DEPARTMENT OF NATURAL RESOURCES
(EXECUTIVE DIRECTOR’S OFFICE, DIVISION OF PARKS AND WILDLIFE, COLORADO WATER CONSERVATION BOARD, DIVISION OF WATER RESOURCES)
FY 2019-20 JOINT BUDGET COMMITTEE HEARING AGENDA

Monday, January 14, 2019
3:00 pm – 5:00 pm

3:00-3:15   INTRODUCTIONS AND OPENING COMMENTS

Presenter:
• Bill Levine, Budget Director

Supporting Presenter:
• Ginny Brannon, Deputy Director

1:45-3:15   DEPARTMENT OVERVIEW

Main Presenters:
• Bill Levine, Budget Director
• Bob Broscheid, CPW Division Director
• Justin Rutter, CPW Chief Financial Officer

Topics:
• General Questions: Page 1, Questions 1-2 in the packet

3:15-3:50   DIVISION OF PARKS AND WILDLIFE

Main Presenters:
• Bob Broscheid, CPW Division Director
• Justin Rutter, CPW Chief Financial Officer

Topics:
• General Questions: Page 3, Questions 3-6 in the packet
• R1 Increase State Parks Spending Authority: Page 7, Questions 7-8 in the packet
• R4 Capital Development Resources: Page 9, Question 9 in the packet
• R6 Increase Wildlife Council Spending Authority: Page 12, Questions 10-11 in the packet

3:50-4:00   BREAK

4:00-4:40   COLORADO WATER PLAN IMPLEMENTATION

Main Presenter:
• Rebecca Mitchell, CWCB Division Director
Topics:
- Water Plan Grant Program: Page 13, Questions 12-14 in the packet, Slides A-C
- Upper Basin Demand Management Program: Page 14, Questions 15-17 in the packet, Slides D-G

4:40-5:00  AQUATIC NUISANCE SPECIES PROGRAM FUNDING

Main Presenters:
- Bob Broscheid, CPW Division Director
- Justin Rutter, CPW Chief Financial Officer

Topics:
- Aquatic Nuisance Species Program funding: Page 17, Question 18 in the packet
DEPARTMENT OF NATURAL RESOURCES  
(EXECUTIVE DIRECTOR’S OFFICE, DIVISION OF PARKS AND WILDLIFE, COLORADO WATER CONSERVATION BOARD, DIVISION OF WATER RESOURCES)  
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Monday, January 14, 2019  
3:00 pm – 5:00 pm  

DEPARTMENT OVERVIEW  

GENERAL QUESTIONS  

1. What is the Department’s process for engaging in (or disputing) federal land, environmental, jurisdictional, and/or water policy issues? How do you coordinate with other departments, the Governor’s Office, local governments, and/or citizens?  

Response: Under the National Environmental Policy Act (NEPA), state agencies are given special status in federal planning processes and NEPA evaluations in the form of acting as a cooperating agency. DNR determines whether or not to act as a formal cooperator depending on the nature of the federal process. Local governments can also participate as cooperating agencies if they have special expertise or jurisdiction over an aspect of a proposed project. Outside of the cooperating agency role, DNR often provides comments to federal agencies on planning processes or policies. In addition, DNR maintains close working relationships with its federal land management and local government partners. When DNR believes that other state agencies are involved or interested in the same federal plan, policy or evaluation, DNR staff reach out to counterparts to coordinate. DNR also informs the Governor's office regarding its comments or problematic issues.  

2. Please describe the Department’s wildfire mitigation and prevention activities, including the types of mitigation activities and how much the Department spent on mitigation activities in FYs 2016-17, 2017-18, and 2018-19 (estimate). Please also provide an overview of outstanding mitigation needs, including scope/scale, cost, and the savings that could be expected with additional mitigation.  

Response: Colorado Parks and Wildlife (CPW) is the only division that is directly involved in wildfire mitigation and prevention activities, although the Department previously administered the Wildfire Risk Reduction Grant (WRRG) Program from FY 2013-14 to FY 2016-17. CPWs current efforts and the WRRG Program are described below.  

Colorado Parks and Wildlife  

Lands under direct control of Colorado Parks and Wildlife are managed to provide quality wildlife habitat, recreational opportunity for people, or both. Prescribed fire is one of the most valuable tools available for habitat management and fuels mitigation. Prescribed fire provides cost effective reduction of fuel loads while also rejuvenating grasses and flowering plants desired.
by wildlife. CPW has identified thousands of acres that would benefit from prescribed fire projects, but CPW’s ability to complete projects is limited by a number of factors, including funding, staffing (i.e., qualified burner availability), weather, and smoke permit conditions.

Colorado Parks and Wildlife conducts a variety of wildfire mitigation and prevention activities annually. The majority of CPW’s fuel mitigation and forest management activities are conducted with partners. CPW has strong partnerships with the Colorado State Forest Service for fuels mitigation work and pile burning, and with the Division of Fire Prevention and Control (DFPC) for broadcast burning and pile burning.

**Pile burns:** In an ongoing effort to reduce to reduce fuel loads and manage forest at a smaller scale, CPW burns about 1,000 slash piles per year within state parks or wildlife areas. These costs are covered by park and area general operating budgets and are difficult to break out.

**Prescribed fire/broadcast burns:** DFPC has conducted multiple larger-scale prescribed fires on CPW lands over the past three years, including at Banner Lakes State Wildlife Area in Weld County and Lone Mesa State Park in Dolores County. Costs for the Lone Mesa prescribed fire were approximately $137,500.

Other forest mitigation activities: General forest management projects are prioritized and implemented on state parks with funding assistance from Great Outdoors Colorado and the Colorado State Forest Service. On occasion, other partners such as Coalition for the Upper South Platte or Coalition for the Poudre River Watershed are able to assist with project funding or implementation. These projects consist of both traditional harvest of trees for wood products (when possible) and mastication of trees in place.

- In FY 2016-17, CPW conducted forest management activities on 642 acres at four state parks, at a cost of $404,202.
- In FY 2017-18, CPW conducted forest management activities on 259 acres at three state parks, at a cost of $400,120.
- For FY 2018-19, CPW has planned projects encompassing 243 acres in two state parks, at a cost of approximately $300,000.

**Wildfire Risk Reduction Grant Program**

DNR previously administered the Wildfire Risk Reduction Grant (WRRG) Program from FY 2013-14 to FY 2016-17, awarding nearly $12 million in grants to projects that reduced the risk of damage to property, infrastructure and water supplies, and those that limited the likelihood of wildfires spreading into populated areas. Senate Bill 17-050 created the Forest Restoration and Wildfire Risk Mitigation Grant Program consolidating two forestry-related grant programs: DNR’s WRRG program and the Colorado State Forest Service’s (CSFS) Forest Restoration Grant Program. The Forest Restoration and Wildfire Risk Mitigation Grant Program is administered by the CSFS, and DNR participates on the technical advisory panel.
DIVISION OF PARKS AND WILDLIFE

GENERAL QUESTIONS

3. Given the long-term trend of increased parks visitations, please explain the Division of Parks and Wildlife’s estimate of a year-on-year decrease in annual visitation in FY 2018-19.

Response: The visitation estimate provided to JBC staff in late November is the average of the three previous fiscal years. As of November, CPW had compiled visitation numbers for only four months of FY 2018-19, which is not a sufficient sample size to make projections for the remainder of the year. A number of variables impact visitation, including weather, gas prices, and the general state of the economy. Visitation in FY 2017-18 benefitted from particularly beneficial weather conditions, especially on key summer holidays. If it were to rain on Memorial Day, July 4th, or Labor Day in 2019, visitation numbers could be significantly impacted in a negative way. Further, looking forward into FY 2018-19, Sylvan Lake State Park will be closed for the Summer 2019 season due to dam replacement work. In light of these factors, a simple average seemed to be a reasonable (albeit conservative) estimate of visitation for FY 2018-19. That stated, CPW is confident that the long-term trend in park visitation will continue to be upward.

4. Please provide an explanation for the decrease in lottery and GOCO revenue between FY 2016-17 and FY 2017-18.

Response: Colorado Parks and Wildlife uses GOCO funding on a reimbursement basis. GOCO awards funding to CPW in the form of Annual Investment Plans, each of which consists of a number of grants. For a given GOCO grant, CPW expends funds toward completion of the grant’s goals and then “bills” GOCO on a monthly basis for the amount expended. GOCO reviews the bills to ensure that all expenditures are appropriate and related to the grant, and then reimburses CPW for the expenditures.

Total GOCO funding awarded to CPW (in the form of the Investment Plans) is fairly consistent year to year, but in FY 2017-18 CPW was reimbursed by GOCO at a slightly lower level (i.e. earned less GOCO revenue) than in FY 2016-17.

CPW earned less Parks-purpose GOCO revenue in FY 2017-18 primarily due to reduced expenditures on large capital projects and non-motorized trails. These are three-year grants and expenditures (and thus GOCO reimbursements) vary slightly from year to year.

CPW earned less Wildlife-purpose GOCO revenue in FY 2017-18 primarily because of a pause in the agency’s Request for Proposals (RFP) program. For a variety of reasons, CPW pursued fewer land transactions (conservation easements, access easements, etc.) in FY 2017-18 than in previous years. CPW expects RFP expenditures (and GOCO revenue) to return to typical levels beginning in FY 2018-19.
5. Please provide the following information with regard to the fee increases for hunting and fishing licenses resulting from S.B. 18-143 (Hunting, Fishing, and Parks for Future Generations Act):
   • Preliminary impact estimates on the volume of resident hunting/fishing licenses sold;
   • Preliminary impact estimates on the volume of non-resident hunting/fishing licenses sold; and
   • Types and volume of complaints received with regard to the fee increases.

Response: The S.B. 18-143 increased in statute the fees for a number of hunting and fishing licenses, effective August 2018 (i.e., 90 days after the passage of the bill, which did not contain a safety clause). In order to standardize new rates within hunting and fishing seasons and to simplify the administration of licenses, the CPW Commission voted to delay implementation of the new rates until January 1, 2019. This practice is consistent other fee increases made by the agency in the past; fee increases in 2000 and 2005 were implemented with an effective date of January 1 of the following year. Because of this, CPW has no data at this time about the impact of the new costs on hunting or fishing license volume.

CPW has not conducted a formal price elasticity analysis, but based on previous experience believes that hunters and anglers will continue to buy licenses at roughly the same rate as in previous years, even with higher costs. S.B. 18-143 requires reporting on a number of topics, including the impact that license fee increases have had on total license sales. The first version of this report is due to the House Committee on Agriculture, Livestock, and Natural Resources and the Senate Committee on Agriculture, Natural Resources, and Energy on November 1, 2019.

