FY 2005-06

Department:	Natural Resources	Dept. Approval:		Date: 10/25/04
Priority Number:	16 of 22	OSPB Approval:		Date: 10/26/04
Division:	Colo Water Conservation Bd	Statutory Citation:	C.R.S. 37-60-119,120,121, and 122	
Program:	Water Supply Planning and Finance Section			
Request Title:	Water Supply Planning and Finance Administrative Staff			

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	2,691,488	2,544,577		2,544,577	2,544,577	37,761			2,681,430	32,909
	FTE	29.0	29.0		29.0	29.0	1.0			30.0	1.0
	GF										
	CF										
	CFE	2,691,488	2,544,577		2,544,577	2,544,577	37,761			2,681,430	32,909
	FF										
Personal Services	Total	2,603,269	2,544,577		2,544,577	2,544,577	32,409			2,576,986	32,409
	FTE	29.0	29.0		29.0	29.0	1.0			30.0	1.0
	GF										
	CF										
	CFE	2,603,269	2,544,577		2,544,577	2,544,577	32,409			2,576,986	32,409
	FF										
Operating	Total	88,219	88,655		88,655	88,655	500			89,155	500
	FTE										
	GF										
	CF										
	CFE	88,219	88,655		88,655	88,655	500			89,155	500
	FF										
Capital Outlay - EDO	Total	10,437	10,437		10,437	10,437	4,852			15,289	0
	FTE										
	GF										
	CF										
	CFE	10,437	10,437		10,437	10,437	4,852			15,289	0
	FF										

Letter Notation:

Cash Fund name/Number, Federal Fund Name: CWCB Construction Fund #424

IT Request ☐ Yes X No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)________________)

Efficiency and Effectiveness Analysis

Department: Natural Resources
Request Title: Water Supply Planning and Finance Administrative Staff
Priority #: 16 of 28
Division: Colorado Water Conservation Board (CWCB)

Summary of Requested Alternative:

The Colorado Water Conservation Board requests 1.0 FTE and spending authority in the amount of $37,761 (Cash Fund Exempt – Construction Fund) to provide administrative support to the Water Supply Planning and Finance Section ("Section"). The Section is responsible for the operations and management of the CWCB Loan Program out of the Construction Fund and Severance Tax Trust Fund Perpetual Base Account ("CWCB Loan Program"). The position will be hired as an Administrative Assistant III ("Admin Assistant") and will assume responsibilities of increased duties for the Section as discussed below.

Problem or Opportunity Definition:

The CWCB Loan Program has financed the construction of over 340 water supply projects and provides funds for non-reimbursable projects. The Section is composed of six professional level employees (one manager, three engineers, a contract officer, and an accountant).

To maintain efficiency of the CWCB Loan Program and comply with recommendations of the 1999 State Auditor's Performance Audit of the Construction Fund (copy of recommendations attached as "Attachment A"), several areas of additional duties have been identified as appropriate for an Admin Assistant. The new duties would be in the following areas:

1. The CWCB electronic document imaging system. Pursuant to the State Auditors' recommendation no. 13, the CWCB agreed to participate in the DNR Electronic Imaging Project. The Admin Assistant would act as the Section Imaging Manager and duties would include assembling and preparing documents for imaging, indexing the materials, generating barcode cover sheets, inspecting each imaged document to assure 100% quality control, and document retention and disposal, as well as all other procedures in accordance with the recently adopted CWCB Imaging Procedures Manual.
2. The CWCB Loan Program database. The Admin Assistant would be used to facilitate the continued compliance with State Auditors' Recommendations nos. 2, 13, 14, 16, and 17 through the maintenance and upkeep of the CWCB Loan

Program database. The information in the database is required to scan documents into the CWCB imaging system (Recommendation 13), and would be used to generate reports associated with estimating receipts and disbursements (Recommendation 2), ensuring that borrowers receive accurate and timely bills for payments due (Recommendation 14), complement the development of a standardized loan contract that could be partially populated with database information (Recommendation 16), and generating reports associated with internal controls (Recommendation 17) such as the project checklist, collateral tracking reports, imaging flow table, and project timing report. The Admin Assistant would be responsible for data input, updating information, and creating forms and queries necessary for generating reports.

3. Borrowers' compliance with liability insurance requirements. Pursuant to the State Auditor's Recommendation No. 11, the Admin Assistant would be used to verify that the borrowers for all of the current loan contracts (approximately 230 contracts in repayment and 50 contracts for projects under construction) are in compliance with the loan contract liability insurance requirements and establish a procedure for reporting said compliance. The insurance for borrowers with contracts in repayment are verified annually and the insurance for projects under construction are verified for both the borrower and its contractor prior to each loan disbursement.

In the past ten years, the average number of loans processed each year has increased from 15 to 40, approximately 10% per year for the past ten years, with the same number of staff. To meet the increasing number of loans processed while continuing to offer quality customer service to all of the applicants, it is critical that the staff receives administrative support in the areas discussed above.

Available Alternatives:

1. No action (Status Quo)
2. Fund an FTE for an additional professional level employee to assist with increased responsibilities associated with marketing, feasibility analysis, contract assistance, and project inspections by temporary or contract labor.
3. Fund an FTE, as proposed, for the admin assistant-level duties of the Water Supply Planning and Finance Section

Analytical Technique:

The analytical technique used for this decision item is a benefit-cost analysis.

Assessment of Alternatives:

1. No action (Status Quo) – (Not Recommended)

a. Description:

The Section does not currently have a staff member assigned to perform the administrative functions described above. The Section has been providing self-support through existing professional staff, but this reduces the amount of time they have to focus on the Section's objectives to maintain and manage the integrity of the CWCB Loan Program (which explicitly includes complying with the Legislative Audit Committee recommendations), promote and market the CWCB loan program for sound loan projects, and facilitate and monitor construction of projects.

b. Department's authority to implement the alternative:

Not applicable

c. Anticipated Outcome:

The "No Action" alternative inhibits the effective and efficient operations of the Section aimed at accomplishing the CWCB Loan Program's objectives by redirecting staff time to implementing audit recommendations and performing additional administrative-level tasks, which directly results in a reduction in the marketing and promotion of the CWCB Loan Program, reduces the number of loans being processed, and the number of projects completed, instead of allowing the CWCB Loan Program to continue to increase the number of loans processed by approximately 10% per year.

2. Fund a professional level employee to assist with increased responsibilities associated with increased loan applications by temporary or contract labor – (Not Recommended)

a. Description:

The CWCB will request funding for contract labor to provide additional professional level assistance with marketing, feasibility analysis, contract assistance and project inspections to support the increasing amount of projects financed with the Section's Loan Program.

b. Department's authority to implement the alternative:

C.R.S. 37-60-119, 120, 121, and 122

c. Anticipated Outcome:

This alternative addresses increasing professional needs of the Section. The use of a professional-level temporary or contract labor would allow the existing staff to perform the additional duties of the Section and continue processing the increasing number of loans and continue to provide quality customer service to all of the applicants. However, the use of contract labor limits the efficiency associated with an FTE due to additional staff time required to select, train, and manage the temporary employee, including the repetition of this process when turnover occurs due to the six-month limitation for temporary employees. Unfamiliarity of the temporary employees with the intricacies of the programs will lead to additional time to complete the required tasks due to the length of the training process. Also, additional funding will be required since contract labor rates typically cost more than similar work done in-house.

3. **Fund an FTE as proposed for the office administration of the Water Supply Planning and Finance Section – (Recommended)**

   a. **Description:**

   Adequate, long-term funding for the Administrative Assistant III will enable the Section to operate efficiently and effectively, by assisting in the development of water supply goals of the state and financial goals of the CWCB Loan Program managed by the Section.

   The duties of the Administrative Assistant III would consist primarily of the Section's implementation of the CWCB imaging system, maintenance of its database, and assure compliance with insurance requirements as identified by the State Auditor's 1999 Performance Audit of the Construction Fund.

   b. **Department's authority to implement the alternative:**

   C.R.S. 37-60-119,120,121, and 122

   c. **Anticipated Outcome:**

   Alternative 3 resolves all shortcomings identified under *alternatives 1 and 2.* It allows the Section to maintain an expected level of customer service, operate and maintain the administrative responsibilities recently developed as a result of recommendations from the State Auditor, and continue to successfully manage the increasing amount of projects under CWCB Loan Program to the benefit of the state's water users. Additionally associated with hiring a permanent employee, the staff avoids spending time to retrain and manage temporary employees, which have a high turnover rate and never acquire the basic working knowledge inherent with permanent employees of the CWCB Loan Program.

   In addition, alternative #3 allows the section to meet DNR objectives 1.1 and 1.2.

Link Budget Expenditures to the Full Range of Outcomes:

The proposed budget expenditures of alternatives 2 and 3 would allow for:

- The CWCB Loan Program documents scanned into the CWCB electronic document imaging system managed by a dedicated employee thoroughly familiar with the CWCB Loan Program will be more able to assure all documents are 100% intact and accessible for future reference.
- The CWCB Loan Program database administered by a dedicated employee familiar with the CWCB Loan Program will be more efficiently and effectively managed and generation of the reports to assure compliance with the recommendations of the State Auditor's 1999 Performance Audit of the Construction Fund will be more possible.
- Ability to continue offering quality customer service to the increasing number of applicants in support of the CWCB Loan Program's objectives.

- The CWCB is cash-funded by proceeds from the CWCB Loan Program so none of the proposed alternatives will increase costs to other state agencies, nor to federal, local, or private entities.

Alternatives 2 and 3 will assist the Section with meeting the increasing demands on its agency responsibilities.

Alternative 1 does not meet all of the program goals and is therefore unacceptable. Alternative 2 would minimally meet the program goals but due to turnover and re-training issues, it would not meet program goals in an efficient and effective manner. Alternative 3 would continuously meet all program goals. In addition, alternative 3 would be more cost-effective and efficient than alternative 2 and allow staff to continue to provide quality customer service and is therefore the preferred alternative.

Application of the Analytical Technique/Assumptions and Calculations:

The goals of the Water Supply Planning and Finance Section are as follows:

1. Provide water users with quick and timely access to the loan program professional staff
2. Assure easy access to loan program documents and financial information.
3. Maintain document and data quality in the CWCB Loan Program database and imaging system.
4. Insure efficient and accurate collection of information for the preparation of reports associated with the 1999 State Auditor's Performance Audit of the Construction Fund

As shown below, under *Cost/Benefit Analysis & Budgetary Cost Assumptions and Calculations*, the annual salary (including PERA and Medicare) for an Administrative Assistant III is $32,409. This amount is less than the cost of a professional level employee at approximately $50 per hour to perform duties needed to allow current staff to perform the duties associated with an Admin Assistant. Therefore, it is more cost-effective to permanently hire an FTE (alternative 3) to perform the duties consisting primarily of the Section's implementation of the CWCB imaging system, maintenance of its database, and assure compliance with insurance requirements as identified by the 1999 State Auditor's Performance Audit of the Construction Fund.

- Proposed new FTE will be:

  Administrative Assistant: Administrative Assistant III @ $2,420 month + PERA and Medicare = **$32,409**

  The Administrative Assistant primary responsibilities will be implementation of the CWCB imaging system, maintenance of its database, and assure compliance with insurance requirements.

- Contract/Temporary employee rate: $50/hr, 2,080 hours = $104,000

  Contract/Temporary labor will be used full-time as an alternative to hiring an FTE (alternative 2).

- Operating:

  $ 500 Operating Expenses
  $ 500 Total

- Capital Outlay

  $ 973 Desktop computer
  $ 294 Office Suite software
  $ 2,021 Office furniture
  $ 1,564 Printer
  $ 4,852 Total

Key Issues for Decision Making:

The success of the CWCB Loan Program is not only critical to the water users of the state, but also to the very existence of the CWCB since 100% of the agency's operating budget is provided by proceeds from the CWCB Loan Program managed by the Section.

Omission, Biases, or Uncertainties:

The position will be key in providing assistance with oversight of the construction fund's integrity by complying with the findings of the State Auditor.

Attachment "A"
RECOMMENDATION LOCATOR
Agency Addressed: Water Conservation Board

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
1	14	Set forth goals and objectives for managing the Construction fund Program, closely monitor the progress of implementing procedures that will improve program operations, and make periodic reports on improvements to interest parties.	Agree	July 1999

2	19	Improve methods for estimating receipts and disbursements, assess the effectiveness of marketing strategies, and work with the General Assembly to make the statutory changes needed to reduce the cash balance of the Construction Fund.	Agree	January 1999
3	21	Require applicants to provide evidence that they have explored alternative funding sources prior to approving the use of Construction Fund monies.	Agree	August 1998
4	23	Ensure projects receiving funding through the Program clearly adhere to the funding priorities now established by statute or seek statutory changes.	Agree	February 1999
5	26	Establish reasonable time limits for sponsors to expend project funding.	Agree	February 1999
6	31	Improve methods for ensuring the feasibility of a project prior to loan approval.	Agree	Immediately
7	32	Identify all feasibility study loans made before	Agree	June 1999
		1993, determine their status, and initiate repayment processes if appropriate.		
8	35	Develop and implement a systematic method for quantifying and weighing the relative creditworthiness and financial need of potential loan recipients.	Agree	January 2000
9	38	Ensure collateral for loans adequately protect the State's interests in the event of a borrower's default on its loan obligation.	Agree	June 1999

RECOMMENDATION LOCATOR
Agency Addressed: Water Conservation Board

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
10	41	Ensure that all security documents are filed in a timely manner, and develop reliable systems to monitor compliance with filing requirements.	Agree	June 1999
11	42	Ensure that borrowers comply with requirements to carry general liability insurance.	Agree	June 1999

12	44	Establish a process for reviewing each loan file prior to disbursing funds and periodically thereafter.	Agree	June 1999
13	44	Improve procedures for maintaining loan records including developing a consistent, centralized filing system.	Agree	June 1999
14	46	Ensure that borrowers receive bills that are timely and accurate.	Agree	June 1999
15	50	Formally adopt policies and procedures for handling loan collection problems.	Agree	June 1999
16	52	Work with the Attorney General and State Controller to expand the use of boilerplate contracts, develop monitoring procedures to ensure contracts are amended in a timely manner, and consider adopting a two-phase contracting process.	Agree	June 1999
17	55	Work with the Department of Natural Resources' Accounting Section to improve accounting procedures and to strengthen internal controls.	Agree	July 1999
18	57	Consider staffing changes and other alternatives to correct accounting deficiencies.	Agree	June 1999

f. Agree. New procedures for independent reviews are as follows:
   - The program manager for the Minerals program will review the monthly reconciliation of deposits.
   - A budget and policy analyst will review the monthly cash bonds reconciliation.
   - Copies of monthly reconciliations will be kept on file in the Division.
   - Reviewers will monitor the timeliness of withdrawal and deposits of financial warranty instruments with the State Treasurer.

Implementation date: January 2004.

Colorado Water Conservation Board

The Colorado Water Conservation Board (CWCB) is the State's primary water policy and planning agency. The statutory duty of the Board is to promote conservation of the State's waters and to assist in flood prevention. One program that helps the Board meet its statutory duty is the Construction Fund Loan Program. This program provides loans from its revolving fund for projects that will either increase the beneficial consumptive use of Colorado's undeveloped compact-entitled waters and/or repair or rehabilitate existing water storage and delivery systems. The Board, with the approval of the General Assembly, authorizes loans to local governments, water districts, and private companies for a variety of projects that are important to water conservation in Colorado. Since its inception in 1971, the Board has disbursed over $214 million for over 256 water projects. As of June 30, 2003, CWCB had 222 loans in repayment status totaling $162.5 million.

