EXHIBIT F.2

Exhibit 19 – Referral Agency Comment and Response Table

This exhibit contains Denver Water's responses to comments received from Boulder County Departments and other referral agencies on Denver Water's Gross Reservoir Expansion (GRE) Project 1041 Permit Application. Denver Water first coded comments by assigning a Letter ID to the source agency, as shown in Table 1 below. Denver Water then assigned a unique Comment ID to each comment within each letter and drafted a response, as shown in Table 2 below. For reference, a copy of the original letters coded with Letter and Comment IDs are included in Exhibit 35.

Table 1 - Referral Agency Comment Letters Received

Comment Letter ID	Agency	Date Comment Submitted	Page Number in this Document
A	Building Safety & Inspection Services Team (Boulder County)	10-19-2020	4
B	Community Planning & Permitting (Boulder County)	11-13-2020	6
C	Public Health Environmental Health Division (Boulder County)	11-12-2020	13
D	Wildfire Mitigation Team (Boulder County)	12-10-2020	15
E	Colorado Department of Transportation (CDOT)	12-16-2020	16
F	Public Works (Boulder County)	11-11-2020	18
G	Community Planning & Permitting (Boulder County) [ADDITIONAL COMMENTS]	12-17-2020	21
H	Community Planning & Permitting – Historic Preservation Advisory Board (Boulder County)	11-12-2020	29
I	Community Planning & Permitting – Long Range Planning (Boulder County)	11-13-2020	30
J	Colorado Parks and Wildlife	11-12-2020	40
K	Colorado Division of Water Resources	10-19-2020	41
L	Community Planning & Permitting (Boulder County) Floodplain Management Program	11-12-2020	42
M	Gilpin County	12-17-2020	45
N	Grand County and Northwest Colorado Council of Governments	11-13-2020	47
O	Jefferson County – Director of Transportation and Engineering Division	12-14-2020	51
P	City of Lafayette	9-30-2020	52
Q	Town of Nederland	12-1-2020	52

Exhibit 19 – Referral Agency Comment and Response Table

Comment Letter ID	Agency	Date Comment Submitted	Page Number in this Document
R	City of Boulder Open Space & Mountain Parks	12-17-2020	54
S	Parks & Open Space (Boulder County), Planning Manager	12-17-2020	56

Glossary of terms used by Denver Water in response to comments

ADA	Americans with Disabilities Act	GRE Project	Gross Reservoir Expansion Project, also known as the Moffat Project
ADT	Average Daily Traffic	IBC	International Building Code
AF	Acre-foot	ICC	International Code Council
AF/yr	Acre-foot Per Year	IGA	Intergovernmental Agreement
BMP	Best Management Practice	IRP	Integrated Resource Plan
CDOT	Colorado Department of Transportation	kW	Kilowatt
CDPHE	Colorado Department of Public Health and Environment	LEED	Leadership in Energy and Environmental Design
CEQ	Council on Environmental Quality	NEPA	National Environmental Policy Act
cfs	Cubic-feet Per Second	NWCCOG	Northwest Colorado Council of Governments
CO2e	Carbon Dioxide Equivalent	O&M	Operations & Maintenance
Corps	U.S. Army Corps of Engineers	PACSM	Platte & Colorado Simulation Model
CPW	Colorado Parks & Wildlife	PCA	Potential Conservation Area
CR	County Road	P.E.	Professional Engineer
CSFS	Colorado State Forest Service	The River District	Colorado River Water Conservation District
CWCB	Colorado Water Conservation Board	ROW	Right-of-Way
EA	Environmental Assessment	SEO	State Engineer's Office
EIS	Environmental Impact Statement	SH	State Highway
EPA	Environmental Protection Agency	USDA	U.S. Department of Agriculture
FEMA	Federal Emergency Management Agency	USFS	U.S. Forest Service
FERC	Federal Energy Regulatory Commission	USGS	U.S. Geological Survey
FWS	U.S. Fish and Wildlife Service		