CPW conducted significant public outreach over three years prior to the development of S.B. 18-143, including public meetings and forums. Based on this and other public input, CPW believes that the hunting and angling communities in Colorado generally support the license increases in the bill, and the benefits to Colorado wildlife and habitat that will result from these increases. Many hunting fees increased by only $8. While CPW respects and understands that pricing is important to Colorado sportsmen, this amount does not seem likely to result in a large volume of complaints. With that being said, CPW has received a small volume of correspondence from constituents about the fee increases. Since November, the agency’s main call center in Denver has received about 20 calls related to fees in general. About half of these were related to existing state park and camping fees and boating fees; the rest were related to license fees. CPW’s regional offices report a similarly small volume of calls related to the hunting and fishing license fees. CPW anticipates an increase in public comments when the 2019 big game hunting brochure is published in February.

6. Please provide an assessment of the impact of the 2011 merger that created the Division of Parks and Wildlife. In this assessment, please discuss:
   • The impact on revenues and expenditures, including any cost savings realized;
   • The impact on the capital development backlog for Parks and Wildlife operations; and
   • The impact on personnel and any staffing efficiencies realized.
Response: A primary goal of the merger of Colorado State Parks and the Colorado Division of Wildlife was to create more efficient and effective services through economies of scale and use of shared resources. Since the 2011 merger, a great deal of work has been undertaken to realize efficiencies and cost savings under the comprehensive outdoor recreation mission of the merged agency. During this process CPW has had to be especially cognizant of restrictions on the funding sources involved. Because of federal funding requirements and other restrictions, CPW must maintain the distinction between funding sources with a wildlife nexus and funding sources for state parks purposes. CPW cannot use wildlife-purpose funds for non-wildlife activities (such as park operations). Similarly, CPW does not use state park fees and other park revenue to support wildlife activities.

Pursuant to Section 33-9-106 (2), C.R.S., Colorado Parks and Wildlife (CPW) reports annually to the Joint House Agriculture, Livestock and Natural Resources Committee and the Senate Agriculture, Natural Resources, and Energy Committee regarding the administration of the Division, including an evaluation of division resources and their utilization and an identification of opportunities for efficiencies. Each report summarizes stakeholder outreach conducted during the prior year and also identifies disposition of assets and cost savings, both planned and realized, since the previous year, including savings pertaining to personnel, equipment, services, and provisioning. The following information draws from the 2014 Path Forward, CPW’s merger report, CPW’s annual reports pursuant to Section 33-9-106(2), C.R.S., and CPW’s 2018 Fact Sheet.

Revenues, Expenditures and Cost Savings

- $10 million budget reduction. In 2013, the Parks and Wildlife Commission directed CPW to reduce wildlife-related expenditures by approximately $10 million/year to address a projected gap between expenditures and revenue. This amount represented a 12.3% reduction of CPW’s total budget. The $9.9 million reduction approved by the Commission in November 2013 was distributed in the following fashion:
  o Statewide programmatic reductions: 53% ($5.25 million; 0 FTE)
  o Research/science capacity: 26% ($2.63 million; 10.2 FTE)
  o Remaining headquarters units: 12.5% ($1.20 million, 3 FTE)
  o Regions: 8.5% ($0.84 million; 4 FTE).

- Parks and Wildlife Commission. The Parks and Wildlife Commission was reorganized in 2012 to reduce its membership by three commissioners, from 14 to 11. This yielded annual savings in per diem, lodging, mileage, etc. Merging the Parks Board and the Wildlife Commission also reduced the number of annual meetings from an average of 18 per year to a maximum of 12.

- IPAWS. Prior to the merger, State Parks was planning to invest a considerable sum to implement its own Point of Sale system. In 2018, a new Integrated Parks and Wildlife
System (IPAWS) launched offering one-stop shopping for licenses, permits, passes and registrations, improving customer service while reducing costs. IPAWS integrated eight systems into one.

- **Website and intranet.** The former wildlife and parks websites were merged into a single website and social media outreach was similarly consolidated. Before the merger, the two agencies had three aging intranet servers for internal communications. The three servers were merged into one central unified intranet.

- **GIS.** Each agency had its own GIS system which were integrated into a single system, allowing for improved species management, natural resource/habitat management, recreational opportunities and natural areas work.

- **Law enforcement.** As a result of the merger, law enforcement was able to put several efficiencies into effect. Several required law enforcement training topics for CPW officers have been combined, resulting in both cost savings and a more consistent training message. All park managers and wildlife manager trainees are hired and trained at the same time. The combined hiring and background process and the subsequent field training allows all trainees to attend combined training together.

- **Fleet and equipment.** Cost sharing of fleet and heavy equipment offers opportunities for cost savings, particularly in areas where parks and state wildlife areas are nearby and each uses heavy equipment. Additionally, a single fleet coordinator manages all CPW vehicles and associated equipment.

- **Impact Assistance Grants.** CPW streamlined the Impact Assistance Grant program, merging the separate agencies' processes into a single web grant application page.

**Capital Development Backlog**

Reduction of an existing capital backlog was not an explicitly stated goal of the merger, but falls broadly under the merger’s goal of finding efficiencies and making use of shared resources. The merger of Parks and Wildlife has formed a team of capital development professionals with a wide array of skills and abilities. The central capital team from the former Division of Wildlife included a Design Team capable of producing project designs in-house. The Parks Division had a team of project managers that were experienced in putting large scale vertical construction projects on the ground utilizing contract services. With both regional and central resources, the merged program has a better ability to staff-up projects and react to a variety of circumstances.

With that being said, CPW still has a significant backlog of capital development, renovation, and rehabilitation projects. Following the passage of S.B.18-143, CPW is seeking additional resources beginning in FY 2019-20 to address this. Decision item R-4, Capital Development Staff and
Operating, will provide CPW with additional professional engineers to help complete a larger volume of projects in a timelier fashion. Decision item R-3, Spending Authority for Asset Maintenance and Repairs, will create a “small capital” program for wildlife areas focused on routine maintenance and small construction projects. (CPW has operated a small capital program for state parks for several years.)

Personnel and Staffing Efficiencies

- Position eliminations. CPW eliminated 22 permanent positions, resulting in annual savings of $1.7 million beginning in FY 13-14.

- Regulations management and rule-making process. CPW combined the regulatory processes of the two previous agencies into one process managed by a single Regulations Manager. The Parks and Wildlife Commission then streamlined and combined the two divisions’ former rule-making processes. The new process reduced from a three-step to a two-step process for most regulatory changes.

- ANS program. Two aquatic nuisance species (ANS) strategies were combined into a single ANS program.

- Volunteer program. The former divisions’ two volunteer programs were merged into one. CPW has more than 6,000 active volunteers who contribute more than 300,000 volunteer hours annually. That is the equivalent of 145 FTEs with a value exceeding $7.3 million annually.

- Budget and finance. In 2013, budgets and finances were integrated into a single system. Throughout that process, attention was paid to ensuring that funding sources which must remain segregated are kept so and are limited to uses allowed by statute.

R1 INCREASE STATE PARKS SPENDING AUTHORITY

7. Please discuss the impact of utilities costs on the State’s parks. Specifically, how have regional differences in utility providers affected the various state parks?

Response: In general, utilities costs (electricity, natural gas, and water/sewer) have increased steadily over the last eight years:
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Utility Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2010-11</td>
<td>2,366,651</td>
</tr>
<tr>
<td>FY 2011-12</td>
<td>2,559,681</td>
</tr>
<tr>
<td>FY 2012-13</td>
<td>2,640,623</td>
</tr>
<tr>
<td>FY 2013-14</td>
<td>2,832,544</td>
</tr>
<tr>
<td>FY 2014-15</td>
<td>2,889,688</td>
</tr>
<tr>
<td>FY 2015-16</td>
<td>3,018,012</td>
</tr>
<tr>
<td>FY 2016-17</td>
<td>3,463,396</td>
</tr>
<tr>
<td>FY 2017-18</td>
<td>3,191,386</td>
</tr>
</tbody>
</table>

CPW has received no corresponding spending authority increases to account for this growth. As part of the analysis for decision item R-1, Increase State Parks Spending Authority, CPW reviewed utility costs system-wide, but did not review costs on a regional level. As such, CPW cannot address regional differences in utility providers and their rates.

8. What were the factors that drove the Division to reassess its centralized cost allocation methodology?

Response: The Division of Parks and Outdoor Recreation and the Division of Wildlife merged in 2011, fully integrating financial activities in FY 2013-14. Once finances were combined, CPW came up with a cost allocation methodology to split centralized costs between the wildlife and parks cash funds at a rate of approximately 75% wildlife and 25% state parks. This cost allocation proved necessary for combined functions that are not a clean fit for exclusively the State Park Operations line item, the Wildlife Operations line item, or another line item. For example, Financial Services staff work on budget, accounting, and procurement activities for the entire division and do not fit into a single line item. Other examples of costs shared between state parks and wildlife programs include law enforcement, division management, and capital development staff.

Although allocating the costs for shared services is a responsible budgeting practice in general, it is also a foundational requirement of federal wildlife and sport fish grants that specifically require that revenue generated from hunter and angler license fees cannot be used for non-wildlife or sport fish purposes. The cost allocation model and related annual review of expenditures ensures that the administrative costs are split appropriately between parks and wildlife.
Although CPW has validated the cost allocation each year, it wasn’t until FY 2016-17 that the financial structures, CORE practices, and transactional review was settled enough to comprehensively review the allocation for possible adjustment. During spring 2018, CPW analyzed actual expenditures from FY 2016-17 and identified about $13,753,000 on average in centralized expenses that required allocation between the State Park Operations line item and the Wildlife Operations line item. The initial 75/25 cost allocation was based on expenditure patterns prior to the financial merge occurring, but a closer analysis of expenditures post-merger indicates that this is probably not the correct percentage split to apply. After examining a few different methodologies, CPW settled on the use of overall agency expenditures (minus capital construction costs and shared costs) to determine the correct ratio to apply to shared costs. This agency-wide ratio is very close to 65/35 Wildlife/State Parks.