Compliance With Liability Insurance Requirements

The Board requires borrowers to maintain general liability insurance from the time of contract execution until their loan is repaid. Requiring borrowers to maintain liability insurance protects the State's interests should an unforeseen event at a project site impact a borrower's ability to pay its obligations. In addition, for contracts dated 1995 and later, the State must be named as an additional insured on the general liability insurance policy. To comply with these insurance requirements, borrowers must provide the Board with a certificate of insurance (including an additional insured endorsement) and documentation of policy renewal, as needed, throughout the life of the loan.

During our 1998 Colorado Water Conservation Board Construction Fund Loan Program performance audit, we found that in 41 of 154 active loans (27 percent) there was no evidence that the borrower had obtained the required liability insurance. In addition, we observed issues with the internal loan review process and recordkeeping. We found that files were missing evidence that sufficient liability insurance had been obtained. We observed that these problems could have been identified and corrected if the Board had an internal review process and better file maintenance procedures. Therefore, we recommended that the CWCB ensure that borrowers comply with the general liability insurance requirements and establish a process for reviewing each loan prior to disbursing project funds and at various times thereafter. The Department agreed with our recommendations and planned to develop procedures to ensure that borrowers comply with the liability insurance requirements. The procedures were to be implemented by January 1, 2000.

During our current audit, we reviewed 25 contracts dated between 1999 and 2002 to determine if these recommendations had been implemented. We noted that current certificates of liability insurance were not on file for 17 contracts out of 25, or 68 percent, of the selected sample as follows:

- For five contracts the liability insurance expired in 2001.
- For eight contracts the liability insurance expired in 2002.
- For three contracts the liability insurance expired on March 1, 2003.
- For one contract the liability insurance expired on June 1, 2003.

The outstanding loan balances of the 17 contracts totaled approximately $31.3 million. Missing evidence of liability insurance appears to be attributable to the following factors:

- Inadequate monitoring procedures to identify borrowers who are delinquent in meeting the liability insurance requirements. Such monitoring could be done using the reporting capabilities within the Access database.
- Lack of standard procedures for following up with borrowers who are delinquent in meeting the liability insurance requirements.

As a result of our audit, the CWCB reviewed the 17 loan files and obtained current certificates of liability insurance from borrowers with expired liability insurance for Fiscal Year 2003. Because the period of coverage for the majority of the certificates of liability insurance is one year, these certificates should be renewed by the borrowers annually and forwarded to the CWCB for the term of the loan. If current certificates of liability insurance are not obtained, the CWCB may not be insured against borrowers' default on loan repayments.

Recommendation No. 16:

The Water Conservation Board should improve its monitoring of borrowers' compliance with the liability insurance requirements by:

a. Extending testwork to review all the outstanding loan files to identify instances in which the borrower does not meet insurance requirements and following up to ensure compliance.

b. Utilizing Access database reporting capabilities to monitor liability insurance expiration dates by borrowers on a monthly basis.

c. Developing procedures for following up in a timely manner with all borrowers who are delinquent in meeting insurance requirements.

Department of Natural Resources Response:

Agree. This recommendation had been implemented by September 1999. The CWCB staff had performed an analysis and review of all insurance requirements and updated the certificates on file. Then, a procedure had been implemented to request any expired certificates of liability insurance on a monthly basis. By June 2000, another procedure had been implemented to ensure that no loan disbursements were made unless a current certificate was on file.

Operational changes have occurred at CWCB over the past two years that impacted administrative functions. As a result, insurance compliance was not being performed on a monthly basis due to its time-consuming nature. Hence, the numbers of certificates not on file during the spot audit.

CWCB is currently putting this procedure back into place and expects to accomplish this by June 2004. Additionally, if CWCB, Water Supply Planning and Finance could establish an administrative position to include this as one of the duties, this procedure could be fully implemented at all times.

Implementation date: June 2004.

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department: Department of Natural Resources
Priority Number: 17 of 28
Division: Colorado Oil and Gas Conservation Commission
Program: Operations
Request Title: Piceance & D-J Basin Water Studies and Environmental Data Tool Development

Dept. Approval: William S. Daley **Date:** 10/25/04
OSPB Approval: Nancy J. Day **Date:** 10/25/04
Statutory Citation:

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total	213,078	180,000			180,000	300,725	480,725			
	FTE										
	GF										
	CF										
	CFE	213,078	180,000			180,000	300,725	480,725			
	FF										
Line Item Name Environ-mental Assistance Projects	Total	213,078	180,000			180,000	300,725	480,725			
	FTE										
	GF										
	CF										
	CFE	213,078	180,000			180,000	300,725	480,725			
	FF										

Letter Notation: The funds shall be from the Environmental Response Fund. The unexpended portion in FY 2005-06 should automatically roll forward into FY 2006-07.

Cash Fund name/Number, Federal Fund Name: Environmental Response Fund (Fund #257)

IT Request ☐ Yes ☐ No **(If yes and request includes more than 500 programing hours, attach IT Project Plan)**

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes ☐ No **(If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)**

Request Affects Another Department(s): ☐ Yes ☐ No **(If yes, Name of other Department(s)________________)**

REQUEST TO CHANGE THE BASE OPERATING BUDGET

PART B - EFFICIENCY AND EFFECTIVENESS ANALYSIS

COMMON IDENTIFICATION INFORMATION

Department:	Natural Resources
Priority Number:	17 of 28
Long Bill Group/Division:	Colorado Oil and Gas Conservation Commission
Program Title/Work Package Title:	Operations
Change Request Title:	Piceance & D-J Basin Water Studies and Environmental Data Tool Development
Statutory Cite:	CRS 39-29-109(1)(a)(II), CRS 39-29-109(1)(c)(I), CRS 34-60-102(1), CRS 34-60-106(2)(d)

SUMMARY OF REQUESTED ALTERNATIVE

This change request is for $300,725 to fund additional environmental projects over the two year period FY 05-06 through FY 06-07. With oil and gas drilling activity at historic levels, the Colorado Oil and Gas Conservation Commission must accelerate its efforts to ensure the safety of Colorado's ground water resources. Funding is requested for the following projects:

- Follow Up Baseline Ground Water Quality Study for the Piceance Basin
- Expansion of Ground Water Quality Baseline Data and Produced Gas Data in the D-J Basin
- Development of Reporting, Data Entry, and Query Tools for Bradenhead Test and Bottom Hole Pressure Measurement Data

Funding for this change request is from the Environmental Response Fund.

PROBLEM OR OPPORTUNITY DEFINITION

Oil and gas development in Colorado, and throughout the Rocky Mountain region, continues to expand into new areas as well as established fields. Examples of this can be seen in Garfield and Weld Counties.

Garfield County is located in what is known as the Piceance Basin. Production comes primarily from the Williams Fork Formation, which until recently was not considered to be a good reservoir because of its low permeability. However, innovations in drilling and completion techniques have made this "tight sandstone" reservoir the target of gas wells drilled up to one well per ten acre density. As a result of this intense development, the number of active oil and gas wells in Garfield County has jumped from 775 in 1999 to about 2,000 in 2004, with more wells being drilled every day. In addition to the Williams Fork gas play, operators are beginning to test the coals in the lower portion of the Williams Fork Formation and the coals in the underlying Isles Formation. If economically viable methane gas reserves are discovered, then Garfield County will be the site of another coalbed methane (CBM) play in the state.

Weld County is located in what is known as the Denver-Julesburg Basin, or D-J Basin for short. Although oil and gas production in the D-J Basin started back in the 1940's, with even some older production in certain areas, it continues to be the site of intense drilling of new wells and production from both old and new wells. Oil and gas are produced from at least five (5) different geologic formations. With wells drilled into any or all of these formations, there can be more than 20 wells in one section (1 square mile) of land. Since 1999 the number of active oil and gas wells in Weld County has grown from 9,500 to nearly 12,000, which is a 26% increase.

Although the COGCC staff has conducted ground water and gas studies in both the D-J and Piceance Basins, there is a strong need to expand upon these studies in light of the current level of exploration and development. In addition, because of real and potential impacts from oil and gas operations observed in both of these basins, the increase in activity has been accompanied by concern from local government and the public about the potential impacts to ground water, public health, safety, welfare, and the environment.

COGCC understands the importance of collecting environmental data in areas of active oil and gas development and believes that we must be more proactive in the D-J and Piceance Basins. It is imperative that baseline and existing conditions in these basins be more fully identified and documented. Further existing conduits for migration of hydrocarbons from oil and gas reservoirs to ground water aquifers, water wells, surface water, or to the ground surface should be identified and eliminated whenever possible. The activities proposed in this budget request will provide the COGCC with tools for: 1) optimizing production, while minimizing impacts to human health and the environment; 2) minimizing landowner and gas company conflicts that can result in legal action; 3) determining strategies for minimizing and mitigating impacts when they do occur; and 4) responding to landowner complaints and investigating ground water contamination claims. In addition, the collection, evaluation, and reporting of these kinds of data elsewhere in the state have demonstrated the high value of knowing where impacts to ground water are occurring and, equally important, where they're not.

The measurement of pressure in the annular space between the surface casing and the production casing (known as the bradenhead) in oil and gas wells is one of the best and easiest methods for detecting down hole conditions that might allow gas and fluids to migrate from an oil and gas reservoir into shallower ground water aquifers. In La Plata County operators are required to make bradenhead measurements on over 2,000 oil and gas wells. Currently this data is reviewed by the engineering staff and if high pressures are identified, then they require operators to conduct remedial activities to correct the problem. Although some of this data is tracked in a stand alone database, there is a need to develop a better method for managing this important data and for expanding the tracking system for bradenhead data collected throughout the state.

As part of COGCC Orders 112-156 and 112-157, operators in La Plata County are also required to collect bottom hole pressure data from the newly drilled "infill" wells. In the future, this data will be critical in the Commission's evaluation of whether "down spacing" is necessary for the further development of coalbed methane from the Fruitland Formation. Currently this data is tracked in a stand alone database, but there is a need to develop a better method for managing this important data and for expanding the tracking system for bottom hole pressure data collected throughout the state.

Once the management system for this data (bradenhead and bottom hole pressures) is developed and deployed, it will become a powerful tool for COGCC staff to use for: 1) identifying wells that may potentially act as conduits for gas and fluid migration into the environment; and 2) evaluating the efficiency of reservoir development.

AVAILABLE ATERNATIVES

Description of Alternatives

Alternative 1: Complete all three projects as proposed.

Cost Estimate: $300,725

Assumptions & Calculations:

1. Baseline Ground Water Quality Study for the Piceance Basin

a. Analytical costs:	225 samples @ $425/sample	$95,625
b. Consultant to collect samples:	40 days @ $700/day	$28,000
c. Consultant to evaluate & report findings:	2 days @ $500/day	$ 1,000
		$124,625

2. Expand Coverage of Ground Water Quality Baseline Data and Produced Gas Data in the D-J Basin

Ground water quality baseline data

a. Analytical costs:	80 samples @ $425/sample	$34,000
b. Consultant to collect samples:	20 days @ $700/day	$14,000
c. Consultant to evaluate & report findings:	4 days @ $500/day	$ 2,000

Produced gas composition and isotope data expansion costs

a. Analytical costs:	100 samples @ $450/sample	$45,000
b. Consultant to collect samples:	15 days @ $620/day	$ 9,300

		$104,300

3. Development of Reporting, Data Entry, and Query Tools or Bradenhead Test and Bottom Hole Pressure Measurement Data

Bradenhead testing report data tools		
a. Create computer form:	30 days @ $280/day	$ 8,400
b. Test & debug computer form:	25 days @ $280/day	$ 7,000
c. Deploy to customer & tech. support:	30 days @ $280/day	$ 8,400
d. Develop queries & report to access data:	25 days @ $280/day	$ 7,000
e. Data entry of backlog	90 days @ $120/day	$10,800
Bottom hole pressure report data tools		
a. Create computer form:	25 days @ $280/day	$ 7,000
b. Test & debug computer form:	20 days @ $280/day	$ 5,600
c. Deploy to customer & tech. support:	20 days @ $280/day	$ 5,600
d. Develop queries & report to access data:	15 days @ $280/day	$ 4,200
e. Data entry of backlog:	65 days @ $120/day	$ 7,800
		$71,800
Grand Total		**$300,725**

COGCC's Statutory Authority to Implement Alternative 1

CRS 39-29-109(1)(a)(II) (Senate Bill 96-170) One-half of the severance tax receipts credited to the Severance Tax Trust Fund …shall be credited to the Operational Account of the Severance Tax Trust Fund and used to fund programs established within the Colorado Oil and Gas Conservation Commission, the Colorado Geological Survey, the Division of Minerals and Geology, and the Colorado Water Conservation Board that promote and encourage sound natural resource planning, management, and development related to minerals, energy, geology, and water…

CRS 39-29-109(1)(c)(I) …The General Assembly may appropriate moneys from the total moneys available in the Operational Account of the Severance Tax Trust Find to fund recommended programs as follows:
(A) For programs or projects within the Colorado Oil and Gas Conservation Commission, up to forty-five percent of the moneys in the Operational Account…

CRS 34-60-102(1): Oil and Gas Conservation Act – declares it is to be in the public interest to foster, encourage, and promote the 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…

CRS 34-60-106(2)(d): The commission has the authority to regulate…oil and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, taking into consideration cost-effectiveness and technical feasibility.

Linkage to Specific Department Objectives:

Department of Natural Resources Strategic Objectives include:

1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety.

Alternative 2: No Action.

ANALYTICAL TECHNIQUE – BENEFIT-COST ANALYSIS

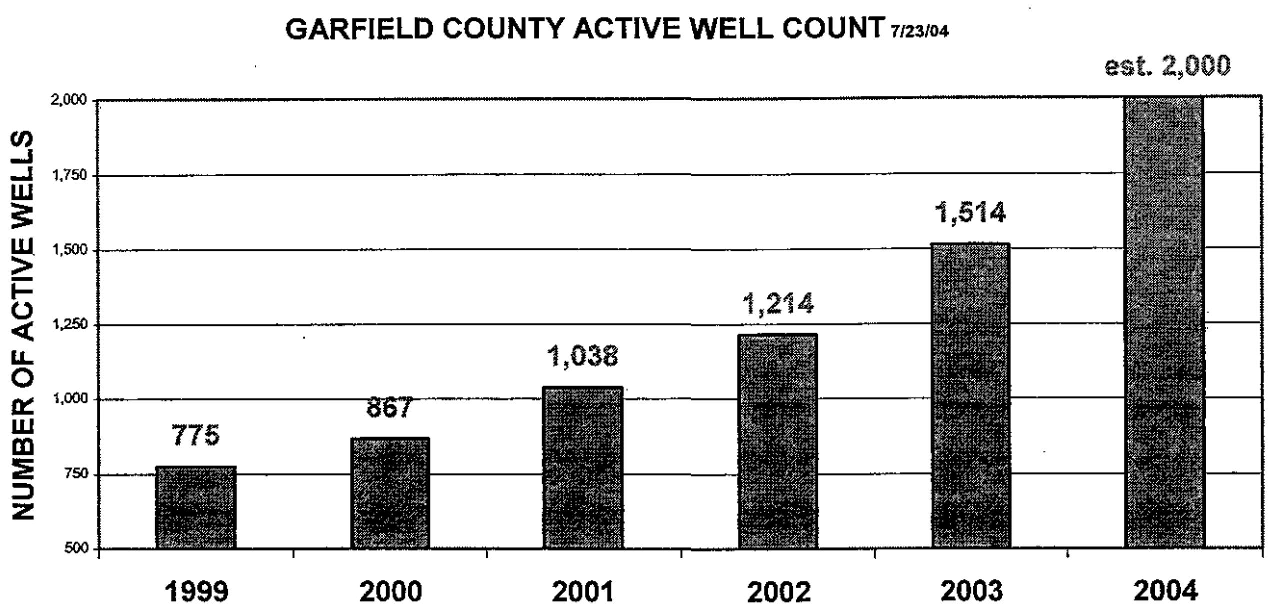
ASSESSMENT OF ALTERNATIVES

Alternative 1

Follow Up Baseline Ground Water Quality Study for the Piceance Basin, Garfield County ($124,625)

Since 1999 the COGCC staff has conducted several water well sampling projects to establish existing ground water quality conditions. These data are used to help determine whether impacts to ground water have occurred as a result of oil and gas activities. In Garfield County over 300 water wells, springs, and other sources of ground water have been sampled through FY 03-04. The COGCC is proposing to resample approximately 225 of the water wells located in the areas of most intense oil and gas development. An additional 25 samples will be performed in areas of little or no new development for chemical analysis, including methane and BTEX compounds. If water wells contain sufficient gas to perform a compositional and stable isotope analysis, then a gas sample will be collected and analyzed. New and historic data would be compared to determine whether detectable, significant changes have occurred in the last few years. Third party contractors would be used to collect the samples, compile the analytical results, and prepare a report of findings. The COGCC environmental staff will review and take action on these findings, as necessary. The sharp rise in active wells in Garfield County, as seen in Figure 1, and the recent release of natural gas from a gas well into West Divide Creek and the adjacent alluvial aquifer, underscore the importance of this project. If additional ground water problems exist they need to be identified and mitigated as soon as possible.