R4 CAPITAL DEVELOPMENT RESOURCING

9. Please provide the following information regarding dam safety and dam safety projects:
   - Number and geographic dispersion of highest risk dams;
     
     **Response:** CPW owns 34 High or Significant hazard dams, located throughout the state. Please see the attached map illustrating the locations of the dams that CPW owns and operates (Attachment A).
   - Size of the Dam Safety Program backlog (e.g., number of projects and cost);
     
     **Response:** CPW owns and operates a total of 110 dams throughout Colorado. The average age of these dams is 72 years. Based on a 2015 Screening Level Risk Analysis (SLRA), CPW identified 11 dams as being at the highest risk level and requiring immediate attention. CPW has subsequently added three more dams to this list based on follow-up inspections. These 14 highest priority projects are as follows:
<table>
<thead>
<tr>
<th>Dam</th>
<th>Location (County)</th>
<th>Hazard Classification</th>
<th>Estimated Repair Costs (as of 2015)</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta Park Dam</td>
<td>Mineral</td>
<td>High</td>
<td>3,570,000</td>
<td>Alternatives analysis</td>
</tr>
<tr>
<td>Willow Creek Dam</td>
<td>Routt</td>
<td>High</td>
<td>8,000,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Chief Creek Dam</td>
<td>Yuma</td>
<td>Significant</td>
<td>2,450,000</td>
<td>In design</td>
</tr>
<tr>
<td>Black Lake #2 Dam</td>
<td>Eagle</td>
<td>Significant</td>
<td>1,700,000</td>
<td>Pending</td>
</tr>
<tr>
<td>Trujillo Meadows Dam</td>
<td>Conejos</td>
<td>High</td>
<td>3,870,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Big Meadows Dam</td>
<td>Mineral</td>
<td>High</td>
<td>3,070,000</td>
<td>Pending</td>
</tr>
<tr>
<td>Spring Creek Dam</td>
<td>Gunnison</td>
<td>High</td>
<td>520,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Sylvan Lake</td>
<td>Eagle</td>
<td>High</td>
<td>4,000,000</td>
<td>Under construction</td>
</tr>
<tr>
<td>Rito Hondo Dam</td>
<td>Hinsdale</td>
<td>Significant</td>
<td>3,770,000</td>
<td>In design</td>
</tr>
<tr>
<td>Two Buttes Dam</td>
<td>Baca</td>
<td>High</td>
<td>6,520,000</td>
<td>Design complete</td>
</tr>
<tr>
<td>Haviland Dam</td>
<td>La Plata</td>
<td>High</td>
<td>1,420,000</td>
<td>In design</td>
</tr>
<tr>
<td>Tarryall Dam</td>
<td>Park</td>
<td>High</td>
<td>TBD</td>
<td>Alternatives analysis</td>
</tr>
<tr>
<td>Meadow Creek Dam</td>
<td>Garfield</td>
<td>High</td>
<td>TBD</td>
<td>Pending</td>
</tr>
<tr>
<td>Skaguay Dam</td>
<td>Teller</td>
<td>Significant</td>
<td>TBD</td>
<td>Pending</td>
</tr>
</tbody>
</table>

- **Current dam safety projects:**

**Response:** In addition to the high hazard dam projects listed above, CPW has several other active dam safety projects:

<table>
<thead>
<tr>
<th>Dam</th>
<th>Location (County)</th>
<th>Hazard Classification</th>
<th>Estimated Repair Costs</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Elk Falls Dam</td>
<td>Park</td>
<td>Low</td>
<td>4,500,000</td>
<td>In design</td>
</tr>
<tr>
<td>North Michigan Dam</td>
<td>Jackson</td>
<td>Low</td>
<td>3,500,000</td>
<td>In design</td>
</tr>
<tr>
<td>Heart Lake Dam</td>
<td>Garfield</td>
<td>High</td>
<td>TBD</td>
<td>Alternatives analysis</td>
</tr>
</tbody>
</table>

CPW also conducts ongoing routine maintenance and small construction projects on lower hazard dams, as well as annual inspections on all high hazard dams. Please note that the Upper Elk Falls Dam project, North Michigan Dam project, and proposed FY 2019-20 SCADA monitoring project (which will be added to this list if funded) are not included in the list of high priority (with regards to safety) projects, but are considered priority projects.
for other reasons. The Upper Elk Falls Dam project at Staunton State Park will help complete build-out of CPW’s newest state park. The North Michigan Dam project is part of ongoing renovations at State Forest State Park, which CPW is contractually obligated to complete as part of a new lease agreement. The SCADA system at Highline State Park will significantly reduce annual operating costs.

- Anticipated length of time at current staffing and resource levels to eliminate the backlog; and

Response: CPW has been addressing the agency’s dam maintenance backlog in priority order, as allowed by capital construction budgets and staffing levels. Estimating a completion date for work on the highest priority projects is difficult. Dam rehabilitation and renovation projects are notoriously unpredictable; engineers frequently uncover previously unknown issues during the course of planned construction, which require new engineering work, revised contract scopes, and other delays.

CPW is committed to completing work on the highest priority projects and then moving on to address other dam safety needs and routine maintenance. The passage of S.B. 8-143 will provide additional revenue to fund large-scale dam rehabilitation projects, and CPW is requesting additional engineering staff in decision item R-4, Capital Development Staff and Operating. Additional staff resources will allow CPW to manage more dam projects concurrently and accelerate the rate of completion.

- Any requests, current or anticipated, for funding from the Capital Development Committee.

Response: All active projects listed in the two tables above (including projects whose status is under alternatives analysis, are in design, or are under construction) were previously submitted to the Capital Development Committee for review and approval. In contrast, only those projects listed as pending have not been to the Capital Development Committee. For FY 2019-20, CPW has submitted to the CDC either funding requests (for cash-funded projects, which require appropriations) or informational items (for GOCO/Lottery funded projects, which do not require appropriations) for four new projects:

- State Parks Dam Maintenance (general budget for small/routine projects): $600,000
- Wildlife Dam Maintenance (general budget for small/routine projects): $600,000
- Spring Creek Phase II: $1,070,000
- Upper Highline SCADA monitoring system: $370,000
10. Please provide an overview of the trends in hunting and fishing licenses and how the Wildlife Council’s marketing and media-outreach efforts have impacted these trends.

Response: At a national level, participation in hunting and (to a lesser degree) fishing is decreasing. In Colorado, the picture is somewhat less bleak. While the number of big game license holders – the largest group of hunters in Colorado – has been declining since 1985, the number of applicants has increased during the same period. Trends in overall angler license sales are increasing.

By statute, the Wildlife Council’s mission is to oversee the design of a comprehensive, media-based public information program (Hug a Hunter/Angler) to educate the general public about the benefits of wildlife, wildlife management and wildlife-related recreational opportunities, specifically hunting and fishing. The mission is not directly tied to the recruitment in participation of hunting and fishing but pushes for support of hunting and fishing.

Each year the advertising agency hired by the Wildlife Council conducts a tracking study among Colorado residents to measure the effectiveness of the Hug a Hunter/Angler campaign. The most recent study showed about 6 in 10 Coloradoans say they support hunting, and about 8 in 10 say they support fishing. While fewer recall general hunting/fishing messaging, the number of people who recall Hug a Hunter/Angler has remained constant. More are knowledgeable of the benefits of license fees, including the benefits to the state and wildlife management.

11. Does the Wildlife Council have any outreach products, current or in development, that target toward under-represented groups in the hunting/angling community (e.g., women, youth from urban areas, the disabled, etc.) to encourage their engagement and use of the State’s wildlife resources?

Response: The mission of the Wildlife Council is to educate the general population about the benefits of hunting and fishing, rather than recruitment in participation of these activities. The Wildlife Council is committed to becoming more precise in measuring audiences and messaging, focusing its efforts on key target audiences and become strategic in message development and target messaging.

Independently of the Wildlife Council, CPW is committed to hunter and angler outreach and to reducing the hurdles for potential new participants. CPW conducts mentored hunts for youths and other novices. CPW provides educational opportunities for young Coloradans via the Schools and Outdoor Learning Environments (SOLE) program, the Youth Internship Program (YIP), funding for the Colorado Youth Corps Association (CYCA), and other internal programs and opportunities. The Fishing Is Fun program provides free fishing gear for young anglers. The Parks and Wildlife Commission is planning a special session in March 2019 to reach out to under-represented groups to learn more about obstacles and challenges these groups face when it comes to outdoor recreation in general.
COLORADO WATER PLAN IMPLEMENTATION

WATER PLAN GRANT (WPG) PROGRAM

12. Generally, how involved are the Basin Roundtables in the development and execution of WPG Program projects?

Response: Basin Roundtables do not have a formal role in the Water Plan Grant (WPG) Program, with the exception that many Basin Roundtables choose to provide letters of support for applications submitted to the CWCB Board for approval. The WPG Application asks applicants to explain how their project meets the goals of the applicable Basin Implementation Plan as well as the Water Plan.

13. Basin Roundtables are supported by Tier II transfers from the Severance Tax Operational Fund. Are the Basin Roundtables allowed to utilize these funds for WPG Program projects? If so, do these funds count toward the awardee’s 50.0 percent matching requirement?

Response: Basin Roundtables independently recommend grants from the Tier 2 Water Supply Reserve Fund (WSRF) for approval by the CWCB, but they themselves cannot be the fiscal agent for WSRF grants. The Water Plan Grant (WPG) Program is administered by the CWCB and supported by appropriations from the CWB Construction Fund with no formal involvement from the Basin Roundtables (see above response). Entities can apply to and receive funding from both the WSRF and the WPG Program for a single project provided limitations on WPG matching funds and total CWCB share of project funding are met.

Specifically, the WPG Program has a 50% matching requirement; however, the overall sum of CWCB grant funds from all sources cannot exceed 75% of the total cost of a given project or activity. Water Plan Grants and grants made from the Water Supply Reserve Fund (Tier 2) both count as CWCB funds under this limitation on total project funding although, again, applicants are welcome to use both sources on a single project as long as the 50% match is met and the 75% threshold is not exceeded. As an example, if a project’s total cost is $100,000 the CWCB could contribute no more than $75,000 in total across any/all of its grant programs, but the $75,000 from CWCB could be comprised of $50,000 from the Water Plan Grant Program and $25,000 from the Water Supply Reserve Fund. The remaining $25,000 would need to come from other funding sources.

14. Taking into consideration the newness of the WPG Program, what has been the demand for grant funding? What is the estimated need statewide, in dollar terms, for projects that would qualify for the WPG Program?

Response: In its first year, FY 2017-18, the Water Plan Grant (WPG) Program was appropriated $9 million for grants. The total funding request was for $13.3 million. The CWCB Board approved grants for the first round of FY 2018-19 funding in November 2018. The total request for the first round exceeded $4 million and applications for the second round of funding are due February 1, 2019.
Anticipating specific demands for WPG Program funding is difficult given that the program is only halfway into its second year. The Water Plan estimated an overall funding need of approximately $20 billion associated with meeting the water supply needs of municipal and industrial water users. This included potential water projects identified through a basin process, maintenance needs of existing water delivery systems, alternatives to agricultural transfers, and active water conservation, all of which would qualify for funding through the WPG Program. In the Water Plan, CWCB committed to investigating options to secure $100 million annually to implement the plan, which includes WPG funding. Additionally, CWCB will deliver the results of a statewide water supply study in the summer of 2019, which will include data and analysis on water supply gaps as well as new tools for water project development. These results will help inform the state and the basins about their future water supply needs across a variety of sectors, including municipal and industrial, agricultural, and environmental. We anticipate these results will lead to an increased demand on funding sources for water projects. Overall, the WPG Program has been successful and well-utilized thus far and CWCB has no reason to expect any significant decline in demand going forward.

**Upper Basin Demand Management (UB-DM) Program**

15. How does the Upper Basin Demand Management Program fit within the Colorado Water Plan? Why has funding the UB-DM Program been prioritized instead of funding water projects that are ready for implementation in the near-term?

**Response:** Colorado's Water Plan includes the following policy statement on the subject of Colorado River Compact obligations: "The state of Colorado will support strategies to maximize the use of compact water while actively avoiding a Colorado River Compact deficit." (Chapter 9.1) Similarly, the Conceptual Framework in Chapter 8 was a series of priorities identified and ratified by basin roundtables, the Interbasin Compact Committee, and the CWCB, which specifically highlights the importance of "a collaborative program to address Colorado River system shortages." The efforts of the Upper Basin States, including Colorado, in assessing the feasibility of demand management represent the current evolution of these ideas.

All of the basin roundtables across the state identified Colorado River system sustainability and the protection of existing Colorado River water uses as a priority in their respective Basin Implementation Plans. Because the management of the Colorado River affects water users across the state, continued drought in the Colorado River basin will have state-wide consequences. A demand management program aligns with basinwide efforts to provide for certainty of current water use, and to prepare for future projections of increasing demand and decreasing supply associated with climate change.

Demand management efforts have the potential to align with several other Water Plan goals including dovetailing conserved consumptive use efforts with instream flow goals, endangered
species recovery, and other integrated watershed management planning efforts. Demand management also offers the opportunity for economic assistance for farmers and ranchers including providing funding to upgrade and improve infrastructure, thus protecting agricultural water rights. This prioritization of funding allows Colorado to assume a leadership position within the Upper Basin and throughout the West, while also ensuring that Colorado water users and stakeholders are afforded meaningful input into processes which will affect them in the long run.

Funding near-term water projects will get the state a long way towards meeting the goals of Colorado's Water Plan. However, the state needs a more holistic approach to address the long-term effects of variable hydrology on our Colorado River compact obligations than individual infrastructure and watershed restoration projects can accomplish independent of a larger strategy. Providing sustainability for the entire system and being proactive about compact obligations will allow Colorado water users to control their own destiny in the face of the uncertainty associated with a potential imposed involuntary curtailment under the compact. This allows for more certainty for the proponents of projects associated with Water Plan goals, and for all water users and stakeholders within Colorado.

There is momentum at the state, regional, and federal levels to move the drought contingency planning process forward. At the November 2018 CWCB Board meeting, the Board approved a policy statement in support of drought contingency planning efforts and developing a demand management program. In December 2018 at the Colorado River Water Users Association in Las Vegas, the Upper Colorado River Commission approved the Upper Basin Drought Contingency Plan documents. At the same event, the Bureau of Reclamation Commissioner has laid out a January 31 deadline for the Lower Basin to come to agreement on their Drought Contingency Plan.

16. How will the UB-DM Program help to alleviate the impact of the current drought in Colorado?

Response: The entire Colorado River Basin is currently in the worst hydrologic cycle in the historic record and is entering its nineteenth year of drought. At the same time, Colorado’s population is expected to grow placing additional pressure on the system. The latest data indicate that Colorado is likely to continue to see reduced flows and increased demand through the Colorado River Basin. Regardless of whether this is an extended drought or the new normal hydrology, the potential impacts to the state and its citizens could be significant.

Continued drought conditions in the Colorado River Basin could increase the risk of: a) Lake Powell storage declining below critical elevations to maintain operational functionality; and b) mandatory water rights curtailment to maintain compliance with the Upper Colorado River Basin and Colorado River Compacts. Both risks could have serious implications for Colorado, on both the East and West Slopes.
Colorado and the other seven states that are signatories to the Colorado River Compact have been developing Drought Contingency Plans (DCPs) in response to the ongoing drought. The DCPs are intended to reduce the likelihood of Lake Mead and Lake Powell declining to critical elevations. The impacts of Lake Powell falling below critical elevations include both the loss of power generation which supplies power across the West and funds important programs and the risk of not maintaining Colorado’s compact obligations, which could force mandatory curtailment of water rights. The Upper Basin DCP, of which Colorado is a party, would protect critical elevations at Lake Powell, assure continued compliance with the Colorado River Compact and authorize storage of water conserved through a Demand Management Program in the Upper Basin.

A demand management program will allow Coloradans to take a long-term view of water management by providing certainty for water users without the fear of potential imposed involuntary curtailment as a result of a Colorado River Compact deficit. Such a program would compensate water users for intentionally, temporarily, and voluntarily reducing their use of Colorado River water in order to fill the storage pool authorized in the DCP. This conserved water could then be used to avoid, delay, or mitigate a Colorado River compact curtailment. Establishing a funding source for this program is a crucial first step to achieving flexibility and security on the Colorado River through a voluntary and collaborative approach. These funds will act as an important first investment to demonstrate statewide leadership, encourage water users to participate, and may leverage additional funding from other partners.

17. Please provide a summary discussion on the impacts of climate change on the Colorado River System and Basin.

**Response:** Below is a brief summary of climate impacts for the entire SW region that encompasses the Colorado River Basin and was pulled directly from the [National Climate Assessment – Southwest Region](https://www.globalchange.gov/assessments) report.

"The Southwest is already experiencing the impacts of climate change. The region has heated up markedly in recent decades, and the period since 1950 has been hotter than any comparably long period in at least 600 years. The decade 2001-2010 was the warmest in the 110-year instrumental record, with temperatures almost 2°F higher than historic averages, with fewer cold air outbreaks and more heat waves... There is mounting evidence that the combination of human-caused temperature increases and recent drought has influenced widespread tree mortality, increased fire occurrence and area burned, and forest insect outbreaks. Human-caused temperature increases and drought have also caused earlier spring snowmelt and shifted runoff to earlier in the year."

"The Southwest is prone to drought. Southwest paleoclimate records show severe megadroughts at least 50 years long. Future droughts are projected to be substantially hotter, and for major river basins such as the Colorado River Basin, drought is projected to become more frequent, intense, and longer lasting than in the historical record. These..."
drought conditions present a huge challenge for regional management of water resources and natural hazards such as wildfire...

...Winter snowpack, which slowly melts and releases water in spring and summer, when both natural ecosystems and people have the greatest needs for water, is key to the Southwest’s hydrology and water supplies. Over the past 50 years across most of the Southwest, there has been less late-winter precipitation falling as snow, earlier snowmelt, and earlier arrival of most of the year’s streamflow. Projections of further reduction of late-winter and spring snowpack and subsequent reductions in runoff and soil moisture, pose increased risks to the water supplies needed to maintain the Southwest’s cities, agriculture, and ecosystems...

...Conservation efforts have proven to reduce water use, but are not projected to be sufficient if current trends for water supply and demand continue. Large water utilities are currently attempting to understand how water supply and demand may change in conjunction with climate changes, and which adaptation options are most viable...

...Agriculture, a mainstay of the regional and national economies, faces uncertainty and change. The Southwest produces more than half of the nation’s high-value specialty crops, including certain vegetables, fruits, and nuts. The severity of future impacts will depend upon the complex interaction of pests, water supply, reduced chilling periods, and more rapid changes in the seasonal timing of crop development due to projected warming and extreme events.”

AQUATIC NUISANCE SPECIES PROGRAM FUNDING

18. Please provide a justification for the continued statutory authorization for continuous spending authority that has been granted the Division of Parks and Wildlife Aquatic Nuisance Species Fund. (Section 33-10.5-108 (1)(o)(f), C.R.S.)

Response: The Aquatic Nuisance Species Program was created in 2008 under S.B. 08-226. Among other things, this bill also established that the primary source of revenue for the State's Aquatic Nuisance Species Program was to be severance tax revenue through Tier 2 of the Severance Tax Operational Fund. S.B. 08-226 created both a Parks ANS cash fund and a Wildlife ANS cash fund, to address ANS issues on state parks and on other waters of the state that we not part of state parks. At this point in time, both ANS cash funds were given continuous appropriations authority. The primary reason for the continuous appropriations authority was related to the Tier 2 funding. Under current law, all Tier 2 funding is distributed as follows:

- 40% of available funding is distributed on July 1 of each fiscal year
- 30% of available funding is distributed on January 4 of each fiscal year
• 30% of available funding is distributed on April 1 of each fiscal year

This system of installments was intended to make sure that not all of the authorized funding went out the door early in the fiscal year, both for cash flow reasons and to allow for reductions if projected revenue declined over the course of the fiscal year. With programs under direction to not assume they would get their full allocation of Tier 2 funding (given revenue volatility and unpredictability), it was deemed unfair to expect Tier 2 programs to fully expend the 60% of funding that came in the last six months of the fiscal year. Continuous spending authority allows Tier 2 programs to both retain and expend these revenues across fiscal years. This is particularly important for aquatic nuisance species activities. The boating season in Colorado generally runs from April until September, which crosses fiscal years. Continuous spending authority enables CPW to issue contracts for temporary staff and other services in April and May that do not terminate at the end of the fiscal year. This might not be the case if appropriations out of the ANS fund were not continuous and expired June 30 of a given year.

For the Aquatic Nuisance Species Program specifically, continuous spending authority has allowed the program to bank small amounts of severance tax revenues during good severance tax revenue years and spend them during poor severance tax revenue years. Maintaining continuous spending authority is requested to address other ongoing variability in ANS Program financing. Most critically, continuous spending authority provides Colorado Parks and Wildlife with the ability to immediately respond to emergency situations. For example, if a new body of water in Colorado were to test positive for the presence of zebra mussels, CPW would have the immediate ability to purchase equipment and staff to manage boat washing stations at that location and to otherwise respond in a way that hopefully contained the situation. Situations like this are not theoretical. In 2018 mussel larvae were discovered in Green Mountain Reservoir, and CPW has experienced other situations requiring a fast response. Additionally, since the boating season crosses fiscal years, continuous spending authority can help relieve financial pressure when a boating season starts slowly in April through June and then picks up in July and August. In this scenario, unspent funding from one fiscal year can be used to address the surge in expenditures. Finally, the ANS program begins collecting fee revenue pursuant to HB 18-1008, the Mussel Free Colorado Act, this upcoming boating season. Although CPW’s revenue estimate is based on historic boating data, until actual revenue is collect, the flexibility associated with the continuous appropriation may help resolve unanticipated cash flow patterns. For all of these reasons, the Department would like to retain spending continuous spending authority on the Division of Parks and Wildlife Aquatic Nuisance Species Fund.
Provide a list of any legislation that the Department has: (a) not implemented, or (b) partially implemented. Explain why the Department has not implemented or has only partially implemented the legislation on this list. Please explain any problems the Department is having implementing any legislation and any suggestions you have to modify legislation.