FIGURE 1



Expand Coverage of Ground Water Quality Baseline Data and Produced Gas Data in the D-J Basin ($104,300)

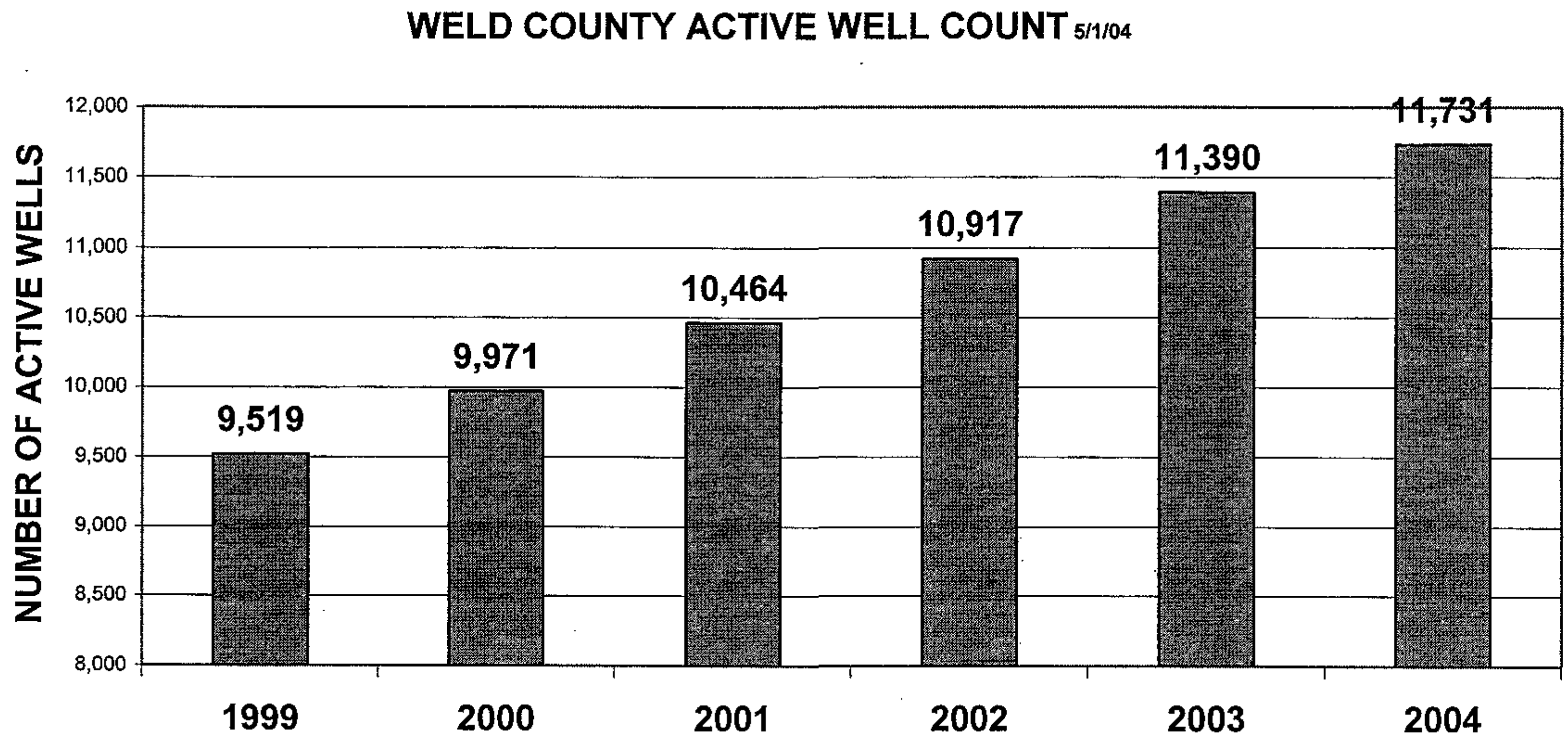
Weld County has nearly 12,000 active oil and gas wells (see Figure 2) and has more new wells being drilled than any other county in the State. Over the past 10 years, numerous complaints from landowners alleging impacts to water wells from oil and gas activities have been investigated in Weld County. Although most of these allegations were found not to be true, a number of impacted water wells have been identified recently. As rural residential development continues to expand, more water wells are being drilled to the Laramie/Fox Hills aquifer in areas with large numbers of oil and gas wells. That means the risk of water wells encountering ground water impacted by oil and gas activities continues to increase.

Currently the COGCC has analytical results for water samples collected from approximately 30 Laramie/Fox Hills water wells in Weld County. COGCC staff would resample most of these and attempt to sample approximately 50 other water wells distributed around the areas of heaviest oil and gas development. Samples would be analyzed for a variety of chemical parameters, including methane and BTEX compounds. If water wells contain sufficient gas to perform a composition and stable isotope analysis, then gas samples will be collected and analyzed. Data would be used to define existing conditions more fully and to aid in the investigation of future water well complaints. Third party contractors would be used to collect the samples, compile the analytical results, and prepare a report of findings.

The COGCC database currently contains gas composition and isotope data for approximately 80 gas wells. Since there are five major producing formations, the distribution of this data is limited. COGCC is proposing in this request to collect gas samples from about 100 additional gas wells. This would give the COGCC about 20 additional samples per formation or roughly 36 total samples per formation. These samples would be analyzed for composition and stable isotopes. Third party contractors would be used to collect the samples, compile the analytical results, and prepare a report of findings. Having this information in the database would accelerate the investigation of ground water contamination complaints. If gas is detected in a water well, then its composition and stable isotope signature would be compared to those of gas wells and other water wells. Evaluation of this data indicates whether the gas in the water well is derived from the gas that can occur naturally in the Laramie/Fox Hills aquifer or if it is similar to gas produced from one of the various oil and gas producing formations. If it is thermogenic gas, the data would be used to focus further investigation into the identity of the migration pathway.

In addition to impacts from natural gas, landowners are concerned about potential impacts from the migration of water from the oil and gas reservoirs into shallower ground water aquifers. Analysis of the water chemistry is used to determine whether such an impact has occurred.

Figure 2



Development of Reporting, Data Entry, and Query Tools for Bradenhead Test and Bottom Hole Pressure Measurement Data ($71,800)

Measuring pressure in the bradenhead annular space of producing oil and gas wells is an important way to determine whether a well has the potential to leak gas and fluid into shallow ground water resources. In La Plata County, operators are required to measure bradenhead pressures periodically in all wells. In response to impacts to ground water from oil and gas wells in other parts of the State, operators have been required to measure bradenhead pressures in numerous wells. Funding is needed to develop a method for operators to report these measurements electronically to the COGCC, create a data entry form, hire a third party contractor to enter the backlog of measurement data, and to develop queries and reports to access data.

In La Plata County, operators are required to measure bottom hole pressures periodically in all new wells. These data are currently tracked in a stand alone Access data base, which contains over 400 measurements from approximately 233 gas wells. Additional funds should be used to develop a method for operators to report these measurements electronically to the COGCC, create a data entry form, upload data from stand alone data base, develop queries and reports to access data.

Once the management system for this data (bradenhead and bottom hole pressures) is developed and deployed, it will become a powerful tool for COGCC staff to use for: 1) identifying wells that may potentially act as conduits for gas and fluid migration into the environment; and 2) evaluating the efficiency of reservoir development.

Linking Budgetary Expenditures to Beneficial Outcomes

Experience gained by the COGCC shows the need to establish baseline conditions related to natural gas seepage, water quality and quantity. If data is not collected using sound scientific practices and properly documented as early as possible during the development of an oil and gas field, then the only yardstick for identifying whether changes are occurring is anecdotal information. The personal motivations of individuals or oil and gas operators sometimes can cause these recollections to be less than reliable. The data collected during the investigation proposed in Alternative 1 would be for the immediate use and benefit of all stakeholders including, operators, local government, landowners, environmental groups, and the COGCC.

Alternative 1 contains three components designed to enable the COGCC to be proactive in identifying whether significant adverse impacts to public health, safety and welfare, or to the environment have occurred or have the potential to occur in the Piceance Basin of Garfield County, the D-J Basin of Weld County, and the San Juan Basin of La Plata County as a result of oil and gas development. Funding for Alternative 1 is proposed to come from the Environmental Response Fund balance.

The primary beneficial outcomes of Alternative 1 are:

Customer	Beneficial Outcome to Customer
The Public, Oil and Gas Industry, and Local Governments	• Provides readily available environmental data for the currently active portion of the Piceance basin and the entire D-J Basin. • Will improve the COGCC's response time for ground water quality complaints. • Reduces potential risk of impacts to public health, safety, welfare and the environment.
COGCC Staff	• Allows staff to find ground water problems earlier while the problems are easier to mitigate. • Earlier resolution of problems lessens the liability of the State. • Will improve understanding of the potential and actual impacts of oil and gas development on ground water resources.

Application of Analytical Technique/Assumptions and Calculations

The following chart provides an analysis of some of the major potential risks to public health, safety, and welfare and the environment created by oil and gas activity that the COGCC will not be able to identify and quickly address without the approval of this request.

Assessment of Annual Incremental Risk Attributed to Alternative 2 - "No Action"								
Issue	**Impact to**	**Cost Per Occurrence**	**Annual Frequency**	**Annual Cost of Impacts**	**Health Safety and Welfare Impact**	**Incremental Risk Factor**	**Cost of Incremental Risk**	**Cost Incurred by**
Contamination from leaking production equipment and pits	Surface owners, soils, ground water	$25,000	10	$250,000	High	10%	$25,000	Industry and COGCC
Contamination from leaking production equipment	Surface Water	$1,250,000	1	$1,250,000	High	10%	$125,000	Industry and COGCC
Staff time spent on bradenhead and bottom hole pressure management	Surface owners and industry	$200,000	1	$200,000	High	5%	$10,000	Industry and COGCC
Total Annual Cost of Alternative 2 - "No Action"							**$160,000**	

Definition of terms used in above chart:

Annual Frequency – Annual average number of total occurrences in Colorado.
Incremental Risk Factor - Percentage of impact not currently being addressed (multiplier to calculate cost of incremental risk).
Cost of Incremental Risk – Portion of annual cost of impacts that is at risk due to current workload management.

Future Value Benefit-Cost Comparisons

Year	Cost of Alternative 1	Benefit of Avoiding Incremental Risk Attributed to Alternative 2 "No Action"	Net Value
1	$200,000	$52,800	($147,200)
2	$100,725	$107,200	$6,475
3	$0	$160,000	$160,000
4	$0	$160,000	$160,000
5	$0	$160,000	$160,000
6	$0	$160,000	$160,000
7	$0	$160,000	$160,000
8	$0	$160,000	$160,000
9	$0	$160,000	$160,000
10	$0	$160,000	$160,000
Total	**$300,725**	**$1,440,000**	**$1,139,275**

Assumptions:

1. Net value is based on the incremental risk cost which could potentially occur in each year.
2. Cost of Alternative 1 is $300,725, of which about $200,000 and $100,725 are spent in Year 1 and Year 2, respectively.
3. In Year 1, the benefit is about one-third of total annual benefit.
4. In Year 2, the benefit is about two-thirds of total annual benefit.

Conclusion: Alternative 1 provides a satisfactory level of customer service and a lower risk of impacts to public health, safety and welfare and the environment. Alternative 2 "no action" subjects the State to an increasing level of risk.

Description of Key Issues for Decision Making

The key issues for decision making are as follows:

- Colorado is experiencing incrementally increasing risk of impacts to public health, safety and welfare and the environment from increased oil and gas activity.
- With the projections of increased oil and gas activity, the level of risk is expected to increase if no action is taken to adequately monitor the State's ground water resources

Recommendation

The COGCC recommends that funding for Alternative 1 be approved.

Schedule 6
DECISION ITEM / CHANGE REQUEST for FY 2005-06

Department:	Natural Resources	Dept. Approval by: William S Daley	Date: 10/26/04
Priority Number:	18 of 28	OSPB Approval: Cindy Z Day	Date: 10/25/04
Division:	Minerals and Geology	Tracking Number:	
Program:	Minerals Regulatory Program	Statutory Citation:	
Request Title:	Minerals Program Line Consolidation		

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/ Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
		(excl EDO Pots)	(excl EDO Pots)			(excl EDO Pots)		(excl EDO Pots)			
Total of All Line Items	Total	1,875,969	1,872,463			1,921,685	0	1,921,685			
	FTE	22.9	22.9			22.9	0.0	22.9			0
	GF	0	0			0	0	0			
	CF	1,782,171	1,784,970			1,825,601	0	1,825,601			
	CFE	93,798	87,493			96,084	0	96,084			
	FF	0	0			0	0	0			
(C) Minerals Personal Services	Total	1,753,355	1,749,849			1,799,071	(1,799,071)	0			Line Deletion
	FTE	22.9	22.9			22.9	(22.9)	0.0			
	GF	0	0			0	0	0			
	CF	1,659,557	1,662,356			1,702,987	(1,702,987)	0			
	CFE	93,798	87,493			96,084	(96,084)	0			
	FF	0	0			0	0	0			

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/ Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
								0			
(C) Minerals Operating Expenses	Total	122,614	122,614			122,614	(122,614)	0			Line Deletion
	FTE	0.0	0.0			0.0	0.0	0.0			
	GF	0	0			0	0	0			
	CF	122,614	122,614			122,614	(122,614)	0			
	CFE	0	0			0	0	0			
	FF	0	0			0	0	0			
(C) Minerals Program Costs (new line -- consolidation of "Personal Services" and "Operating Expenses" lines)	Total	0	0			0	1,921,685	1,921,685			Consolidated Line - no change to FY05-06 base in out year.
	FTE	0.0	0.0			0.0	22.9	22.9			
	GF	0	0			0	0	0			
	CF	0	0			0	1,825,601	1,825,601			
	CFE	0	0			0	96,084	96,084			
	FF	0	0			0	0	0			

Letter Notation: Letter notations indicating Cash and Cash Fund Exempt sources would reference the consolidated "Program Costs" line.

Cash Fund Name/Number: **Mined Land Reclamation Fund / Fund 256**

Federal Fund Grant Name:

Supplemental and Budget Amendment Criteria: o Emergency o Technical Error o New Data o Unforeseen Contingency

Request for New or Replacement Vehicles: o Yes o No (If the Yes box is checked, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

CHANGE REQUEST - FY05-06
Partial Analysis

Identifying Information

Department:	Natural Resources
Priority Number:	18 of 28
Long Bill Group/Division:	Division of Minerals and Geology/Minerals Regulatory Program
Change Request Title:	**Minerals Line Item Consolidation**

Summary of Request:

The request is to consolidate the Minerals Program Personal Services and Operating lines in the Long Bill into a "Program Costs" line. The line consolidation allows management flexibility in addressing customer service improvements out of personal services funds when vacancy savings or shifts in personal services costs occur. No increase to the base budget of the Program results from this request.

Performance Evaluation Factors

1) Number of pending customer service improvements that are implemented.
2) Number of budget Change Requests and dollar amounts that are submitted by the Minerals Program after line consolidation.

Problem/Opportunity Definition

The Minerals Program has an opportunity to implement pending customer service improvements through a "program line" which provides the flexibility of funding one-time operating investments when employee vacancies or other shifts occur in personal services costs (i.e., lower salaries for new hires), within base resources. The current Long Bill line format restricts the types of expenditures that can be charged to the Personal Services line versus the Operating line, whereas "program lines" are unrestricted. Providing a "program line" in the Minerals Program would conform to the format that is used in all other programs within the Division of Minerals and Geology. The use of a "program line" also eliminates the need for submitting decision items for small to moderate cost projects.

Examples of pending customer service projects that this request could enable are:

- Purchase of adequate global positioning equipment to provide/confirm accurate mine boundary information during inspections;

- Allow use of credit cards for payment of permit fees;
- Website enhancements; and
- Maintenance of staff/public computers and of the imaging system where all permit files are accessed.

Statutory Authority
Colorado Mined Land Reclamation Act, as Amended, CRS 34-32-101 *et seq.*
C.R.S. Colorado Land Reclamation Act for the Extraction of Construction Materials, 1995 as Amended, CRS 34-32.5-101 *et seq.*
HB 04-1422, Long Bill

Department of Natural Resources Objectives
DEPT 1.4 Promote continued development of Colorado's mineral and energy resources in a manner that is consistent with environmental preservation and protection of public health and safety by increasing the availability of relevant information and data and maintaining a balanced regulatory environment.

DEPT 1.7 Assist citizens in avoiding or mitigating risks to life and property by providing training, information, technical assistance, and regulatory enforcement related to statutorily authorized programs.

Background Information
The Minerals Program has lacked sufficient Operating funding to adequately implement customer service and staff technology enhancements and to maintain office and field equipment. Other programs within the Division have already implemented the enhancements, which has caused inconsistency of service delivery across the Division. The Program believes that the pending enhancements involve small to moderate costs that would be best funded from existing base resources if the Program were given the flexibility through the requested line consolidation. Many of the pending enhancements cost less than $15,000, which does not warrant the full budget request process on an as-need basis. The "program line" format provides the utmost flexibility for the long-term as technology and equipment needs continuously evolve.

All of the other programs in the Division operate under the "program line" format, which has significantly reduced budget increase submittals from the Division. This request would provide a consistent budget format across the division.

Assumptions and Calculations

COST OF REQUEST $0

Proposed enhancements will be funded only as funds become available through vacancy savings/personnel cost shifts within the proposed "Program Costs" line.

The following table shows examples of pending enhancements that would be addressed over time and the magnitude of costs involved:

Proposed Customer Service/Staff Enhancements	**Assumptions/Cost Estimates**	**Benefits**
Website and Database Improvements – operator access to mine permit forms, point-of-sale capability, permit file database tracking system	Average cost of contractual services per prior web developments implemented in DNR = $3000-$5000	<u>Mine Operator Time Savings</u> --Access to information and forms on website reduces mailing and travel time. <u>Regulatory Staff Time Savings</u> --More accurate mine site data from GIS data reduces enforcement issues and time --Improved tracking systems to track violations inspection frequency, and financial warranty (bond changes.
Cost to maintain field and computer equipment and data bases	PC replacement – replace 2 per year @ $1800 ea = $3,600 GPS Units – purchase 3 @ $4000 each (replace units as needed) = $12,000	<u>Mine Operator Time Savings</u> --More accurate mine site data per GIS data reduces enforcement issues and time.
Fees for Credit Card Acceptance	Assume 75% of fees would be paid by credit card @ 2.08 % per transaction x 75% of total fee revenue of $950,000 = $14,820	<u>Mine Operator/Public Travel and Mailing Savings</u> --Credit card payment acceptance reduces mailing or travel costs for other types of payments
Staff Training – safety re-fresher training and training on mine reclamation and enforcement	5 staff members (20%) attend 1 training session per year @ $250-500/session = $2,500	<u>Staff training</u> Examples of ongoing training requirements: mine safety refresher courses, revegetation technique

techniques		updates, water quality issues, and financial warranty information
OVERALL BENEFIT		<u>Budget Staff Time Savings</u> Time savings realized by division, EDO, OSPB an JBC budget staff due to not submitting Operating decision items less than $20,000

Key Issues for Decision Making

1. No net increase to the base budget of the Minerals Regulatory Program.
2. Program management flexibility to adjust priorities for office/field equipment and information needs.
3. Timely response in addressing customer service improvements and equipment maintenance (not dependent on the budget approval process).
4. Reduction in future submittals of Budget Change Requests from the Division.
5. Precedence of allowing "program lines" in other programs within the Division of Minerals and Geology.
6. Low risk of allowing expenditure flexibility because of other safeguards that are in place such as the Office of Information and Technology approval required for IT purchases over $25,000 and departmental approval for IT over $10,000 and purchasing oversight that ensures fair competition for vendors.

Recommendation

Minerals line consolidation is a no-net increase proposal and is recommended based on the increased flexibility it provides in addressing customer service and staff needs in a timely manner, with a low risk to the State, and because it prevents submittal of budget increase requests for lower cost program enhancements.

Schedule 6

DECISION ITME REQUEST for FY 2005-06

Department:	**Natural Resources**	**Dept. Approval:** [illegible]	**Date:** 10/25/04
Priority Number:	**19 of 28**	**OSPB Approval:** [illegible]	**Date:** 10/25/04
Division:	**Parks and Outdoor Recreation**	**Statutory Citation:** CRS 33-10-101 to 33-15-112	
Program:	**Park Management and Maintenance**		
Request Title:	**Program Line Consolidation**		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Total of All Line Items	Total		26,811,737			26,811,737		26,811,737		26,811,737	
State Parks Program	FTE		250.6			250.6		250.6		250.6	
	GF		2,831,763			2,831,763		2,831,763		2,831,763	
	CF		18,150,983			18,150,983		18,150,983		18,150,983	
	CFE		4,940,060			4,940,060		4,940,060		4,940,060	
	FF		888,931			888,931		888,931		888,931	
(A) State Park Operations	Total						21,407,496	21,407,496		21,407,496	21,407,496
(Total consolidation of establishe	FTE						238.6	238.6		238.6	238.6
state parks line items and new	GF						2,831,763	2,831,763		2,831,763	2,831,763
state parks line items)	CF						16,020,773	16,020,773		16,020,773	16,020,773
	CFE						2,135,060	2,135,060		2,135,060	2,135,060
	FF						419,900	419,900		419,900	419,900
State Parks Program Costs	Total						21,387,626	21,387,626		21,387,626	21,387,626
	FTE						238.6	238.6		238.6	238.6
	GF										
	CF										
	CFE										
	FF										
Impact Assistance Grants	Total							19,870		19,870	19,870
	FTE										
	GF										
	CF										
	CFE										
	FF										

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
(A) Total Established State Parks Program Line (Total consolidation of established state parks line items)	**Total**		20,375,525			20,375,525	(20,375,525)	0		0	(20,375,525)
	FTE		226.1			226.1	(226.1)				(226.1)
	GF		2,667,589			2,667,589	2,667,589				2,667,589
	CF		15,527,976			15,527,976	(15,527,976)				(15,527,976)
	CFE		1,760,060			1,760,060	(1,760,060)				(1,760,060)
	FF		419,900			419,900	(419,900)				(419,900)
Program Costs	**Total**		16,336,724			16,336,724	(16,336,724)	0		0	(16,336,724)
	FTE		226.1			226.1	(226.1)	0		0.0	(226.1)
	GF										
	CF										
	CFE										
	FF										
Seasonal Work Program	**Total**		4,018,931			4,018,931	(4,018,931)	0		0	(4,018,931)
Impact Assistance Grants	**Total**		19,870			19,870		19,870		19,870	
	FTE										
	GF										
	CF										
	CFE										
	FF										

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
(B) Total New State Parks	Total		1,031,971			1,031,971	(1,031,971)	0		0	(1,031,971)
Program Line	FTE		12.5			12.5	(12.5)	0		0	(12.5)
(Total consolidation of new	GF		164,174			164,174	(164,174)	0		0	(164,174)
state parks line items)	CF		492,797			492,797	(492,797)	0		0	(492,797)
	CFE		375,000			375,000	(375,000)	0		0	(375,000)
	FF										
Program Costs	Total		826,171			826,171	(826,171)	0		0	(826,171)
	FTE		12.5			12.5	(12.5)	0.0		0.0	(12.5)
	GF										
	CF										
	CFE										
	FF										
Seasonal Work Program	Total		205,800			205,800	(205,800)	0		0	(205,800)
	FTE										
	GF										
	CF										
	CFE										
	FF										

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Parks Cash Fund 172
IT Request ☐ Yes ☒ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)____________________)

Efficiency and Effectiveness Analysis

Identifying Information/Summary of Request

Department:	Natural Resources – Division of Parks and Outdoor Recreation
Request Title:	Program Line Consolidation
Request Priority Number:	19 of 28
Summary of Requested Alternative:	Program Costs consolidation of all line items
Performance Measures:	Provide greater flexibility in managing the Division's efforts for improved self-reliance and park management.

Problem or Opportunity Definition

State Parks is one of the most self-sufficient state park systems in the nation. Based on Price Waterhouse Coopers' (PWC) 2002 marketing assessment study, the projected statewide economic contribution of state parks' visits for the current fiscal year is more than $200 million.

The Division has sustained significant funding reductions over the past several years as a result of the statewide budget crisis and other economic factors. The current line item structure limits the Division's ability to administer the program in the most efficient manner. This request would consolidate the following line items into a single line: Established State Parks Program Cost, Seasonal Work Program line items and the New State Parks Program Costs. This consolidation would significantly improve the Division's ability to manage its programs while providing maximum flexibility to meet current and future budget challenges.

Available Alternatives

Alternative #1 – Line Item Consolidation based on "State Parks Program Costs"
Statutory Authority for this alternative: CRS 33-10-101 to 33-15-112
Specific Department objectives promoted by this alternative:

1.1 Provide leadership in responding to increasing demands by providing services, information and assistance to accommodate economic activity in conjunction with sound stewardship.

The consolidation would provide greater flexibility to shift resources to different operating areas. For example, it can take three to four months to fill a vacancy, often longer. With greater flexibility, seasonal staff could be hired during peak seasons to deal with immediate workload needs at park areas with vacancies.

Alternative #2 – Status Quo
Specific department objectives promoted by this alternative: None of the objectives listed under alternative #1 would be promoted by this alternative.

Linking Budgetary Expenditures to Full Range of Outcomes
General types of potential benefits.
Preservation of facilities and protection of investment.

Potential reductions in budgetary costs.
This initiative requires no additional General Fund support and has the potential to generate a net positive cash flow.
Provides flexibility to the Division's ability to provide responses to critical decisions affecting State Parks.

Selected Analytical Technique

Cost-Effectiveness Analysis
Future cost avoidance due to improved service with the ability to shift resources to different operating areas.

Background
Since it can take four to six months to fill a vacancy, often longer, seasonal employees could be hired during peak seasons to alleviate the workload pressures at park locations with vacancies.

Non-Monetized Benefits. The proposed option is also anticipated to increase public safety, as parks would provide adequate staff to accommodate park visitors.

Alternative #1: With the consolidation of the line items, we would be able to use personal service vacancy savings dollars to hire seasonal workers for vacant positions during transition and peak periods. With our current budget structure, we could only use vacancy savings to hire classified temporary staff with benefits, which would substantially increase costs. The personal service vacancy was compared with temporary staffing of the position with seasonal employees. The potential impact would be significant. By keeping positions vacant during peak season could potentially result in lost opportunities to maintain/increase revenue, compromised customer service, and increased maintenance costs due to wear and tear on the park facility.

Consolidation of the line item structure would enhance the Division's ability to proactively manage its seasonality issues at State Parks, in the most economical way.

Cost Effectiveness Analysis: Compare opportunity costs

Classification	P/S	SWP
Period	6.0 months	6.0 months
Wages	$17,937	$11,248

Key:
P/S – Personal Services
SWP – Seasonal Work Program

Calculation Worksheet

PERSONAL SERVICES CALCULATION						Decision Item FY05-06 Program Line Item Consolidation				
Classification	Min Monthly Salary	Min Annual Salary	PERA	Medicare	STD	Health and Life	[redacted]	Min Total	Month	**Min Total/12 * Month**
PM I – Temp Classified	2,497	29,964	3,041	434	46	2,388		35,874	6	$ 17,937
Total - Personal Services									**6**	**$ 17,937**
SWP CALCULATION	Seasonal Months	x rate/hr.	x 173/ hrs/mo	PERA & Medicare	STD	Health and Life				**Total SWP**
Seasonal Park Ranger III	6	$9.71	10,079	1,169	na	na				$ 11,248
Total – Seasonal Work Program										**$ 11,248**

Alternatives	Benefits and Objectives		
	Protect our natural resources and maintain our investment in facilities	Provide and promote a variety of outdoor recreational opportunities for citizens and visitors	Maintain a viable park system with the flexibility to meet current economic challenges
Alternative #1 -- Fund Request	Yes	Yes	Yes
Alternative #2 – Do not consider request	Yes	Yes	No

<u>Key Issues for Decision Making:</u>
The current line item structure limits the Parks Division's ability to properly administer the program like a business. Consolidation of the Established State Parks and New State Parks line items would significantly improve the Division's ability to proactively manage its program while providing maximum flexibility to meet current economic business challenges.

<u>Assumptions and Calculations</u>
Brief Description of the Request:
Currently the funding for operation of State Parks is divided among five different line items:
Established State Parks - Program Costs
Established State Parks - Seasonal Work Program
Established State Parks – Impact Assistance
New State Parks – Program Costs
New State Parks – Seasonal Work Program

We would request this be reduced to the following two line items:
State Park Operations
Impact Assistance

<u>Recommendation</u>
Approve the consolidation to the single line item establishing "State Parks Program Costs".

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department:	Department of Natural Resources	Dept. Approval: William Daley	Date: 10/25/04
Priority Number:	20 out of 28	OSPB Approval: [signature]	Date: 10/25/04
Division:	Executive Director's Office	Statutory Citation:	Sects 24-1-105, 24-1-124, and 24-33-101 through 24-33-111
Program:	All Programs		
Request Title:	Parks Self-Sufficiency		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Line Item Name	Total	2,765,490	2,926,475	0	2,926,475	2,926,475	0	2,926,475		3,092,292	0
EDO -	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Admin,	GF	856,297	832,421	0	832,421	832,421	-611,982	220,439		925,030	-705,198
Vehicle	CF	96,772	136,059	0	136,059	136,059	611,982	748,041		137,631	705,198
Lease	CFE	1,771,959	1,913,705	0	1,913,705	1,913,705		1,913,705		1,982,198	0
Payments	FF	40,463	44,290	0	44,290	44,290		44,290		47,433	0

Letter Notation: These funds shall be from various sources of Cash Funds / These funds shall be from various sources of Cash Funds Exempt

Cash Fund name/Number, Federal Fund Name:

IT Request o Yes X No (If yes and request includes more than 500 programming hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: o Emergency o Technical Error o New Data o Unforeseen Contingency

Request for New or Replacement Vehicles: X Yes o No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

Request Affects Another Department(s): o Yes X No (If yes, Name of other Department(s)__________________)

CHANGE REQUEST - FY05-06
Partial Analysis

Identifying Information

Department:	Natural Resources
Priority Number:	20 of 28
Long Bill Group/Division:	Executive Director's Office
Change Request Title:	**Parks Self-Sufficiency**

Summary of Request:
Under the current funding methodology, the Division of Parks and Outdoor Recreation (DPOR) receives a General Fund appropriation for its potted allocations. Given relatively strong growth in cash fund revenues, the Division of Parks and Outdoor Recreation is projecting a fund balance of $1,548,000 at the end of FY 2005-06. The decision item request is to re-finance all Generally Funded vehicle lease expenses with a portion of this excess cash fund balance. For FY 2005-06, this decision item would refinance a total of $611,982 in General Fund vehicle lease expenses. Under this request, DPOR would maintain a cash fund reserve of $936,000 at the end of FY 2005-06. The goal would be to build a fund balance of $1,000,000 by the end of FY 2006-07 to provide a more adequate protection against cash revenue volatility.