**Response:** The Department is aware of one piece of legislation from the 2018 session—the Future Generations Act (S.B. 18-143)—which is still in the process of being fully implemented. The Future Generations Act is very important to the future of Colorado Parks and Wildlife. The Colorado Parks and Wildlife Commission (Commission) and Colorado Parks and Wildlife (CPW) staff have made significant progress toward full implementation of the Act. The majority of the provisions in these bills have been addressed in agency regulations and approved by the Commission, with the most substantial changes taking effect on January 1, 2019.

The Future Generations Act gives the Commission some new authorities, including developing new license combinations, low-income licenses, and young adult hunting licenses, although these provisions are technically discretionary, not mandatory, per the legislation. The Commission has not acted on these as of January 14, 2019, but intends to consider them in the near future. CPW staff are also currently working on the reporting requirements outlined in the Future Generations Act. The first report on the bill’s implementation is due to the General Assembly November 1, 2019.

CPW is not experiencing any problems implementing the remaining provisions of the Future Generations Act, and has no suggestions to modify legislation.

Does the Department have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor’s Office and dated June 30, 2018 (link below)? What is the Department doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the Department’s budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found.

http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2018

**Response:** There are no high priority outstanding audit recommendations for the Department of Natural Resources.

If the Department receives federal funds of any type, please respond to the following:

a. Are you expecting any changes in federal funding with the passage of the FFY 2018-19 or 2019-20
a. Is the Nation facing a new federal budget? If yes, in which programs, and what is the match requirement for each program?

b. Does the Department have a contingency plan if federal funds are eliminated?

c. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the Department is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the Department by the federal government during FFY 2018-19 or 2019-20.

Response: (a) While a number of divisions in the Department of Natural Resources receive federal grant funds from various sources, only one—the Division of Reclamation, Mining, and Safety (DRMS)—anticipates any changes to operations if/when a new federal budget is adopted. DRMS anticipates a significant reduction to funds allocated to the Bureau of Land Management (BLM) used for partner projects related to abandoned mine land (AML) issues. This funding cut will indirectly affect the Inactive Mines Reclamation Program (IMRP) as it often partners and cost shares with the BLM on AML projects in order to accomplish more work. The IMRP may be required to contribute more for AML partnership projects with BLM, or may no longer be able work on AML projects when funding is insufficient on the BLM side.

Additionally, funding for the Clean Water Act 319 Program in the U.S. Environmental Protection Agency may also be significantly reduced. This program provides funding to address non-point source AML water quality-related issues. The IMRP, in partnership with the Colorado Department of Public Health and Environment or local non-profits, designs and manages non-point source AML projects utilizing Clean Water Act Section 319 funds. A reduction in this funding may reduce the number/scope of AML non-point source projects on which IMRP partners.

(b) As mentioned above, DRMS would limit its activity in the IMRP Program in accordance with available partner funding. For other divisions that receive federal funding, no imminent changes or reductions are expected, but contingency plans vary.

- The Oil and Gas Conservation Commission receives a federal grant for the Underground Injection Control Program, but it represents such a small proportion of the agency’s total budget that OGCC would attempt to use vacancy savings to make up any shortfall.

- Colorado Parks and Wildlife receives federal funds from a variety of sources, but the two most important are the Pittman-Robertson Act (an excise tax on the sale of firearms and ammunition) and the Dingell-Johnson Act (sales tax on the sale of sport fishing equipment and other aquatic recreation equipment). These funding sources support a variety of CPW programs and activities. If these funds were eliminated or significantly reduced, CPW would have to make strategic reductions to wildlife-related activities throughout the division. However, these funds are allocated to the states based on a statutory formula and are not discretionary, which makes any reductions unlikely. Additionally, elimination would involve require federal legislation repealing the acts and current federal activity is seeking to bolster them instead.
• The Colorado Water Conservation Board receives funding from the Federal Emergency Management Agency (FEMA) to support 2.0 FTE in the division along with pass-through grant funds from the federal government for Map Modernization and the Community Assistance Programs. The CWCB does not expect any changes in federal funding but, in the event the funds are reduced or eliminated, it would prioritize projects and complete those that may have remaining funds available.

(c) DNR is not subject to any current or pending federal sanctions.

4. Is the Department spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the Department is working with other state or federal departments to coordinate the campaign?

Response: The Department conducts public awareness work to advance certain priorities. This is detailed by division below.

Division of Reclamation, Mining, and Safety

DRMS's website provides valuable information to the mining industry, as well as the general public, and also for mine employees regarding safety/health and mine training. Additionally, the website “Reclamation Colorado” demonstrates successes in mine site reclamation and includes historic and current information on mining in the state. The effectiveness of both websites is measured by the thousands of hits received annually and the number or types of questions that are submitted through the “contact us” link. The cost to maintain DRMS’s website is wrapped up in staff salaries and OIT Common Policy charges. The “Reclamation Colorado” website expense is $1,540 per year.

The Inactive Mines Reclamation Program supports the “Stay Out, Stay Alive” campaign to warn the public to avoid abandoned mines through hand-outs for career fairs and school events and works with the Bureau of Land Management on their “Fix a Shaft Today” program. Relatively low rates of accidents that occur in abandoned mines are a measure of campaign effectiveness. The program spends less than $1,000 per year to update and produce hand-outs.

The Colorado Reader is periodically distributed to 4th graders across the state and features mining related topics, as well as other natural resources areas. This publication is well received by teachers for that grade level. The content for the Colorado Reader rotates between different natural resources topic areas and the associated state agency. Responsibility for content and production expenses rotates between agencies every couple of years. In FY 2016-17, DRMS spent $12,000 to produce the mining related edition; a FY 2017-18 issue was not produced.

Outreach related to mine safety and rescue trainings conducted by the division is provided through participation in trade association committees, booth exhibits at conferences, and by
referrals to new participants from previously trained miners. No materials are produced nor are there any other specific expenses associated with these points of contact.

**State Land Board**
The State Land Board has worked with Rocky Mountain PBS (RMPBS) to air 15 and 30 second branding commercials during children/family programs and science programs. The goal of this campaign is to increase awareness among lessees and potential lessees, trust beneficiaries, and the public at large about the impact the State Land Board’s work has on Colorado’s schoolchildren. The State Land Board will spend $7,775 in FY 2018-19 with RMPBS for paid media. The State Land Board does not receive tax funds and pays for media from operating revenue. The Land Board has created and maintains a media relations plan for earned media. Staff facilitates earned media in-house at no expense.

The State Land Board measures the effectiveness of the campaign using RMPBS viewership analytics and other digital communication analytics.

The State Land Board is not working with federal or other state departments but does work with other sister agencies within the Department of Natural Resources, such as Colorado Parks & Wildlife and the Executive Director’s Office, for marketing campaign opportunities.

**Colorado Parks and Wildlife**
Colorado Parks and Wildlife’s Creative Services and Marketing Section conducts the agency’s general public awareness activities. CPW’s marketing strategies are currently focused on two primary areas: 1) Reminding hunters and anglers to apply and buy their licenses, and 2) encouraging people to visit and recreate at Colorado state parks. For FY 2018-19, the operating budget for wildlife (hunting and fishing) direct promotion is about $93,000. The FY 2018-19 operating budget for state park-related direct promotion is approximately $197,000. Please note that these amounts do not include permanent personal services (i.e. FTE) costs. CPW utilizes print ads, broadcast, radio sponsorship, email and social media to reach outdoor recreationists.

CPW also participates in a public awareness campaign via the Colorado Wildlife Council. The Council was designed by a coalition of hunters, anglers and conservationists and created in state law in 1998. The Council’s enabling statute (Section 33-4-120, C.R.S.) requires a “comprehensive media-based public information program to educate the general public about the benefits of wildlife, wildlife management, and wildlife-related recreational opportunities in Colorado, specifically hunting and fishing.”

Since 2012, the Council has focused its efforts on the Hug a Hunter campaign. This campaign focuses on the benefits of hunting and fishing for our state, with a target audience of the general population of Colorado. The campaign raises awareness around the role hunters and anglers play in Colorado’s conservation efforts, including the scientific management of wildlife
and wildlife habitats. The Council employs a contractor to implement a media campaign that uses television, radio, online and print strategies and that may use other media such as social networks or phone applications. The contractor also provides industry-tested, scientifically valid measured results illustrating the effects of the education program’s message penetration.

The program is funded by a surcharge on each hunting and fishing license sold. The surcharge currently generates about $900,000 annually. However, the cost of advertising, especially broadcast media, has increased by more than 140 percent in the last eight years, which has begun to impact the Council’s ability to promote its message. In light of this, in Fall 2018 Parks and Wildlife Commission approved an increase to the surcharge from $0.75 to $1.50, and CPW submitted a corresponding decision item (R6 – Increased Spending Authority for the Wildlife Council) for the authority to spend the additional revenue starting in FY 2019-20. This increase will allow the Hug a Hunter campaign and messages to reach a larger audience, complete more in-depth research into the campaign’s target audience, and ensure the messages we create resonate with them.

**Colorado Water Conservation Board**

The CWCB continues to be actively involved in education and outreach projects to educate people about Colorado’s Water Plan and water in Colorado. Funds are being utilized for Public Education, Participation, and Outreach workgroups, grants for projects to further the goals in Colorado’s Water Plan, and for additional education and outreach projects.

**Public Education, Participation, and Outreach Workgroups:** Created through the Colorado Water for the 21st Century Act, Interbasin Compact Committee (IBCC) Public Education, Participation and Outreach (PEPO) workgroup has created a process to inform, involve, and educate the public on IBCC activities and important water issues. Each basin roundtable has an education and outreach committee, which set up Education Action Plans. The action plans detail the educational goals and tasks in which each basin roundtable engages the public. Each of the nine PEPO workgroups receives $6,500 annually for education and outreach activities within their basin. They work with their Basin Roundtable to set the priorities and budgets, and then submit those to the CWCB. Basin roundtables may apply for funds from the CWCB for implementation of their Education Action Plans.