Problem/Opportunity Definition
DPOR's receives cash revenue from the sale of a variety of daily and annual park passes, as well as from various other sources such as camping fees and boating registrations. Cash revenue is deposited into the Parks and Outdoor Recreation Cash Fund and is used in administering and managing state parks and outdoor recreation programs in Colorado. DPOR is currently projecting that the cash reserve in the Parks and Outdoor Recreation Cash Fund will grow to $1,548,000 by the end of FY 2005-06. This projection reflects relatively strong year-to-date growth in cash revenues in FY 2004-05. In fact, cash revenues are currently running about 5.5% higher in FY 2004-05 in comparison to FY 2003-04.

Under the current funding methodology established by the Joint Budget Committee, General Fund appropriations are used to cover a portion of State Parks direct operating expenses and almost all of Parks' potted allocations. Potted allocations are appropriated to the Executive Director's Office and include items such as legal services, vehicle lease payments, leased space, salary survey, and health, life, and dental insurance. Revenue projections through FY 2006-07 show that there is sufficient Parks cash available to: (1) cover current appropriated spending authority as well as decision items; (2) apply excess revenues to build up the emergency reserve in the Parks Cash Fund, and; (3) refinance $611,982 in General Fund costs for pots increases.

Under Section 33-10-111.5 (2), C.R.S., DPOR is directed to maintain a fund balance of $500,000. For a number of reasons, it now appears that this minimum fund balance may not be sufficient. First, the $500,000 fund balance was established in 1989 under H.B. 98-1175 (see Page 1349 of the 1989 Session Laws). In comparison, the FY 1988-89 Long Bill provided DPOR with an appropriation of $9.4 million (not including pots), of which $5.9 million was from the Parks Cash Fund. In contrast, the FY 2004-05 Long Bill appropriates $26.8 million to DPOR (again excluding pots), including $17.2 million from the Parks Cash Fund. Given that the spending of Parks Cash has more than tripled since the creation of the $500,000 emergency reserve, we believe that establishing a $1.0 million cash reserve would be a modest first step toward giving DPOR a greater financial stability.

Section 24-75-402, C.R.S., establishes a standard by which agencies are supposed to target cash reserves at 16.5 percent of the amount expended during a fiscal year. This equates to roughly two months of spending being kept in a cash fund reserve. For FY 2003-04, this equated to a target reserve in the Parks and Outdoor Recreation Cash Fund of more than $2.9 million. In contrast, the $500,000 statutory cash reserve equate to about 2.5 percent of FY 2003-04 expenditures (or about 1.3 weeks of spending). In comparison, the Parks statutory reserve is smaller than either the 4.0 percent General Fund reserve or the 3.0 percent TABOR reserve.

In FY 2002-03, Parks cash revenues declined by three percent (or $________) in comparison to the previous fiscal year. The decrease in revenue reflects, in part, the impact of Colorado's drought, an abnormally high number of forest fires, and a depressed economy. In fact, the Division can easily lose hundreds of thousands of dollars in revenue as a result of inclement weather on peak park visitation weekends such as Memorial Day weekend and July 4th weekend. Because it was foreseen, the FY 2002-03 Park cash revenue decline was managed by keeping a large number of positions vacant, by reducing the size of the seasonal workforce, and by reducing utilities and other operating expenses. Unfortunately, this reduced the level and quality of services offered to state parks visitors. A less foreseen decline in revenue – such as might be associated with poor weather on Memorial Day weekend – would potentially have more dramatic impacts because it would occur with only one month left in the fiscal year. For these reasons, DPOR has been discussing the concept of raising its cash fund reserve for a number of years.

As discussed in the footnote report titled "the Impact of Enterprising the Colorado Division of Parks and Outdoor Recreation", DPOR believes passing legislation to designate Colorado State Parks as an enterprise under the Taxpayers Bill of Rights (TABOR) is an issue with promising potential. However, one of the concerns about enterprising is how to assure that Parks consistently meets the statutory requirement to receive ten percent or less of its annual revenues from the General Fund or other state sources. In FY 2003-04, Parks received 10.1 percent of its revenue from the General Fund. Unexpected changes in cash revenue have the potential to unintentionally move Parks in and out of enterprise status. These unexpected revenue changes may involve volatility in Parks cash revenue or fluctuation in receipt of GOCO, Lottery, and federal funds. To maintain enterprise status, Parks may have to proportionately reduce its receipt of General Fund revenues when other cash revenues decline in order to stay within the 10 percent threshold. From an operational standpoint, it might seem counterproductive for Parks to receive a smaller General Fund subsidy when its cash revenues unexpectedly decline. Indeed, Parks most needs its General Fund subsidy when cash revenues are declining. However, a larger cash fund reserve would provide an alternate source of funding to counterbalance the "double whammy" of Parks experiencing a decline in both cash and General Fund revenues. Finally, on a philosophical level, we believe that creating a larger cash fund reserve fits within the spirit of enterprising. If Parks is to operate more like a business, it should be better prepared to weather financial downturns which predictably occur in a normal business cycle.

Assumptions and Calculations

The decision item request is to refinance $611,982 of Generally Funded vehicle lease expenses with Parks Cash. However, inherent in this decision item request is the general philosophy of DPOR trying to be more self-sufficient by taking over responsibility for the funding of its vehicle lease costs in the future. It should be noted that the estimated impacts of this decision item are compounded by the impacts of two other statewide decision items that will effect the overall appropriation for vehicle leases costs. The impacts of these decision items are detailed below:

Parks FY 2004-05 General Fund Base for Vehicle Lease Line Item	$647,876
FY 2005-06 Statewide D.I. – Vehicle Lease Line Reconciliation (Impact to Parks Only)	($82,502)
Projected FY 2005-06 Vehicle Lease Line Fixed Payments	$565,374
Add FY 2005-06 Statewide D.I. – Vehicle Replacements (Impact to Parks Only)	$46,608
GRAND TOTAL – Estimated Vehicle Lease Costs for Colorado State Parks	$611,982

Because the costs of the vehicle replacement decision item will annualize in FY 2006-07, the cost of refinancing DPOR vehicle lease expenses will rise by an additional $93,216 in FY 2006-07. As a result, the refinancing of this line item in FY 2006-07 will require $705,198 from the Parks Cash Fund (and will save an equal amount of General Fund dollars).

Schedule 6
DECISION ITME REQUEST for FY 2005-06

Department: Natural Resources
Priority Number: N/A
Division: Parks and Outdoor Recreation
Program: ITS Projects
Request Title: Systems Operation and Support

Dept. Approval: William Daley Date: 10/25/04
OSPB Approval: Anita L Day Date: 10/25/04
Statutory Citation: CRS 33-10-101 to 33-15-112

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
New Line Item - Systems Operations and Maintenance	Total	N/A	N/A	N/A	N/A	N/A	426,000	426,000	N/A	426,000	390,325
	FTE						0.0	0.0		0.0	0.0
	GF						0	0		0	0
	CF						0	0		0	0
	CFE						426,000	426,000		426,000	390,325
	FF						0	0		0	0

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Lottery - Fund 427
IT Request * Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)__________)

Efficiency and Effectiveness Analysis

Identifying Information/Summary of Request

Department:	Department of Natural Resources
Request /Analysis Title:	Systems, Applications Operations and Maintenance
Request Priority Number:	N/A
Summary:	Operational support for business and administrative systems and applications.
Performance Evaluation:	Complete support plans and strategies with satisfactory approval ratings from affected program staff.

Summary of Request

State Parks is requesting $426,000 in cash exempt funds, specifically Lottery funds, to support several administrative and line of business systems. The systems to be supported are: Parks Automated Record Keeping System (PARKS); law enforcement; volunteer administration; and revenue systems (registrations, internet sales and camping reservations.) this request represents ongoing support for systems developed through the capital construction budget from both the ITS Projects line item and the Major Repairs and Minor Improvements line item. Identifying ongoing support for these systems as a specific line item will improve budget management and accountability.

Problem or Opportunity Definition

State Parks operates several business and administrative systems. The legacy revenue systems includes registrations, camping reservations and internet pass sales (an e-commerce site.) Collectively these systems help to generate $4-$5 million dollars annually. All of these include successful e-commerce sales capabilities. Additionally, State Parks is participating in the Department of Natural Resources pilot for web store development.

There are several administrative systems, all previously described in the Modernization Study submitted to the Information Management Commission in 2001 (the revenue business systems were also described in that document as well). The largest systems include PARKS, the law enforcement citation tracking system and volunteer administration. The PARKS application currently provides administrative support for visitation, revenue and consignment of passes and permits. PARKS Phase II covers law enforcement and volunteer administration.

State Parks officers annually issue just under 6,000 citations, and formally report several times that number of contacts. Citations fall under four possible categories, and the different categories involve different procedures. The law enforcement application tracks citations through payment or judgement, including resolution through the courts, providing appropriate reporting as required by statute and procedure.

The volunteer application supports the administration of the greatly enhanced volunteer system for State Parks. Presently, State Parks attracts over 2,000 volunteers per year. With functionality provided through the volunteer system, this number is expected to increase substantially. The volunteer application enables interested citizens to access information about volunteering for Colorado State Parks on line, review opportunities and then to sign up as a volunteer. The application also allows parks to advertise volunteer opportunities as well as providing reports and analysis for decision makers and managers.

Problem Statement

These different systems require adequate operational support as well as on-going maintenance and replacement. State Parks relies on contractors for this support since FTE are not available. This analysis describes the costs and benefits required to support these systems.

Available Alternatives

Alternative #1: Provide technical support through central IT operations and budget

- Provide technical support for the following applications and systems:
  - PARKS (Visitation, Revenue and Consignment reporting)
  - Volunteers
  - Law Enforcement
  - Reservations
  - Registrations
  - Internet sales site
  - Web site
- Technical support includes server maintenance, operating system and all other system components for the above listed systems and applications.

- User support for the PARKS, internet sales, web site and volunteer applications will be provided. User support specifically for reservations web enabled reporting will also be provided. This is a very specific application that is currently accessible through the web site and, will eventually be accessible, through PARKS. User support for other applications is not included in this request and will continue to be handled by the business managers for law enforcement, reservations, and registrations.
- The strategic approach will be to guarantee consistency with State or departmental policies, work toward consistent technical solutions (e.g., standard server platforms or data bases) and standard management so as to minimize total costs and to seek out economies in procurement and support whereever possible.
- Specific Departmental Objectives:
    - Objective 1.8.1.

Alternative #2: Disburse support requirements to each application or system, Status Quo
- The technical and user support for the above listed applications will be covered by the different business operations.
- Consistency with State or departmental policies will require more management since many managers will be making decisions.
- Consistent procurement, platform standardization, etc., will be problematic since business managers may perceive different advantages from different approaches, resulting in different decisions.
- Total costs will increase due to inconsistent platforms, software, operations, etc., with the resulting heterogeneity driving increased costs.

Statutory Authority
C.R.S. §33-10-101, et seq.

Linking Budgetary Expenditures to Full Range of Outcomes
Alternative # 1 Preferred Alternative - Provide technical support through central IT operations and budget

Operational Area	Beneficial Outcome of Alternative #1
State Parks Operations	Lower overall costs.
	Greater consistency between offices.
	More effective operations due to lower technical support requirements.
	Flexibility in meeting the specific needs for each business application, while maintaining consistency.
	Estimated cost savings of between 20-30% annually, based on secondary research (Travco Report, 2004)
Statewide direction	Greater consistency and compatibility with statewide policies.

General types of Benefits
The overall benefit is for more effective operations and support related connectivity.

Potential budgetary benefits
Alternative #1 is expected to manage overall costs more effectively through greater efficiency in procurement, technical support, operations, total costs and consistency with Statewide and departmental policy.

Alternative # 2 Status Quo

Operational Area	Outcome of Alternative #2
State Parks Operations	Less effective and less consistent operations between applications.
	Greater requirement for technical support with greater complexity and support costs.
Statewide direction	Less consistency with State policies through less focused budget and management processes.

General types of Benefits
This approach might reduce budget requirements in the short term, but costs would increase in the mid or long term and efficiencies would decrease.

Potential budgetary benefits
The impact on the budget is actually negative, as higher costs and lowered effectiveness are expected.

Selected Analytical Technique

Benefit Cost Analysis is the preferred analytical technique

Assessment of Alternatives

Alternative #1 Central Support structure and budget

Necessary background info
- The consistency with policy and directive will become more critical over time.
- The ability to make management decisions consistent with strategic direction helps to ensure that the appropriate solution is derived from more widely based requirements.
- Standard approaches to technical solutions and support will reduce total costs.
- Cross training for technical staff will reduce overall staffing requirements.
- Budgets and costs can best be leveraged through the central approach.
- Costs are based on FY 03-04 support levels using contractor technical staff.

Alternative #2 Funding and decision making through each business application:
Necessary background info
- Experience with this approach is that technical support and cost controls are much more difficult to manage.
- There is no ability to leverage support and costs between systems.
- Costs will be higher.

Analysis

	Requested 2005-06	Estimate 2006-07	Estimate 2007-08	Estimate 2008-09	Estimate 2009-10	Estimate 2010-2011
Alternative #1 Preferred Alternative						
PARKS	206,513	211,469	216,545	221,742	227,063	232,513
Law Enforcement	41,818	42,822	43,849	44,902	45,979	47,083
Volunteer Administration	15,250	15,616	15,991	16,375	16,768	17,170
Revenue Systems (excluding internet)	117,596	120,418	123,308	126,268	129,298	132,401
Internet Pass Sales	44,823	45,899	47,000	48,128	49,283	50,466
Total Preferred Alternative	$ 426,000	$ 436,224	$ 446,693	$ 457,414	$ 468,392	$ 479,633

	Requested 2005-06	Estimate 2006-07	Estimate 2007-08	Estimate 2008-09	Estimate 2009-10	Estimate 2010-2011
Alternative #2 Decentralized Management						
PARKS	206,513	211,469	216,545	221,742	227,063	232,513
Law Enforcement	48,091	48,988	73,482	51,368	77,052	96,315
Volunteer Administration	16,775	15,616	23,424	23,986	16,768	17,170
Revenue Systems (excluding internet)	129,356	142,291	156,520	210,672	231,740	254,913
Internet Pass Sales	44,823	45,899	47,000	48,128	49,283	50,466
Total Decentralized Alternative	$ 445,557	$ 464,263	$ 516,971	$ 555,896	$ 601,906	$ 651,377

Preferred Alternative	$ 426,000	$ 436,224	$ 446,693	$ 457,414	$ 468,392	$ 479,633
Decentralized Alternative	$ 445,557	$ 464,263	$ 516,971	$ 555,896	$ 601,906	$ 651,377
Cost Benefit	5%	6%	16%	22%	29%	36%

Assumptions

- Estimated annual cost increase is 2.4% per year (beginning FY 2006-2007) based on recommended inflation factor.
- Preferred Alternative allows effective cross support, thereby reducing costs between different support activities.
- With Decentralized Alternative, the decline in effectiveness will vary yearly, due to increasingly lower effectiveness, variable technical support costs, no leverage or cross training, etc.
  - PARKS and internet pass sales, already centrally managed will increase by the rate of inflation.
  - Law enforcement will experience higher costs in FY 05-06 due to additional administrative costs. These are estimated at 15% over the preferred alternative (based on past administrative costs.)
  - Volunteer costs will likely be comparable to the preferred alternative in FY 05-06, and more variable thereafter.
  - Revenue systems provide the greatest opportunity for cross support as the two major systems, registrations and reservations, have different peak seasons, enabling shared support.
  - The lack of shared support is expected to increase costs by 10% over the preferred alternative (based on past experience, specifically experience gained when the systems were supported by a single IT professional and over the past two years when there was no common IT support.)

Other key issues for decision making

- Staffing is likely the single most limiting factor for effective operations within State Parks. Any approach that reduces the unmet requirement for staffing helps the division operate more effectively.
- The recommended alternative increases the efficiency for staffing by limiting the variability between systems and applications and allows for consistent strategies and decision making.

Omissions, biases, uncertainties.

- There are no known omissions or biases.
- Uncertainties are always a factor, as new technologies or changing economic conditions may alter the situation in unforeseen ways. However, there are no specific uncertainties identified at this time.

Recommended Alternative

The recommendation is to fund operations and support for the above listed applications and systems, providing the types of support services listed.

Schedule 6
DECISION ITME REQUEST for FY 2005-06

Department:	**Natural Resources**	**Dept. Approval:** William A Daley	**Date:** 10/25/04
Priority Number:	**N/A**	**OSPB Approval:** Andrew Day	**Date:** 10/25/04
Division:	**Parks and Outdoor Recreation**	**Statutory Citation:** CRS 33-10-101 to 33-15-112	
Program:	**ITS Projects**		
Request Title:	**Vehicle Registration System**		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
New Line Item - Vehicle Registration System	Total	N/A	N/A	N/A	N/A	N/A	175,000	175,000	N/A	175,000	0
	FTE						0.0	0.0		0.0	0.0
	GF						0	0		0	0
	CF						0	0		0	0
	CFE						175,000	175,000		175,000	0
	FF						0	0		0	0

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Lottery - Fund 427
IT Request * Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)__________)

Efficiency and Effectiveness Analysis

Identifying Information

Department: Department of Natural Resources
Request /Analysis Title: Vehicle Registration System – Software Revision
Request Priority Number: N/A
Summary: Revision of vehicle registration application to enhance functionality.
Performance Evaluation: Revision or replacement of the existing system with a more robust and more fully functional system.

Summary of Request

The change request is for $175,000 to: (1) Analyze the State Parks Vehicle Registration System to determine how to better support the system and to improve needed functionality for revenue reporting, etc., and (2) revise the existing system or develop a new system based on that analysis. This request would be entirely funded with Lottery dollars. Although this system has been developed and supported through funding allocated from the capital construction line item Major Repairs and Minor Improvements, identifying this project as a specific line item will improve budget management and accountability.

Problem or Opportunity Definition

The vehicle registration system is a major legacy line[1] of business for State Parks. This system, including lock box, internet and over the counter operations, enables customers to register their boat, snowmobile or off highway vehicle (OHV) annually. Over 200,000 customers use this system each year. Annual gross revenue is $4.4 million. An application enhancement will be deployed in early 2005, allowing customers to make an original registration on-line (currently only renewals are allowed over the internet.) This will increase use of the on-line portion of the system.

There are three ways for customers to purchase a registration. These are: (1) in person at the State Parks Littleton Office Registration Unit, which allows customers to obtain an original registration, renewal, or transfer a registration from one

[1] The Vehicle Registration System (VRS) is a "legacy line of business" system since it has been in place for over 8 years and provides a very substantial revenue stream to State Parks.

owner to another; (2) over the internet, which allows renewals and by March 2005 will allow originals or transfers; and (3) through the Lock Box system with the State's banking services, which is for renewals only. Customers can register at many State Parks offices around Colorado as well, and those transactions are processed through the internet module. Originals are for first time registrations (e.g., new vehicles), renewals are for previously registered vehicles, and transfer are to transfer the registration from one owner to another. Over the counter and internet registrations account for about 50% of the total revenues, while lock box is the balance of the roughly $4.4 million annual revenues.

The current vehicle registration system (VRS) was developed and deployed eight years ago. The system is a Linux/Informix database and application, residing on a dedicated server. The system developer, Select Systems, Inc., has provided technical support to the application since deployment through a series of maintenance contracts. The Department of Natural Resources Information Technology Section provides server and other technical system support. While the VRS system is operated by DNR and State Parks, it requires significant support from contractors for the Linux and INFORMIX. The existing server is now over 4 years old and will be replaced in FY 04-05.

Support is increasingly problematic since the application is an Informix 4GL data application running on a Linux operating system, and the system developer is no longer available for these services. Changes in DNR Information Technology Section priorities and staffing have also altered the type of technical expertise available within the Department. Although programmers for Informix are available, the custom nature of the application requires a learning curve delay every time a new programmer is brought in, thereby increasing costs. There are not timely, short term solutions to supporting the VRS. Additionally, the State Parks strategy for other applications, such as PARKS, is focused on a clustered server architecture, hosted at Department of Personnel and Administration, Division of Information Technology. The VRS is a single server architecture with no real time backup beyond tape backup of the data. The Parks Record Keeping System (PARKS) uses a Microsoft operating system and SQL database, and applications are designed with an internet accessible customer (internal and external) interface. Contractor support for Microsoft systems is much more widely available than for Informix.

Problems with adequate and timely support for the application is causing Parks to consider alternatives, including the possibility of developing a new vehicle registration application with different architecture. Specific requirements include:

- Analyze the functionality of the existing system, particularly as the current system is inadequate for revenue reporting, has credit services problems and relies on technical expertise that is not readily or widely available.

- Through the analysis determine if or when the system should be replaced. The existing application could be revised to improve revenue reporting and credit sales management, but on-going difficulty in finding support for regular maintenance are a major concern.
- Pending the analysis, State Parks anticipates the need for budget to develop a new system in FY 05-06. This decision is not final and will be based on the analysis of the registration system. State Parks will not undertake any development effort until all analyses are completed and the report fully reviewed and approved by the appropriate decision makers, including the JBC and IMC. However, given the associated risks and costs, State Parks cannot wait until the next budget cycle to fund this step. Identifying a budget for upgrading or replacement of the registration system is critical while the analysis is taking place.
- Potential to migrate server hosting to Department of Personnel and Administration, Division of Information Technology computer center would be examined in the analysis. This is an attractive option since it increases system availability substantially over the present scenario and allows us to review options for a more robust system architecture.
- Potential to share server space with other applications, such as PARKS application, would be examined in the analysis process.

Problem Statement:
Failure to fund a revision of the existing vehicle registration system will increase the likelihood that the system will fail and that technical support will not be readily available to fix the system in a timely manner. This will result in a decrease in revenues and a high level of customer-citizen frustration and complaints.

Available Alternatives

Alternative #1 Preferred Alternative – Review system requirements and revise or replace existing system:
- Statutory Authority 33110-107; 33-12-104, *et seq.*
- Review the business requirements for the vehicle registration system and either revise the existing system or develop a replacement system.
- The current system does not meet all functional requirements. This analysis process will enable Parks to research short falls and correct any deficiencies.
- Specific Departmental Objectives:
  - Departmental direction is more focused on alternative operating systems and data engines.
  - Objective 1.8.1

Alternative #2 Status quo Alternative:
- Do not revise the vehicle registration system and accept the increasing risk of a major system failure.
- Specific Departmental Objectives:
  - This does not conform to the DNR standards.

Statutory Authority

Authority is given through C.R.S § 33-10-104, *et seq*.

Linking Budgetary Expenditures to Full Range of Outcomes

Alternative # 1 Preferred Alternative - Review system requirements and revise or replace existing system

Stakeholders	*Beneficial Outcome of Alternative #1*
Citizens	Maintain a system that serves over 200,000 citizen customers annually.
	Maintain revenue flows from registrations that support OHV and Snowmobile programs, as well as boater related State Parks operations.
State Parks	Enable server hosting to be migrated to DoIT, consistent with other State Parks applications.
	Greater consistency in support and staffing requirements.

General types of Benefits
The overall benefit is to replace a system that has an increased risk of failure. Mitigate negative impact to revenues and customer satisfaction.

Potential budgetary benefits
Alternative #1 does not expenditures, it provides enhanced protection of revenue flows and improves customer services.

Alternative # 2 Status Quo

Stakeholders	Outcome of Alternative #2
Citizens/State Parks	Saves money in the short term but with greater costs in the longer term.

General types of Benefits
There are no positive benefits from this option.

Potential budgetary benefits
The impact on the budget is actually negative, as this option results in higher costs.

Selected Analytical Technique

Benefit Cost Analysis is the preferred analytical technique.

Assessment of Alternatives

Necessary background info
Preferred Alternative: Review system requirements and revise or replace existing system
Costs: $10,000 for Requirements review and definition; $165,000 for revision or development; Total $175,000
Requirements Definition:

- Registrations and IT staffs review system performance 2-3 times per year, through which they can identify new requirements. This has been in place for several years. Much of the requirements work has already been completed.
- $10,000 identified for consultant analysis and writing the functional requirements, based on existing references and interview with staff. The analysis is targeted to require about 130 hours at $75/hour.

Redevelopment or Replacement:

- Original system development budget was about $55,000, eight years ago.
- Analysis of potential cost to redevelop system was estimated at $150,000 to $165,000 in late 2003.
- Proposed budget for redevelopment or replacement: $165,000. The estimate is for about 2,060 hours at $80/hr.

Benefits:

- Reduce staff time for financial reporting if revenue reporting function incorporated into application. Some benefit is definite, but the actual benefit is not shown here and will be defined in the analysis process.
- This application currently supports $4.4 million in annual revenues. This revenue stream would be better protected.
- Revised or replacement system should further reduce staff time to administer program. This will be addressed more completely in the analysis.
- Support for revised or replacement system would be re-set at acceptable and appropriate level, which will be identified in the analysis process.
- Total cost of ownership should be reduced either through replacement or revision.

	Request 2005-06	Estimated 2006-07	Estimated 2007-08	Estimated 2008-09	Estimated 2009-10
Alternative #1 Preferred Alternative					
System Requirements Review	10,000	0	0	0	0
System Redevelopment or Replacement	165,000				
Projected Budget Requirement	$ 175,000	$	$	$	$
Total Preferred Alternative	**$ 175,000**	**$ -**	**$ -**	**$ -**	**$ -**

	2005-06	2006-07	2007-08	2008-09	2009-10
Alternative #2 No Analysis or Replacement - Status Quo					
System Failure Risk Assessment					
Probability of failure in any week	10%	15%	20%	25%	30%
Expected duration of a failure (weeks)	4	4	4	4	4
Weekly Revenue Impact **(negative)**	$ 20,000	$ 20,480	$ 20,972	$ 21,475	$ 21,990
Revenue Impact (Loss of revenue)	$ 416,000	$ 638,976	$ 872,415	$ 1,116,691	$ 1,372,191
Total Decentralized Alternative	**$ 416,000**	**$ 638,976**	**$ 872,415**	**$ 1,116,691**	**$ 1,372,191**
Preferred Alternative	$ 175,000	$ -	$ -	$ -	$ -
No Analysis or Replacement Approach	$ 416,000	$ 638,976	$ 872,415	$ 1,116,691	$ 1,372,191
Cost Benefit - Net Benefit	$ 241,000	$ 638,976	$ 872,415	$ 1,116,691	$ 1,372,191

Assumptions

- Risk and revenue impacts will increase with each year this is not addressed.
- Risk of failure assumed to be 10% in any given week for Year 1.
  - Risk of failure increases each year the system is not replaced. Gartner Group research suggests that the probability of failure is actually higher than shown here as systems get older.
- Duration assumed to be 4 weeks from the time outage occurs. This accounts for finding technical support, procurement process and average expected time needed to fix problem.

- Revenue impacts assumed to be $20,000 per week in Year 1.
  - Based on shut down of internet registrations and severely restricted over the counter sales from the time the outage occurs until fixed. Lock box sales could continue unabated for 4 weeks.
  - Costs based on 50% of $4.4 million revenues (internet sales or 25% of total would be shut down completely and counter sales, another 25% would be decreased), averaged to weekly rate of $20,000. Some counter sales could be continued, but data entry back log would impact ability to continue over the counter sales for very long. Total internet and counter sales are about $29,000 per week. The $20,000 attempts to account for the loss in sales from the internet and partial loss of counter sales during a 4 week outage and that any backlogged data entry would be manageable once system was restored.
  - Internet sales are expected to increase by 3-5 percent each year. This is not factored into these equations.[2]
- Revenue impact based on Risk times Duration times Revenue Impact, and shown as estimated revenue loss for year.
- Past experience shows that if the registration process is smooth, prompt and effective, more customers register.
  - Conversely experience shows that many customers will simply opt not to register their vehicle or vessel that year if the system is not available, risking instead a possible fine if they come into contact with a State Parks officer.

Other key issues for decision making

- Staffing is the single most limiting factor for effective operations within State Parks. Any approach that reduces the unmet requirement for staffing helps the division operate more effectively.

Omissions, biases, uncertainties.

- There are no known omissions or biases.
- Uncertainties are always a factor, as new technologies or changing economic conditions may alter the situation in unforeseen ways. However, there are no specific uncertainties identified at this time.
- While State Parks is not certain it will revise or replace the registration application, the limitations and risks of the current system necessitate a change.

[2] Internet camping reservations, experienced almost a 10% per year increase in internet sales over 4 years, but internet registrations has historically increased by a smaller percentage.

Recommended Alternative

The recommendation is to approve the request for $175,000 for the analysis and revision or replacement of the registrations system for State Parks.

Schedule 6
DECISION ITME REQUEST for FY 2005-06

Department: Natural Resources
Priority Number: N/A
Division: Parks and Outdoor Recreation
Program: ITS Projects
Request Title: Connectivity

Dept. Approval: William Daley Date: 10/25/04
OSPB Approval: Andrew Day Date: 10/25/04
Statutory Citation: CRS 33-10-~~101~~ 1 to 33-15-112

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
New Line Item - Connectivity	Total	N/A	N/A	N/A	N/A	N/A	44,000	44,000	N/A	44,000	193,600
	FTE						0.0	0.0		0.0	0.0
	GF						0	0		0	0
	CF						0	0		0	0
	CFE						44,000	44,000		44,000	193,600
	FF						0	0		0	0

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Lottery - Fund 427
IT Request * Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)________________)

Efficiency and Effectiveness Analysis

Identifying Information

Department: Department of Natural Resources
Request /Analysis Title: Connectivity
Request Priority Number: N/A
Summary: Operation and maintenance of satellites, wireless and other connectivity solutions.
Performance Evaluation: Connectivity solutions to provide adequate bandwidth and reliability to satisfy business needs within the parks as well as between the parks and other locations.

Summary of Request

The change request is for $44,000 for connectivity at the State Parks. This includes both external connectivity (from the parks outward) and connectivity within the parks (at specific locations only). This request would be entirely funded with Lottery dollars. It continues funding which had previously been appropriated through the capital construction portion of the budget in FY 02-03 and will be an ongoing line item into the future.