**Colorado’s Water Plan Grants:** For FY 2018-19, the General Assembly approved $7.0 million for the CWCB to grant funds for projects related to the implementation of Colorado’s Water Plan (CWP). The purpose of the funding is to make progress on the critical actions identified in the CWP and its Measurable Objectives. The CWCB will fund projects, programs, and activities that have the best opportunity to make progress on the CWP’s objectives. All applications are assessed based on funds available for a particular Water Plan Implementation category. Currently, there are five categories based on types of projects and funds have been distributed to each category. One of the categories is Engagement & Innovation (E&I). For FY 2018-19,
the E&I category was allocated $500,000 to fund education, outreach, public engagement, and innovation projects statewide. The purpose is to engage the public on water issues and achieve the goals set forth in Colorado’s Water Plan. The overall goal of the E&I Grant Fund is to enhance Colorado’s water communication, outreach, education, and public engagement efforts; advance Colorado’s water supply planning process; and support a statewide water innovation ecosystem.

Additional Education and Outreach: CWCB will request additional funds via the 2019 Projects Bill for education, outreach, and continued survey work for Colorado’s Water Plan. Previous funding for this outreach effort resulted in a draft survey after coordinating with other state agencies and statewide education organizations. If new funding is approved, the draft survey will be finalized and distributed to gather key data to help achieve the goals and actions in Colorado’s Water Plan.

Based on the Department’s most recent available record, what is the FTE vacancy and turnover rate by department and by division? To what does the Department attribute this turnover/vacancy? Do the statewide compensation policies administered by the Department of Personnel help or hinder in addressing vacancy or turnover issues?

Response: According to the FY 2017-18 State Workforce Report published by the Department of Personnel, the Department had a 7.6% turnover rate, which is the second lowest across all state departments for last fiscal year and 7.1 percentage points lower than the statewide average turnover rate. DPA is currently unable to calculate turnover rates by division or program. However, the annual burn FTE report for the Department of Natural Resources summarizes actual FY 2017-18 staffing levels and vacancy rates by division. Data for this report was provided by the Department of Personnel on August 14, 2018, and is included as an attachment to these responses.

For most divisions, vacancies can generally be attributed to the cumulative effect of normal staff turnover and personnel processes, e.g. short periods of time (1-3 months on average) when positions are unoccupied while the hiring process is taking place. However, the Division of Reclamation, Mining, and Safety appears to have a much higher vacancy rate than other divisions in FY 2017-18 at 31.4% with 21.3 vacant FTE. This initial calculated vacancy rate is artificially inflated as 8.0 of the vacant FTE were actually occupied but supported by non-appropriated federal funds. These FTE are shown in the Long Bill for transparency but appear to be vacant every year because of the way Inactive Mines federal grant funds are structured.

After accounting for the federally-funded IMRP FTE, the FY 2017-18 vacancy rate for DRMS falls to 19.6%. The remaining vacancies can be attributed to: (a) a relatively high number of retirements that occurred last year; (b) a low long-term turnover rate; and (c) a larger proportion of staff in scientific and professional job classes. DRMS had six retirements in FY 2017-18, two of which were program managers: one for the Coal Program and the other for the Minerals...
Program. These higher-level positions are often filled from within DRMS, resulting in a ripple of turnover and vacancies that contributed to the division’s vacancy rate. Current technical staff tend to be the most qualified individuals to fill program manager and senior supervisory positions. As a senior supervisor moves up to fill the manager position, this leaves the senior supervisor position vacant to be filled by one of the more senior environmental protection specialists, and so on. Additionally, when these vacancies occur in the Coal Program, positions are no longer backfilled due to the industry downturn and the associated decline in workload.

Aside from recent retirements, the long-term turnover rate for the division is low on average. Once hired at DRMS, employees tend to stay, which means agency staff often have higher levels of experience and salaries that correspond to their expertise and time with the division. While this is a testament to DRMS as an employer, it also means that more of its personal services budget ends up being used for fewer FTE than if less-experienced employees were being cycled in to fill vacant positions at lower salaries as they often are in other divisions and departments.

Finally, approximately 75% of DRMS staff are in job classes that require professional scientific work (i.e. Physical Science Researchers/Scientists and Environmental Protection Specialists). Like other agencies that compete with the energy sector, the DRMS sometimes hires new employees for these positions with salaries above range minimum to attract and keep qualified candidates with the required expertise. As evidenced by the division’s low turnover rate and excellent program performance, this hiring strategy has been successful but can result in the division not being able to fully fill the appropriated number of FTE.

6 Please identify how many rules you have promulgated in the past two years (FYs 2016-17 and 2017-18). With respect to these rules, have you done any cost-benefit analyses pursuant to Section 24-4-103 (2.5), C.R.S., regulatory analyses pursuant to Section 24-4-103 (4.5), C.R.S., or any other similar analysis? Have you conducted a cost-benefit analysis of the Department’s rules as a whole? If so, please provide an overview of each analysis.

Response: Three divisions promulgated rules in the past two years.

Oil and Gas Conservation Commission
- FY 2016-17: 0 rules
- FY 2017-18: 4 rules, no CBA or regulatory analysis was required
  - February 12, 2018 – Concerning an Increase to the Mill Levy (one rule)
  - February 13, 2018 – Concerning Flowlines (three rules)

Colorado Parks and Wildlife
Colorado Parks and Wildlife makes a large number of quota changes, season date changes, and
other hunting-specific changes to the agency regulations each year. In this regard, CPW has over 4,000 individual hunt codes used for issuing licenses by specific species, sex, geographic area, season, and method of take. CPW does not track statistics related to these changes. In terms of more substantial regulatory changes, CPW has identified the following totals:

- FY 2016-17: 84 regulatory changes, no CBA or regulatory analysis was required
- FY 2017-18: 113 regulatory changes, no CBA or regulatory analysis was required

Division of Water Resources

- Water Well Construction rules were amended with an effective date of 7/10/18. Per Section 24-4-103 (4.5), C.R.S., a cost benefit analysis (CBA) was requested and completed by the Division. The focus of the CBA was on proposed Well Construction Rules (2 CCR 402-2) specifically addressing the following rules:
  - Rule 10.4.4, Annular Space Requirements for All Grouted Intervals
  - Rule 10.4.5.1, Type I Well Penetrating Only One (1) Confining Layer (Excluding Those Penetrating the Laramie-Fox Hills Aquifer, see Rule 10.4.8)
  - Rule 10.4.5.2, Type I Well Penetrating More than One (1) Confining Layer

- Designated Basin Rules (2-CCR 410-1) were amended in April 2017 and May 2018. No cost-benefit analysis was requested from the Division.

- Artificial Recharge Extraction Rules (2-CCR 402-11) were amended in June 2018. No cost-benefit analysis was requested from the Division.

- Updated and revised rules for Adjudicatory Hearings before the Colorado Ground Water Commission. Per Section 24-4-103 (4.5), C.R.S., a CBA was requested and completed by the Division.
  - The focus of the CBA was on direct and/or indirect costs to either the government, business or other entities. Under the proposed amendments, use of alternative dispute resolutions (ADR) is voluntary and no parties will be required to comply. Therefore, the parties would be deciding to spend their money on ADR as opposed to formal adjudicatory procedures.

- Updated and revised rules and regulations for drillers and pump installers licensing process and the continuing education process and remedial actions. No cost-benefit analysis was requested from the Division.

What are the major cost drivers impacting the Department? Is there a difference between the price inflation the Department is experiencing compared to the general CPI? Please describe any specific cost escalations.

Response: Major cost drivers for the Department of Natural Resources include: growth in personal services expenses for 1,465 FTE and hundreds of temps; inflation in the cost of utilities and goods required to operate DNR facilities; information technology costs that have increased substantially year-over-year; and general growth in workload for each division. As an example, the number of active oil and gas wells in the state is a key workload indicator/driver.
for the Oil and Gas Conservation Commission. The number of active wells has increased steadily over the last ten years and will reach an estimated total of 55,000 wells by the end of FY 2018-19. New wells require permits and all active wells require inspections for their lifetime, as well as plugging and final reclamation as they are retired, all of which increases workload requirements and ultimately costs for the OGCC. For additional information on workload and performance measures, please see the Department's FY 2018-19 Performance Plan online.

Many of these factors increase in tandem with the general CPI. However, there are a few specific areas where costs increases have grown more quickly:

**Department-wide Information Technology Costs**

A major driver of Department costs are payments made to the Office of Information Technology (OIT). The following table shows cost increases related to OIT since FY 2014-15:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Payments to OIT Appropriation</th>
<th>Change from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014-15</td>
<td>$8.35 Million</td>
<td>N/A</td>
</tr>
<tr>
<td>FY 2015-16</td>
<td>$8.10 Million</td>
<td>(3.0%)</td>
</tr>
<tr>
<td>FY 2016-17</td>
<td>$8.47 Million</td>
<td>4.6%</td>
</tr>
<tr>
<td>FY 2017-18</td>
<td>$11.47 Million</td>
<td>35.3%</td>
</tr>
<tr>
<td>FY 2018-19</td>
<td>$14.96 Million</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

As shown above, the total cost of DNR’s OIT Payments has grown by $6.6 million over the last four years (a 79% increase in four years). Approximately 77% of these costs are paid directly from cash sources, some of which are facing revenue challenges (e.g., severance tax revenues). Although the Department’s FY 2019-20 request would decrease Payments to OIT by 4.3% to $14.32 million, this remains a major cost driver and financial concern for the Department.

**Colorado Parks and Wildlife**

Colorado Parks and Wildlife in particular has experienced costs exceeding the general CPI in a few key program areas:

a) The CPW Capital Development Program manages construction, renovation, rehabilitation, and other development projects around the state, ranging in size from small landscaping projects to the development of new state parks. The program manages construction that supports operations at facilities division-wide, including over 350 state wildlife areas, 41 state parks, and more than 1,400 total facilities, including 19 hatcheries.

For the last several years, CPW has experienced significantly higher costs for multiple aspects of capital construction, including overall contractor costs, materials costs, and fuel
costs. The net impact is an increase of 4.5 to 5.5 percent a year in overall construction costs. (This is a national trend and is not unique to Colorado.)

CPW’s annual large capital development plans vary from year to year but have averaged around $20.7 million a year over the last four years. Annual increases in cost of 4.5 to 5.5 percent result in a higher cost for work and thus fewer projects accomplished per capital dollar. Many projects come to bid at costs that are significantly higher than had been estimated by CPW’s project management professionals. As an example, in 2017 CPW solicited bids for a combined park office and service center at Staunton State Park. Based on previous projects that were similar in nature, CPW anticipated bids at approximately $300 per square foot. The low bid that CPW received for the project was $380 per square foot. Similarly, in 2018 CPW estimated costs for a new 2,100 square foot camper registration building at $790,000. The low bid was $990,000. These are high-visibility structures that would seem to be attractive to contractors, yet bids continue to come in significantly higher than anticipated.

b) Colorado Parks and Wildlife employs a large number of temporary staff during the busy summer months, and a slightly lower number in the late spring and early fall “shoulder” seasons. (CPW also employs a much smaller number of temporary staff throughout the rest of the year.) Total temporary staffing varies annually depending on need and available budget, but it is common for total temporary staff hours in a typical year to equate to 400-450 FTE. Staff are hired at different hourly rates depending on a number of factors, including experience and the specific labor market (i.e., location) of the hire.