Problem or Opportunity Definition

State Parks Information Technology (Parks' IT) has defined specific technologies and strategies that can be deployed effectively at State Parks for connectivity. Connectivity for State Parks must satisfy both external and internal communications needs. There are well defined business requirements for communications from the parks to other locations, such as the central office, the Department, and other State operations. There are also connectivity requirements within the parks so that locations in a park, such as entrance stations, camper services, and swim beach offices can communicate effectively within the park.

There are 46 State Parks and offices distributed across the state. Requirements for connectivity range from email, used for communications and correspondence, to file transfer between offices, to access to administrative and business applications, including the Kronos time keeping system, Parks Record Keeping system (PARKS) and law enforcement applications. Connectivity requirements vary from office to office depending on the number of staff, the type of functions handled at each office, existing IT and infrastructure, and the business applications required at each office. Additionally, the use of computers to conduct business (report writing, inventory control, etc.) and manage the parks also drives the connectivity requirements.

The connectivity operation covers four main components: (1) satellite lease and equipment, (2) satellite technical support within the parks and (3) dial up accounts, all for external connectivity. The fourth component, for internal park connectivity, is wireless network support. This does not cover Multi-user Network (MNT) costs, which are presently appropriated as a separate line item within the Executive Director's Office, Department of Natural Resources through central POTS.

Problem Definition

In order to adequately support the external and internal business requirements, the multi-tiered, four part approach described above is used. External connectivity and internal connectivity are monitored and supported by contractor personnel as well as through an array of service and maintenance agreements with third party vendors.

The specific challenge is to adequately fund connectivity requirements. This request provides for funding sufficient to that task. New requirements such as redundancy, deployment of new systems for entrance automation, etc., and for systems at other parks, will increase these costs. Such new requirements and the potential costs are not reviewed in this analysis. As new requirements are proposed, the analysis will include the cost and other impacts on connectivity requirements.

It is critical to adequately fund this operation, and to fund it through a specific budget line. Connectivity systems require strong technical support. Inadequate funding will result in connectivity failures, operational problems for the parks, and the inability for parks to meet statutory reporting or business requirements.

Available Alternatives

Alternative #1: Preferred Alternative - Centrally fund connectivity and manage connectivity system for the division:
- Statutory Authority 33-10-101, 33-12-101, *et seq*.
- Central funding allows managers to find and achieve economies of scale through standard, consistent deployment of best available technology.
- The multi-tiered approach allows greater flexibility both for connectivity external to the parks and internal within a park, based on the particular requirements of each park.

- Centralized management allows greater responsiveness and efficiency. Common solutions, requiring fewer technical resources, can be deployed and managed through consistent policies and procedures.
- The multi-tiered approach would not be feasible if connectivity management were decentralized.
- Benefits include lowered purchasing costs, standardized technical support and overall management effectiveness.
- Specific Departmental Objectives:
  - Objective 1.8.1.

Alternative #2: Status quo Alternative – Fund connectivity from a number of different budgets, without the ability for a consistent approach based on common or integrated requirements. In this approach, each State Parks would be responsible for funding these costs out of their base operating budget.
- Statutory Authority: As listed above.
- There are no economies of scale; Hence bulk purchasing or statewide service agreements are not as feasible or would result only if administrative staffing were increased.
- Consistent deployments are more difficult since funding must come from a variety of budgets and hence are not managed toward a consistent vision or purpose.
- Configuring the right connectivity approach to the requirements would likely decline since budget availability rather than technological effectiveness would drive the decision process.

Statutory Authority
Authority is given through C.R.S. § 33-10-101, *et seq.*

Linking Budgetary Expenditures to Full Range of Outcomes

Alternative # 1 Preferred Alternative - Centrally fund connectivity and manage connectivity system

Operational Area	Beneficial Outcome of Alternative #1
State Parks Operations	Lower overall costs.
	Greater consistency between offices.
	More effective connectivity for operations.
	Stronger flexibility in meeting the specific needs at each park, while maintaining consistency across the parks system.

	Greater technical support efficiency.
	Estimated cost savings of between 20-30% annually, based on secondary research (Travco Report, 2004)
Statewide direction	Greater consistency and compatibility with statewide initiatives such as MNT. This approach is consistent with the MNT plan for the state.

General types of Benefits
The overall benefit is for more effective operations and support related connectivity.

Potential budgetary benefits
Alternative #1 is expected to manage overall costs more effectively through greater efficiency in procurement, technical support, operations, and consistency with Statewide and departmental policy.

Alternative # 2 Status Quo

Operational Area	*Outcome of Alternative #2*
State Parks Operations	Less effective and less consistent connectivity for park offices.
	Greater requirement for technical support with greater complexity and support costs.
Statewide direction	Not consistent with State's MNT plan or departmental direction.

General types of Benefits
This approach might reduce budget requirements in the short term, but would drive up costs in the mid or long term as it would be much more inefficient and less productive.

Potential budgetary benefits
The impact on the budget is actually negative, as higher costs and lowered effectiveness are expected.

Selected Analytical Technique
Benefit Cost Analysis is the preferred analytical technique.

Assessment of Alternatives

Alternative #1 Centrally fund and manage connectivity:

Necessary background info

- The multi-tiered approach for external and internal connectivity requirements will be maintained.
- This multi-tiered approach consists of (1) satellite network lease and service costs at 28 parks; (2) satellite support (in 28 parks) costs; (3) dial-up accounts for 6 parks; and (4) wireless network support at 5 parks. This provides sufficient flexibility to meet the different requirements at different locations, while allowing technical consistency.
- Costs based on FY 03-04 support levels using contractor technical staff.
- Consistency with statewide and departmental strategic plans and policies will be followed.

Alternative #2 Decentralized funding and management:

- The cost effective approach for external and internal connectivity requirements cannot be maintained, meaning that standardization based on specific requirements at a park and the resulting efficiencies will be lost.
- These are complex systems due to system security, changing technology and other factors, and hence benefit from standardized strategies so that technical staff can deal with a reasonable range of technologies instead of several widely different systems.
- Although the satellite network lease and service contract could be continued, providing adequate support for the parks would be jeopardized or lost since technical staff could not be kept on contract and would not respond promptly to issues.
- Standardized technical support is critical since inconsistencies would result in lowered system performance caused by non-standard connectivity configurations and architecture.
- Decentralized management could not ensure consistent, standardized techniques.
- Short term costs would likely decrease, as shown in the analysis below, while long term costs would increase substantially above costs for the current system.

Analysis

Alternative #1 Central Funding & Management	Request 2005-06	Estimated 2006-07	Estimated 2007-08	Estimated 2008-09	Estimated 2009-10	Estimated 2010-2011
Satellite Lease	66,400	67,994	69,625	71,296	73,008	74,760
Satellite Support	61,870	63,355	64,875	66,432	68,027	69,659
Dial Up	6,000	6,144	6,291	6,442	6,597	6,755
Wireless	44,219	45,280	46,367	47,480	48,619	49,786
Other Support Costs		10,827	11,087	11,353	11,625	11,904
Residual	$ 134,489	$ -	$ -	$ -	$ -	$ -
Preferred Alternative Budget Request	$ 44,000	$ 193,600	$ 198,246	$ 203,004	$ 207,876	$ 212,865

Alternative #2 Decentralized Management	Request 2005-06	Estimated 2006-07	Estimated 2007-08	Estimated 2008-09	Estimated 2009-10	Estimated 2010-2011
Satellite Lease	66,400	67,994	69,625	71,296	73,008	74,760
Satellite Support	61,870	27,842	41,762	31,322	46,983	58,728
Dial Up	6,000	6,144	6,291	6,442	6,597	6,755
Wireless	44,219	45,280	46,367	47,480	48,619	49,786
Other Support Costs		48,240	49,398	50,583	51,797	53,040
Decrease in effectiveness costs	13,361	14,697	16,167	17,783	19,562	21,518
Residual	$ 134,489	$ -	$ -	$ -	$ -	$ -
Status Quo Budget Requirement	$ 57,361	$ 210,196	$ 229,611	$ 224,907	$ 246,565	$ 264,588
Preferred Alternative	$ 44,000	$ 193,600	$ 198,246	$ 203,004	$ 207,876	$ 212,865
Decentralized Alternative	$ 57,361	$ 210,196	$ 229,611	$ 224,907	$ 246,565	$ 264,588
Cost Benefit	30%	9%	16%	11%	19%	24%

Assumptions

- Estimated annual cost increase is 2.4% per year (beginning FY 2006-2007) based on recommended inflation factor.
- Satellite contract will be renewed at similar annual lease rate under either scenario, adjusted for inflation factor.
- Satellite support (in park technical support) will become highly variable and hence less and less effective. Those costs will fluctuate in response to increased problems rather than be systematically managed. Additional costs will be borne from individual park operating base budgets, with impacts on park operations.
- Wireless will not be installed at any additional parks; If wireless is installed at other locations, costs will increase accordingly Estimated cost increase per park, $42,500 installation and first year, $12,750 per year support.
- Connectivity system effectiveness will decline over time, due to decentralized and inconsistent technical support, etc.
- "Other support costs" for Alternative #2 are for impact on FTE staff, increase by about .5 FTE in Year 1.
- The decrease in effectiveness is based on an estimate service decrease of 7.5% (based on industry standards, Travco Report 2004). Thereafter decline in service level estimated to increase at 10% per year.
- State Parks currently has $134,489 in one-time capital funding which will be used for connectivity support in FY 05-06. Budget (from FY 04-05) will off-set and reduce budget required for FY 05-06. There will be no residual after FY 04-05.

Other key issues for decision making

- Staffing is likely the single most limiting factor for effective operations within State Parks. Any approach that reduces the unmet requirement for staffing helps the division operate more effectively.
- The recommended alternative increases the efficiency for staffing by limiting the variability of connectivity solutions, and hence the amount of technical support required.

Omissions, biases, uncertainties.

- There are no known omissions or biases.
- Uncertainties are always a factor, as new technologies or changing economic conditions may alter the situation in unforeseen ways. However, there are no specific uncertainties identified at this time.

Recommended Alternative

The recommendation is to fund connectivity through a central funding source and to manage connectivity centrally for consistency and higher level technical support effectiveness. This also strengthens the ability to manage connectivity consistent with statewide or department policies. Request for FY 05-06 is $44,000 due to residual budget. Actual requirement is for $178,500, of which $134,489 is funded from prior year budgets.

Schedule 6
DECISION ITME REQUEST for FY 2005-06

Department:	Natural Resources	Dept. Approval: William S Daley	Date: 10/25/04
Priority Number:	N/A	OSPB Approval: Nancy L Day	Date: 10/25/04
Division:	Parks and Outdoor Recreation	Statutory Citation:	CRS 33-10-101 to 33-15-112
Program:	ITS Projects		
Request Title:	Asset Management		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
New Line Item - Asset Management	Total	N/A	N/A	N/A	N/A	N/A	230,000	230,000	N/A	230,000	235,059
	FTE						0.0	0.0		0.0	0.0
	GF						0	0		0	0
	CF						0	0		0	0
	CFE						230,000	230,000		230,000	235,059
	FF						0	0		0	0

Letter Notation:
Cash Fund name/Number, Federal Fund Name: Lottery - Fund 427
IT Request * Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)
Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency
Request for New or Replacement Vehicles: ☐ Yes ☒ No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)
Request Affects Another Department(s): ☐ Yes X No (If yes, Name of other Department(s)____________________)

Efficiency and Effectiveness Analysis

Identifying Information

Department:	Department of Natural Resources
Request /Analysis Title:	Asset Management
Request Priority Number:	N/A
Summary:	Estimated replacement for division computers and servers.
Performance Evaluation:	Regular replacement of assets is more cost effective.

Summary of Request

State Parks is requesting $230,000 CFE from Lottery funds to fund the on-going replacement of computers and other IT equipment. This request represents the reallocation of resources for new and replacement computers and equipment that had previously been funded through the Major Repairs and Minor Improvements line item in the Capital Construction budget. Breaking these costs out as a specific line item will improve the Division's ability to track these annual expenditures and set division priorities for Information Technology asset management consistent with state-wide standards and priorities.

Problem or Opportunity Definition

State Parks' computer and peripheral systems are presently adequate to support current business needs. However, technology equipment, including operating system and other software, are not managed for consistent effectiveness. The lack of a standard technological approach outside of the Denver and Littleton offices is increasingly problematic as new enterprise applications, such as the Kronos time keeping system and the Parks Automated Record Keeping System (PARKS) are deployed. User frustration is often high and directed at the application. The problem is that multiple system protocols or different desktop configurations impact the operation of the enterprise system Consistent with Statewide policy from the Governor's Office of Innovation and Technology and the Department of Natural Resources, Information Technology Section, State Parks needs to establish a regular replacement cycle.

The required annual funding to accomplish this is $230,000. With changing costs, or as more equipment is deployed through anticipated projects such as Entrance Automation and later phases of PARKS, this amount will increase.

There are a number of benefits that will follow from moving toward a central funding source for IT equipment replacement. First, this places the agency on a regular replacement cycle. Regular replacement is critical as new, automated systems are deployed and staff are required to use those new systems. Software applications are built to specific standards, in large part since new software versions are released about every 3-4 years. The software development must work toward a specific standard or version, so that developers are not forced to revise their programming while still in development. Since the software-hardware interface and interaction are so critical, hardware replacement is driven by the progression of software changes.

Technical resources and staff are significantly under funded within State Parks (KPMG, "Staffing Recommendations" 2000; Travco "Information Technology Maintenance Staffing Level", 2004.) Parks presently has a .35 FTE (under contract) assisting with desktop support and maintaining in park networks for 46 offices around Colorado. According to established industry standards, Parks should have 4-6 FTE dedicated to desktop and user support (Travco 2004, Ibid.) If technology equipment is highly heterogeneous and of mixed ages and types of technology, as is the case with State Parks, the staffing requirements are even higher. Moving the agency toward a more homogeneous and consistent hardware profile would alleviate the staffing shortfall.

Operating systems now available also enable remote management and administration of desktops (reflecting industry's drive to reduce their operating costs). This has particular appeal to State Parks, as we may be able to utilize these options to reduce the staffing requirements mentioned above through tighter control over the desktop. There is also an increased reporting component as the State and department move toward greater inventory control and management. Another benefit of a central funding source is that it allows State Parks to move effectively toward one or two replacement ordering cycles during the year (again, consistent with State policy), enabling us to focus staff resources on those specific times instead of spreading orders across several weeks or months with no economies of scale.

The goal is to improve this situation by establishing a regular replacement cycle for all equipment, through a central funding source.

Available Alternatives

There are two alternatives: (1) Create a regular asset replacement schedule, consistent with Statewide and Departmental direction and policies, funded and managed centrally; or (2) Continue the present practice of ordering equipment as money and managerial preferences dictate. The recommended, preferred alternative is for a regular, scheduled approach consistent with State policy.

Alternative #1: Preferred Alternative: Establish a regular replacement schedule for computer assets (computers and peripherals).

- Establish a regular replacement schedule for IT equipment based on State and Department policies, adjusted for experience more specific to State Parks requirements. For example, printers in seasonal use areas may only be heavily used for part of the year and may not need to be replaced as frequently.
- Centrally fund this so that it can be effectively managed and so that standard configurations are deployed, while allowing appropriate configurations based on work and business requirements.
- Deploy standard configurations for hardware and software
- Manage all technology equipment, including printers and other peripherals consistent with this strategy.
- Benefits include lower total cost of ownership, lower support costs, lower administrative costs for procurement and inventory control.
- Standard computer platforms, software and equipment facilitate the deployment of critical business applications through consistency.
- Specific Departmental Objectives:
  - Proposed replacement standards for IT equipment
  - State Parks Objective 1.8.1

Alternative #2: Status Quo: Continue to fund procurements through decentralized efforts without coordination.

- This Alternative does not conform to direction from the Governor's Office and the Department related to regular IT equipment replacement.
- Results in higher staff support costs, estimated at up to twice the cost (Gartner Group, 1998).
- Results in greater repair and other ownership costs.
- Inhibits deployment of new systems.
- Specific Departmental Objectives:
  - This does not conform to the proposed replacement standards for IT equipment (Asset Management Plan Draft)

Statutory Authority

Authority is given through C.R.S. § 33-10-101, *et seq*.

Linking Budgetary Expenditures to Full Range of Outcomes

Alternative #1 Preferred Alternative: Establish a regular replacement schedule for computer assets (computers and peripherals).

Beneficiaries	*Beneficial Outcome of Alternative #1*
State Parks	Regular replacement is consistent with State direction and policy.
	Fewer technical staff are needed for support if assets are a consistent type and functional capability.
	Deployment of new applications is facilitated (and less expensive) if assets are consistent.
	Lower support and staffing requirements would provide additional resources for field

General types of Benefits
The overall benefit is for a more effective operations and support related to IT equipment.

Potential budgetary benefits
Although Alternative #1 does not reduce budget requirements, it does reduce the overall cost of ownership. Staff resources that would otherwise be required to maintain older computers may be redirected to other Parks' programs.

Alternative # 2 Decentralized procurement approach: Status Quo
The alternative would continue the practice of ordering computer equipment intermittently during the year. This results in greater effort for each procurement time (no bulk ordering), less effective pricing for the State, and greater ownership and support costs over the life of the equipment. There are no economies of scale and little control over software versions and equipment types, resulting in a highly diverse technical environment that requires more technical support and staff. Such a diverse environment will also make deployment of enterprise solutions much more problematic since different computer configurations interface differently with enterprise solutions. This alternative is more costly and drives a need for more staff.

Beneficiaries	Outcome of Alternative #2
State Parks	Replacement costs vary each year, but Total Costs of Ownership will increase and efficiency will decrease. There are greater costs, less efficiencies and higher need for more staff.

General types of Benefits

There are no efficiencies with this approach. Efforts to improve efficiencies through automation will not happen. The option will result in a greater need for additional technical support staff.

Computer purchases will be based more on personal knowledge of technology, rather than quantitative assessments of business or work assignments, resulting in a wider range of technical equipment, at higher prices and without any requirements for the purchase.[1]

Potential budgetary benefits

The impact on the budget is negative, as this option results in higher costs.

Selected Analytical Technique

Benefit Cost Analysis is the preferred analytical technique.

Assessment of Alternatives

Necessary background info

In FY 03-04, the decentralized approach cost over $142,000 for desktops alone. The recommended approach is expected to cost about $131,500 for desktop replacement. The decentralized approach in that same year, resulted in only

[1] There are documented cases where staff have requested needlessly expensive desktops without any assessment of the true requirements.

replacing other equipment, as needed. This equipment included as printers, hubs, switches when those units failed, resulting in needless lost staff productivity while waiting for replacement units. A regular replacement cycle, while not totally alleviating system failures, would avoid most of the lost staff time.

Analysis

Alternative #1 Preferred Alternative Regular replacement cycle		Request 2005-06		Estimate 2006-07		Estimate 2007-08		Estimate 2008-09		Estimate 2009-10		Estimate 2010-2011
Equipment Replacement												
Desktops/Laptops	$	131,477	$	134,633	$	137,864	$	141,173	$	144,561	$	148,030
Printers/Peripherals	$	30,180	$	30,905	$	31,646	$	32,406	$	33,184	$	33,980
Routers, Hubs, Other network equip, etc.	$	28,971	$	29,666	$	30,378	$	31,107	$	31,854	$	32,618
Labor: Installation (Contract $46/hr)	$	35,389	$	36,239	$	37,108	$	37,999	$	38,911	$	39,845
Disaster Recovery	$	3,982	$	4,078	$	4,175	$	4,276	$	4,378	$	4,483
Total Preferred Alternative	$	230,006	$	235,520	$	241,172	$	246,961	$	252,888	$	258,957

Alternative #2 Decentralized/Status Quo Decentralized and As needed replacement												
Equipment Replacement												
Desktops/Laptops	$	142,305	$	145,720	$	149,218	$	152,799	$	156,466	$	160,221
Printers/Peripherals	$	10,619	$	10,874	$	11,135	$	11,402	$	11,676	$	11,956
Routers, Hubs, Other network equip, etc.	$	10,872	$	44,959	$	61,072	$	81,331	$	94,558	$	108,103
Labor: Installation (Contract $46/hr)	$	28,152	$	28,828	$	29,520	$	30,228	$	30,953	$	31,696
Disaster Recovery	$	3,982	$	4,078	$	4,175	$	4,276	$	4,378	$	4,483
Total Cost of Ownership	$	38,390	$	91,076	$	70,189	$	80,152	$	73,731	$	72,395
Total Alternative #2 Status Quo	$	234,320	$	325,535	$	325,309	$	360,187	$	371,762	$	388,855

		2005-06		2006-07		2007-08		2008-09		2009-10		2010-2011
Regular replacement cycle	$	230,006	$	235,520	$	241,172	$	246,961	$	252,888	$	258,957
Decentralized and As needed replacement	$	234,320	$	325,535	$	325,309	$	360,187	$	371,762	$	388,855
Cost Benefit		2%		38%		35%		46%		47%		50%

Assumptions

- Staffing costs are for installation, not support, and are based on past experience.
- Current inventory is: 255 desktops and laptops (for 240 FTE, plus up to 600 seasonals); 162 printers (43 offices), and 160 hubs, routers, switches, and other networking items.
  - Actual replacements will be:

Type	Replacement Schedule
Desktops/Laptops	3 year cycle
Printers/Peripherals	4 year cycle
Networking equipment	4 year cycle

- Costs will increase at 2.4 percent, consistent with the recommended inflation factor for FY 2005-2006.
- Additional ownership costs and inefficiencies will drive up total costs.
  - Total Cost of Ownership for older equipment is expected to increase overall costs by 20 percent (derived from Gartner 1998).
  - Greater homogeneity of equipment types lowers the overall support requirements, since there are more consistent requirements for technical expertise.
  - Actual staffing requirements if full support were provided would be about 1.2 FTE per year, based on research from Travco 2004.
  - Peripheral replacements, particularly for networking equipment, will occur irregularly and will result in lost productivity. These occurrences are shown in the Network Equipment and Total Cost of Ownership lines and reflect likely system crashes with corresponding equipment purchases, installation costs (with higher "emergency" charges) and lost productivity. Productivity costs are estimated at $45/hour, 5 employees impacted for 2.75 days.
- Additional equipment required due to new automated applications are not factored into these equations and will increase costs.

Other key issues for decision making

- Staffing is the single most limiting factor for effective operations within State Parks. Any approach that mitigates staffing shortfalls helps the division operate more effectively.
- The recommended alternative improves efficiency through standardization of assets (replacement and configuration) allowing for the benefits implicit in newer computer operating systems to control user actions that result in demand for more technical support.

- Efforts are underway within DNR to leverage stronger technical support through inter-agency cooperation.
- Total cost of ownership is reduced through regular replacement strategies.

Omissions, biases, uncertainties.

- There are no known omissions or biases.
- Uncertainties are always a factor, as new technologies or changing economic conditions may alter the situation in unforeseen ways. However, there are no specific uncertainties identified at this time.

Recommended Alternative

Benefits each year vary depending on anticipated costs. The overall benefit of the recommended approach averages 37% over the alternative, which is about $500,000 over 6 years.

Schedule 6

DECISION ITEM REQUEST for FY 2005-06

Department:	Department of Natural Resources	Dept. Approval: Will A Daley	Date: 10/25/04
Priority Number:	Statewide	OSPB Approval: Linda L Day	Date: 10/25/04
Division:	Executive Director's Office	Statutory Citation:	Sects 24-1-105, 24-1-124, and 24-33-101 through 24-33-111
Program:	All Programs		
Request Title:	FY 2005-06 Vehicle Lease Line Reconciliation		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Line Item Name	Total	2,765,490	2,926,475	0	2,926,475	2,926,475	19,610	2,946,085		2,946,085	19,610
EDO -	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Admin,	GF	856,297	832,421	0	832,421	832,421	(90,934)	741,487		741,487	(90,934)
Vehicle	CF	96,772	136,059	0	136,059	136,059	36,092	172,151		172,151	36,092
Lease	CFE	1,771,959	1,913,705	0	1,913,705	1,913,705	60,521	1,974,226		1,974,226	60,521
Payments	FF	40,463	44,290	0	44,290	44,290	13,931	58,221		58,221	13,931

Letter Notation: These funds shall be from various sources of Cash Funds / These funds shall be from various sources of Cash Funds Exempt

Cash Fund name/Number, Federal Fund Name:

IT Request o Yes X No (If yes and request includes more than 500 programming hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: o Emergency o Technical Error o New Data o Unforeseen Contingency

Request for New or Replacement Vehicles: X Yes o No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

Request Affects Another Department(s): o Yes X No (If yes, Name of other Department(s)__________)

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department: Department of Natural Resources **Dept. Approval:** **Date:** 10/25/04
Priority Number: Statewide **OSPB Approval:** **Date:** 10/25/04
Division: Executive Director's Office **Statutory Citation:** Sects 24-1-105, 24-1-124, and 24-33-101 through 24-33-111
Program: All Programs
Request Title: FY 2005-06 Vehicle Replacements

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003-04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Line Item Name	Total	2,765,490	2,926,475	0	2,926,475	2,926,475	165,816	3,092,291		3,092,292	497,448
EDO -	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Admin,	GF	856,297	832,421	0	832,421	832,421	92,609	925,030		925,030	277,827
Vehicle	CF	96,772	136,059	0	136,059	136,059	1,571	137,630		137,631	4,713
Lease	CFE	1,771,959	1,913,705	0	1,913,705	1,913,705	68,493	1,982,198		1,982,198	205,479
Payments	FF	40,463	44,290	0	44,290	44,290	3,143	47,433		47,433	9,429

Letter Notation: These funds shall be from various sources of Cash Funds / These funds shall be from various sources of Cash Funds Exempt

Cash Fund name/Number, Federal Fund Name:

IT Request o Yes X No (If yes and request includes more than 500 programming hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: o Emergency o Technical Error o New Data o Unforeseen Contingency

Request for New or Replacement Vehicles: X Yes o No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/GSS)

Request Affects Another Department(s): o Yes X No (If yes, Name of other Department(s)____________________)

Schedule 6
DECISION ITEM REQUEST for FY 05-06

Department:	Natural Resources	Dept. Approval: William S Daley	Date: 10/25/04
Priority Number:	Statewide	OSPB Approval: Anelia Day	Date: 10/25/04
Division:	Executive Directors Office	Statutory Citation:	
Program:	Information Technology		
Request Title:	Truth in Rates - Multiuse Network		

		1	2	3	4	5	6	7	8	9	10
	Fund	Prior-Year Actual FY 2003 04	Appropriation FY 2004-05	Supplemental Request FY 2004-05	Total Revised Request FY 2004-05	Base Request FY 2005-06	Decision/Base Reduction FY 2005-06	November 1 Request FY 2005-06	Budget Amendment FY 2005-06	Total Revised Request FY 2005-06	Change from Base in Out Year FY 2006-07
Line Item Name	Total	851,224	868,911	0	868,911	780,952	(87,959)	789,181	0	789,181	(87,959)
Exuective Directors	FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Office - Info. Tech.	GF	295,163	312,174	0	312,174	320,403	8,229	328,632		328,632	8,229
Multiuse Payments	CF	552,721	551,227	0	551,227	457,833	(93,394)	457,833		457,833	(93,394)
	CFE	0	0	0	0	0	0	0		0	0
	FF	3,340	5,510	0	5,510	2,716	(2,794)	2,716		2,716	(2,794)

Letter Notation: This amount shall be from various sources of cash funds and cash funds exempt

Cash Fund Name/Number, Federal Fund Name:

IT Request X Yes No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel & Administration)

Request Affects Another Department(s): X Yes No (If yes, name of other Department(s): _DPA________________)

Schedule 6
DECISION ITEM REQUEST for FY 2005-06

Department:	Department of Natural Resources	**Dept. Approval:** William Daley	**Date:** 10/25/04
Priority Number:	Statewide	**OSPB Approval:** Nancy McCallin	**Date:** 10/25/04
Divisions:	Parks and Widlife	**Statutory Citation:**	
Program:			
Request Title:	Dispatch Services from Dept. of Public Safty		

	Fund	1 Prior-Year Actual FY 2003-04	2 Appropriation FY 2004-05	3 Supplemental Request FY 2004-05	4 Total Revised Request FY 2004-05	5 Base Request FY 2005-06	6 Decision/Base Reduction FY 2005-06	7 November 1 Request FY 2005-06	8 Budget Amendment FY 2005-06	9 Total Revised Request FY 2005-06	10 Change from Base in Out Year FY 2006-07
Total of All Line Items	**Total**	21,378,920	21,758,862		21,758,862	22,147,384	67,237	22,214,621		22,214,621	67,237
	FTE	219.8	244.1		244.1	244.1	0.0	244.1		244.1	0.0
	GF	3,522,232.0	2,667,589.0		2,667,589.0	3,069,098.0	1,146	3,070,244.0		3,070,244.0	1,146.0
	CF	14,701,281.0	15,527,976.0		15,527,976.0	15,505,291.0	6,649	15,511,940.0		15,511,940.0	6,649.0
	CFE	2,895,319.0	3,143,397.0		3,143,397.0	3,153,095.0	59,442	3,212,537.0		3,212,537.0	59,442.0
	FF	260,088.0	419,900.0		419,900.0	419,900.0	0	419,900.0		419,900.0	0.0
Line Item Name	**Total**	19,916,851	20,375,525		20,375,525	20,754,349	7,795	20,762,144		20,762,144	7,795
Divsision of Parks	**FTE**	201.7	226.1		226.1	226.1	0.0	226.1		226.1	0.0
Established State	**GF**	3,522,232	2,667,589		2,667,589	3,069,098	1,146	3,070,244		3,070,244	1,146
Parks	**CF**	14,701,281	15,527,976		15,527,976	15,505,291	6,649	15,511,940		15,511,940	6,649
	CFE	1,433,250	1,760,060		1,760,060	1,760,060	0	1,760,060		1,760,060	0
	FF	260,088	419,900		419,900	419,900	0	419,900		419,900	0
Line Item Name	**Total**	1,462,069	1,383,337		1,383,337	1,393,035	59,442	1,452,477		1,452,477	59,442
Division of Wildlife	**FTE**	18.1	18.0		18.0	18.0	0.0	18.0		18.0	0.0
Information Tech.	**GF**	0	0		0	0	0	0		0	0
Personal Services	**CF**	0	0		0	0	0	0		0	0
	CFE	1,462,069	1,383,337		1,383,337	1,393,035	59,442	1,452,477		1,452,477	59,442
	FF	0	0		0	0	0	0		0	0

Letter Notation: These funds shall be from various sources of Cash Funds and Cash Funds Exempt

Cash Fund name/Number, Federal Fund Name: Parks Cash Fund and Widlife Cash Fund

IT Request ☐ Yes ☐ No (If yes and request includes more than 500 programing hours, attach IT Project Plan)

Supplemental and Budget Amendment Criteria: ☐ Emergency ☐ Technical Error ☐ New Data ☐ Unforeseen Contingency

Request for New or Replacement Vehicles: ☐ Yes X No (If yes, a copy of the Schedule 6 will be forwarded to the OSPB analyst assigned to Personnel/DPA)

Request Affects Another Department(s): X Yes ☐ No (If yes, Name of other Department(s)_Public Safty__________________)