With the passage of Amendment 70, effective January 1, 2017, Colorado’s minimum wage increased to $9.30 per hour and increases annually by $0.90 each January 1, until reaching $12 per hour effective January 2020. Thereafter the minimum wage will be adjusted annually for cost of living increases, as measured by the Consumer Price Index used for Colorado.

Based on a 2017 analysis, maintaining the same sized temporary workforce and raising all temporary staff salaries to $12 an hour by 2020 will require additional expenditures of approximately $740,000 for state parks and $640,000 for wildlife-related activities. Temporary staff are vital to agency operations in the summer and shoulder months, and a reduction of temp staff hours directly impacts the experience of CPW’s visitors. To date, CPW has not reduced staff hours, and has adjusted temporary staff wages as mandated by Amendment 70. This has required reallocation of budgets from other priorities.

Other Divisions
Other divisions have experienced similar increases in construction-related costs. For example, the Colorado Water Conservation Board has experienced and received construction bids that have
been higher in cost than expected over the last 18 months, which may be a result of a strong construction economy. This cost increase for construction bids has had an impact on approved loans and grants. The Division of Reclamation, Mining, and Safety has not directly experienced disproportionate increases in the cost of construction but has noted an increase in the procurement of professional engineering services over the last year.

How is the Department’s caseload changing and how does it impact the Department’s budget? Are there specific population changes or service needs (e.g., aging population) that are different from general population growth?

Response: The Department of Natural Resources does not have "caseload" in the same way many other departments might, but population growth and related variables affect a number of divisions and their budgets.

Oil and Gas Conservation Commission
Population increases in specific areas where oil and gas activity is occurring, such as the northern Front Range, drive additional workload and costs for the OGCC. For example, applications for new oil and gas locations near residential areas are far more complex and significantly more time consuming than those in less populated areas, as they require more interaction between OGCC staff, operators, local governments, and the Department of Public Health and Environment; receive more public comments that need to be addressed; require more conditions of approval; and so forth. Oil and gas facilities in populated areas require more on-the-ground attention by inspectors during all phases of the well – construction, drilling, completion, production, plugging and reclamation – as proximity to homes and other occupied structures elevates the status of a well to high priority. They also generate more public complaints, primarily for nuisance issues such as dust, noise, and odors.

Colorado Parks and Wildlife
For CPW, park visitation is a close analog to caseload: a population-based variable that has a direct correlation to operating costs. Since FY 2009-10, visitation at Colorado’s state parks has increased by approximately 18.7 percent, from about 12.3 million visitor days to more than 14.6 million visitor days. (During this period CPW opened one new park – Staunton State Park, in Park and Jefferson Counties.)

In this same period, non-personal services operating costs for the state park system increased by almost 44 percent. Certainly inflation has contributed to these cost increases, but park visitation is a good “common sense” indicator of how park operating expenditures will trend: as more people visit a given park, park operations will need to accommodate the costs associated with increased visitation.

Despite these cost increases, spending authority for the State Park Operations line item (the primary line item supporting day-to-day park operations) is only 6.7 percent higher in FY 2018-
19 than in FY 2009-10. CPW seeks to better align spending authority and costs in the State Park Operations line item with DNR decision item R-1, Increased Spending Authority for State Park Operations.

**Colorado Water Conservation Board**

Colorado’s population is estimated at 5.6 million and this amount could nearly double by 2060. Supporting this growth requires water. Through the work of the Statewide Water Supply Initiative (SWSI), Interbasin Compact Committee, and Basin Roundtables (BRT), the CWCB has learned that the statewide water trajectory is not sustainable for the anticipated population growth. In May of 2013, Governor Hickenlooper issued an executive order directing the creation of Colorado’s Water Plan to ensure there is enough water now and in the future. Since the release of the water plan in December of 2014, and in the face of continued projections for population growth, the CWCB continues to see a high funding demand for various types of water projects including infrastructure, environment and recreation, and agriculture. The Water Plan identified a $20 billion gap in funding for municipal and industrial water needs by 2050. The CWCB has committed to explore and investigate options for $100 million per year towards closing this gap.

For FY 2019-20, Governor Hickenlooper has proposed legislation to provide $30 million GF to the Colorado Water Conservation Board. $10 million of this funding will help to further implement Colorado’s Water Plan through the Water Plan Grant Program. The program’s 50% match requirement will, in turn, leverage other sources of funding. Funding categories in the Water Plan Grant program include: agriculture, conservation and land use, environment and recreation, innovation and outreach, and storage and supply.

In addition to augmenting the Water Plan Implementation Grant Program, $20 million of this funding will be used to establish a new demand management program to help secure the future of the Colorado River system given its importance across Colorado. This program will take a proactive approach to address the continued drought in the Colorado River Basin, which would have state-wide implications. Since 2000, the certainty and security of the Colorado River water supply have been called into question. The entire Colorado River Basin is currently in the worst hydrologic cycle in the historic record and is entering its nineteenth year of drought. With continued population growth estimated at up to 70% by 2050 on the West Slope, additional pressure is being placed on the system. To prepare for the realities of continued drought, the CWCB would use transferred funds to establish a demand management program that would compensate water users for intentionally and voluntarily reducing their use of Colorado River water. For example, in the Colorado River Basin, funding may be used to compensate water rights owners, both agricultural and municipal, for voluntarily foregoing use of their water rights in times of severe drought in a manner that makes sense for their businesses. The conserved water could then be stored to avoid, delay, or mitigate a Colorado River compact curtailment. These funds will act as an important first investment to demonstrate statewide
leadership, will encourage water users to participate, and may leverage additional funding from other partners.

Current efforts, along with an update to SWSI will help provide a consistent framework to examine future water supply and demand. This includes creating several new tools to help develop solutions to identify gaps. On-going funding and planning efforts to meet future water needs for the growing population will be a concerted effort. It requires implementation, leadership, and funding. Throughout the process, the CWCB is committed to continue working with the Colorado Legislature, stakeholders, and water users to complete projects that are beneficial.

Please provide an overview of the Department’s current and future strategies for the use of outward facing technology (e.g. websites, apps) and the role of these technologies in the Department’s interactions with the public.

Response: The Department and its divisions utilize a wide array of technologies for interacting with customers and with the public. Below, each DNR division will discuss how it uses outward facing technologies.

**Division of Reclamation, Mining, & Safety**

DRMS currently uses the following outward facing technology:

- **Web site** – interactions with the public include conveying general information about the division, its mission, and contact information; forms downloads, board hearing minutes, summaries and schedules; public meeting announcements, press releases, and rulemaking information. Our web site also includes a tool to query the DRMS database for permit statistics.

- **Laserfiche WebLink** – the public uses this application to access imaged document data for sites regulated by the division, to include permit documents and supporting information, inspection reports, enforcement action documentation, board hearing minutes, and historic mine data.

- **Map Viewer** – the public uses our Map Viewer to view and download GIS data related to active and reclaimed mine sites and historic mines.

- **Laserfiche Forms** – DRMS has made a complaint form available for the public to use to alert us to any non-compliance issues that may arise. Laserfiche Forms are also used to allow the regulated community to upload annual reports and fees required by our Minerals program.

- **Google Forms** – the regulated community uses Google Forms to enroll in our ePermitting program.

Future strategies for the use of outward facing technology include expansion of Laserfiche Forms to allow for public and other agency comments on applications currently under review,
and to increase the number of permitting actions and required submittals that can be conducted electronically.

**Oil and Gas Conservation Commission**

The Oil and Gas Conservation Commission uses outward facing technology to better interact with the public, the oil and gas industry, local governments, and other interested parties. By providing users with information and other capabilities, the OGCC is able to maximize the transparency of all agency actions. The OGCC's website allows users to access: (1) all reported well and facility data, including inspections and violations; (2) hearings and rule-making applications and schedules; (3) a map of oil and gas wells and facilities, including pending and approved applications, current status, and orphan well projects; (4) bulk downloads and uploads of data, and; (5) electronic submittal of forms, comments, and complaints. Specific examples of the current technology used by OGCC are as follows:

- Industry can electronically submit permit applications and subsequent reports for oil and gas locations, wells, and facilities.
- Pending applications for new oil and gas locations and wells are posted online and are available for review.
- Public comments on applications for new oil and gas locations and wells can be submitted online. Similarly, local government designees can review these applications and submit comments online.
- Approved permit applications for new oil and gas locations and wells are posted and available for review online.
- Sign up for public comments at COGCC hearings is available online.
- Approved Commission orders are posted online.
- Citizen complaints may be submitted online.
- Online interactive maps are available on the COGCC website which display all wells and facilities with extensive related information.
- The COGCC has a searchable database, allowing users access to all reported oil and gas well and facility data, including inspections and violations.
- Operators can upload sample analysis reports directly to the COGCC database.

In addition to these current technologies, the OGCC is in the process of planning and/or developing additional outward-facing technologies. These future projects will: (1) allow operators to submit hearing applications online; (2) allow operators to perform bulk uploads for electronic form submissions; (3) provide access to an orphan well program dashboard that will display program data; (4) provide the capability to access data for all neighborhood oil and gas facilities within a given distance of a specific street address, and; (5) allow local government designees additional online capabilities, including form submissions and downloadable GIS for flowlines in their jurisdiction.
State Land Board

On its website www.colorado.gov/statelandboard the State Land Board currently provides a large amount of information about the work of its Board of Commissioners, the work of agency staff, how to engage with the agency, how to learn more about the agency’s work, and some lease application and lease payment functions. The agency also supplements its requirements for public notice of Board activity using the website. Agency staff is working to provide greater depth and breadth of information to the public on its website. The agency will continue to develop the types of lease transactions it can support via its website including an individualized user profile with secure access to relationship history and pending items due like lease payments and lease contingencies.

The State Land Board is developing additional public access to public records such as leases and maps by developing integration between its leasing system ATLAS, its records archive Laserfiche and its mapping systems. The agency would like to provide a better self-service experience in Colorado Open Records Act requests and building these integrations will allow requestors to find 80% of the things typically requested on their own very quickly.

The State Land Board monitors the activity on its website using web analytics tools to better understand how website users move through and make use of the information provided there. The results of these analytics are used to further develop the agency’s web presence so that it effectively promotes the work of the agency and the impact made on the beneficiaries.

Colorado Parks and Wildlife

Colorado Parks and Wildlife (CPW) is an enterprise that has historically been instructed to operate “self-sufficiently” (that is, with minimal state funding). As such, using technology to interact with customers is integral to generating the revenue needed to operate wildlife programs, the state park system, and other outdoor recreational programs. In this regard, much of the technology is focused on providing information on various recreational activities supported by CPW, as well as selling licenses and passes, and allowing customers to make camping reservations. Moving forward, CPW will continue to develop and expand the use of various technologies to interact with its customers by providing information, education and making it easier to “Live Life Outside”. A few examples of the current technology in use by CPW are:

- CPW’s Public Website;
- Social Media, including Twitter, Facebook, Instagram, Snapchat, YouTube and Vimeo;
- CPW’s Fishing Mobile App;
- Riverwatch, a citizen science application for measuring and maintaining Colorado’s river quality;
- Hunting Reservations, for customers reserving hunting blinds;
- Camping Reservation Mobile App;
- Hunter Education information and logistics;
Volunteer opportunities;
• Chronic Wasting Disease Test Results; and
• www.cpwshop.com
  o Camping Reservations
  o Vehicle registration
  o Pass purchases
  o Retail goods
  o License applications
  o Hunting licenses

The technologies listed above allow CPW to interface with customers and will continue to be enhanced and expanded in the future. Additionally there are current plans to add the following customer conveniences using technology:
• Licensing and permit mobile app allowing customers to have their license on their mobile devices
• Pass mobile app - allowing customers to purchase passes and to have that pass on their mobile devices.
• Online citation payment system
• Hunter Education Classes

Colorado Trails System
Since the inception of the Colorado the Beautiful Initiative, CPW has been working on an application to comprehensively map every trail in Colorado. In June of 2017, CPW premiered COTREX app, which allows users to browse and discover trails in Colorado. Additional improvements were made in 2018 to further develop the state's trail data and build Android, iOS, and web browser versions of the app. These improvements will also give local governments more control to manage and promote trails in their area. The COTREX mobile application is available for free in the Apple and Google Play Stores, as well as online at https://trails.colorado.gov. In building COTREX, CPW has made data from 236 land managers across local, state and federal government agencies easily accessible for 39,829 miles of trail and 3,606 trailheads.

Colorado Water Conservation Board
CWCB uses outward facing technology to better interact with partners and provide information to the general public. Examples of the current technology used by CWCB include:
• Continue to improve the CWCB's website to provide current and concise information to the public about water and Colorado's Water Plan.
• Continue to evolve the Colorado Decision Support System (CDSS) website in partnership with DWR to provide relevant water data, tools and models to the public and the water community.
In addition to these current technologies, the CWCB is in the process of developing a public grant portal to make it easier for the water and environmental communities to apply for and track grants available through the Colorado Water Conservation Board.

**Division of Water Resources**

DWR makes a wide range of tabular data, spatial data, and documents available to the public. Examples of available information includes:

- Dam Safety Information
- Hydrogeological Data (including aquifer parameters and groundwater levels)
- Spatial Data (for example, irrigated area, dry up, service area)
- Water Rights Administration Data (including water rights tabulation, stream flow data, diversion and use records, administrative call records)
- Water Well Information (including permits, construction, pump installation, geophysical logs, meter accuracy, licensed contractors)

Documents generated since Governor Ritter’s Greening of Government initiative are available digitally through DWR’s Imaged Document system. Significant progress has been made to digitize documents generated prior to that initiative and continues as resources are available so that there are readily available to both DWR staff and the public. DWR has long been committed to making all collected data that is not subject to privacy concerns available to the public.

All DWR data and imaged documents are stored in databases maintained by the Governor’s Office of Information Technology in data vaults using the latest digital technology. A key strategy to successful data management is data centricity; there must be a single repository for each data set in order to avoid a loss of data integrity. A second key strategy is a consistent model for making all of our tabular, spatial, and imaged documents available to both our staff and the public.

In terms of specific strategies related to public access, data is cast to the Colorado Information Marketplace, which provides the public with a robust interface to access the data in near real time. In collaboration with the Colorado Water Conservation Board, DWR also maintains Colorado’s Decision Support System website, a public facing website where both the data and tools to analyze the data are maintained. For sophisticated public users, DWR maintains REST (Representational State Transfer) services that allow users to programmatically consume data. This allows users to build their own tools that simply use DWR data. The existing Colorado Information Marketplace datasets, Map Viewer platform, and Imaged Document systems can be used by the public to access essentially all DWR digital information.
The public can also register with DWR and provide certain digital data (diversion data, groundwater levels, etc.) to DWR using the DWR Online Data Submittal website. Such data is then maintained along with data collected by DWR.

DWR is in the process of moving our various public facing interfaces to a single portal that will allow users to submit data and forms electronically. Adopting a single portal to submit data and forms will simplify the user experience, increase the ability to share data, and improve communications.
ATTACHMENT A:

Map of Dams Owned and Operated by Colorado Parks and Wildlife
CPW Dams by Hazard Classification

- High Hazard
- Significant Hazard
- Low Hazard
- No Public Hazard
- Nonjurisdictional
ATTACHMENT B:

Department of Natural Resources

FY 2017-18 Burned FTE Report by Division
## Actual Calculated State FTE for FY 2017-18 as of June 30, 2018

**Calculation to Identify Defined State FTE**

<table>
<thead>
<tr>
<th>Dept. of Natural Resources</th>
<th>CPPS</th>
<th>Total FTE @ No. hours/yr.</th>
<th>State Temps</th>
<th>Payouts</th>
<th>Overtime</th>
<th>Other</th>
<th>Sub-total Non-FTE Defined Codes</th>
<th>Total Defined State FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDO (PAA)</td>
<td>108,810.3</td>
<td>52.3</td>
<td>3.7</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
<td>4.2</td>
<td>48.1</td>
</tr>
<tr>
<td>DRMS (PKA)</td>
<td>120,329.8</td>
<td>57.9</td>
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<td>0.7</td>
<td>0.0</td>
<td>0.0</td>
<td>3.3</td>
<td>54.6</td>
</tr>
<tr>
<td>OGCC (PHA)</td>
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<td>5.1</td>
<td>0.5</td>
<td>0.2</td>
<td>0.0</td>
<td>5.8</td>
<td>102.2</td>
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<tr>
<td>SLB (PCA)</td>
<td>94,952.4</td>
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<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>1.4</td>
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</tr>
<tr>
<td>CPW (PMA)</td>
<td>2,745,604.4</td>
<td>1,319.9</td>
<td>422.2</td>
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<td>0.1</td>
<td>428.6</td>
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</tr>
<tr>
<td>CWCB (PDA)</td>
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<td>45.4</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
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<td>43.9</td>
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<tr>
<td>DWR (PEA)</td>
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<td>255.2</td>
<td>4.0</td>
<td>2.0</td>
<td>1.6</td>
<td>0.0</td>
<td>7.6</td>
<td>247.6</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>3,919,622.1</td>
<td>1,884.4</td>
<td>439.9</td>
<td>10.6</td>
<td>1.8</td>
<td>0.1</td>
<td><strong>452.4</strong></td>
<td><strong>1,432.0</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-FTE Defined Codes</th>
<th>Total State FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Categories for Total Defined State FTE**

<table>
<thead>
<tr>
<th></th>
<th>JBC Non-Appropriated with Actual Hours</th>
<th>JBC Appropriated with Actual Hours</th>
<th>Long Bill + Special Bills FTE Allocation</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td>12.0</td>
<td>1,420.0</td>
<td>1,458.6</td>
<td>38.6</td>
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</table>

## Notes

- **Actual Calculated State FTE:**
  - Total State FTE as of June 30, 2018.
  - Calculation based on CPPS and defined codes.
  - Non-FTE defined codes included.

- **Categories:**
  - JBC Non-Appropriated with Actual Hours
  - JBC Appropriated with Actual Hours
  - Long Bill + Special Bills FTE Allocation
  - Total Difference
Colorado Water Plan
Implementation
$30 MILLION GENERAL FUND REQUEST

- $10 million for CWCB Water Plan Grant Program
- $20 million for Colorado River Demand Management
WATER PLAN GRANT PROGRAM

- Funded through annual Projects Bill starting in FY17/18
- 5 categories of funding: Ag, Storage/Supply, Env & Rec, Conservation, Innovation
- First year received $9M for grants, total request was $13.3M
- Leveraged over $40M
- FY18/19 received $7M for grants
- State committed in Water Plan to investigate options for $100M annually to address $20B need identified in the plan
COLORADO RIVER DEMAND MANAGEMENT

Connection to the Water Plan

- "The state of Colorado will support strategies to maximize the use of compact water while actively avoiding a Colorado River Compact deficit." (Colorado’s Water Plan, Chapter 9.1)
- Sustaining and protecting existing Colorado River water uses was identified as a priority in ALL of the Basin Implementation Plans.
- Colorado River management aligns with many Water Plan goals: conserving consumptive use, improving aquatic habitat, endangered species recovery, integrated watershed management planning, providing certainty for agricultural users.
COLORADO RIVER DEMAND MANAGEMENT

Current Situation

- Colorado River Basin is entering its 19th year of drought

- Risks: 1) Lake Powell storage declining below critical elevations; and 2) mandatory water rights curtailment to maintain compliance with Colorado River Compacts

- 7 Colorado River Basin States have been developing Drought Contingency Plans (DCPs)

- Upper Basin DCP would protect critical elevations at Lake Powell, compliance with CO River Compact, and create pool for conserved water

- Upper Basin DCP documents were approved by the Upper Colorado River Commission in December

- BOR gave Lower Basin States until the end of Jan 2019
COLORADO RIVER DEMAND MANAGEMENT

Options

Reactive – waiting until crisis occurs
- Imposed Involuntary Curtailment
- High level of uncertainty
- Inefficient allocation of natural and economic resources
- Drinking water supplies
- Litigation
- Economic ramifications
- Increased risk of federalization of the Upper Basin

Proactive – control our own destiny.
- Voluntary actions to conserve.
  - Plan ahead to mitigate impacts.
  - Reduce the risk of uncertainty with curtailment avoidance (risk will never be zero).
  - Explore and develop position for employing mechanisms that manage risk level within Colorado and Upper Basin.
COLORADO RIVER DEMAND MANAGEMENT

- CWCB Board adopted policy statement in support November 2018
- Demand management = long-term view and certainty for water users
- Temporary, voluntary, **compensated**
- $20M to fund development and implementation of demand management and leverage additional funding commitments