Table 2 – Referral Agency Comments and Responses

A	**SI-20-0003 Building Safety & Inspection Services Team (Boulder County)** **Date posted: 10-19-2020**		
Comment ID	**Comment**	**Category**	**Response**
A-1	Building Permits. Separate building permits, plan reviews and inspection approvals are required for all; temporary structures, permanent structures and electrical equipment that are part of this proposal. This includes but is not limited to; the dam control building, the quarry operations, construction of a temporary concrete batch/production plant, aggregate processing plant, batch plant offices, crusher office, pump station building, relocated or reconstructed maintenance building, powerhouse, testing lab building, receiving office trailer, office complex trailers, staging area trailers, shop trailers, storage area trailers, all recreation facilities, any retaining walls greater than four feet (measured from the bottom of the footing to the top of the wall), and fences greater than 6 feet tall. For a complete list of when building permits are required, please refer to the county's adopted 2015 editions of the International Codes and code amendments, which can be found via the internet under the link: 2015 Building Code Adoption & Amendments, at the following URL: http://www.bouldercounty.org/dept/landuse/pages/default.aspx The Commercial Plan Submittal Checklist: http://www.bouldercounty.org/doc/landuse/b70commercialplanchecklist.pdf	Construction Activities	Denver Water will provide Boulder County with plans for construction-related facilities. However, structures that are part of the licensed Gross Reservoir Hydroelectric Project have already been approved by FERC, which has exclusive jurisdiction under the Federal Power Act to license and regulate the construction, operation and maintenance of these facilities. Denver Water met with Boulder County's Community Planning & Permitting Building Safety & Inspection Services Team on February 3, 2021, to discuss the applicability of the building permit process to the facilities that are part of the licensed Hydroelectric Project under FERC's jurisdiction. Notes from the February 3 meeting are available in Exhibit 23 of Denver Water's 1041 responses to comments submittal. With respect to the quarry operations, Denver Water is preparing a Quarry Operation Plan and a Quarry Reclamation Plan and will consult with the County—as well as the USFS, Colorado Division of Reclamation, Mining, and Safety, and the Corps—in the development of the plans, as required by the FERC Order. Denver Water anticipates circulating draft plans for a 30-day review period according to the FERC Plans Submittal Schedule attached to this response to comments submittal (Exhibit 22). Denver Water will then make appropriate adjustments based on the feedback received before submitting the plans to FERC by the July 16, 2021, deadline in FERC's Order. Denver Water also is preparing a revised Recreation Management Plan that addresses all recreation facilities required by the FERC Order. Denver Water anticipates circulating the draft plan for a 30-day review period according to the FERC Plans Submittal Schedule attached to this response to comments submittal (Exhibit 22), incorporating feedback as appropriate, and then submitting the final plan to FERC by the July 16, 2021, deadline in FERC's Order.
A-2	**Grading Permits.** Grading permits are required for trails and roads and any other grading that is in excess of 50 cubic yards. Plan review and inspection approvals are required for the proposed work. Please refer to the county's adopted 2015 editions of the International Codes and code amendments, including the most applicable portion, Appendix J (grading) of the International Building Code ("IBC"), which can be found via the internet under the link: *no link provided in the comment letter*	Construction Activities	Denver Water will submit a Site Grading Plan to Boulder County for review and approval. Grading plans for the aggregate quarry, the crushing plant pad, the batch plant pad, haul roads, staging areas and spoil disposal areas will be submitted in the 3rd quarter of 2021. Pre-application meetings can be arranged in advance to discuss the format and content.
A-3	**Engineering Observations.** Observation reports from the design engineer or another qualified engineer stating that the grading work has been accomplished in substantial conformance with the approved grading plans will be required to be submitted to Building Safety & Inspection Services for review and approval prior to final approval of the work covered by the grading permit.	Construction Activities	Denver Water will submit grading work information to Boulder County for review and approval. Construction observation will be provided by qualified oversight personnel. Reports documenting compliance with permit and design requirements will be provided to Building Safety & Inspection Services.
A-4	**Ignition-Resistant Construction and Defensible Space.** Please refer to Section R327 of the Boulder County Building Code for wildfire hazard mitigation requirements, including ignition-resistant construction and defensible space. A separate referral response will be forthcoming from one of the county's wildfire mitigation specialists. Wildfire mitigation in the area surrounding all structures will be required	Construction Activities	Denver Water will meet the Boulder County requirements for ignition-resistant construction of temporary and permanent structures. Defensible space measures will be described in permit application documents and will be verified complete to Building Safety & Inspection Services.

A	**SI-20-0003 Building Safety & Inspection Services Team (Boulder County)** **Date posted: 10-19-2020**		
Comment ID	**Comment**	**Category**	**Response**
A-5	**Minimum Plumbing Fixtures for the recreation facilities and permanent structures.** The plumbing fixtures count needs to meet or exceed the requirements of IBC Chapter 29, including the need for accessible restrooms and fixtures.	Construction Activities	Plumbing fixtures in permanent and recreation structures will meet the requirements of IBC Chapter 29. Accessible restrooms and fixtures will be provided.
A-6	**Accessibility For the recreation facilities and permanent structures where applicable.** Chapter 11 of the IBC and referenced standard ICC A117.1-09 provide for accessibility for persons with disabilities. Any building permit submittals are to include any applicable accessibility requirements, including accessible parking, signage, accessible routes and accessible fixtures and features.	Construction Activities	Permanent and recreation structures will meet the requirements of IBC Chapter 11 and referenced standard ICC A117.1-09. Building permit applications for these structures include any applicable accessibility requirements, including accessible parking, signage, accessible routes and accessible fixtures and features.
A-7	**Design Wind and Snow Loads.** The current design wind and snow loads for the property are approximately 170 mph (Vult) and 50 psf (ground), respectively.	Construction Activities	Permanent structures will meet the code requirements for wind and snow loads. Denver Water may request a variance to the wind and snow load criteria for temporary structures. Colorado P.E. stamped designs will be provided for all proposed facilities (permanent or temporary).
A-8	**Plan Review.** The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be performed at the time of building permit(s) application, when full details are available for review, to assure that all applicable minimum building codes requirements are to be met. Building Safety forms, handouts and other publications can be found at: http://www.bouldercounty.org/property/build/pages/bldingdf.aspx	Construction Activities	Temporary and permanent structures will meet the county's code requirements or a variance will be sought when appropriate. Specific requirements for each structure, temporary or permanent, can be reviewed at the Pre-application conference prior to permit application submittal. Based on the February 3, 2021, between the Boulder County Building Official and Denver Water, it was apparent the permit process and timeline for both permanent and temporary buildings may require over 6 months to complete. As such, Denver Water may ask for a concurrent review of building permits while the 1041 Permit process is underway, to ensure Denver Water can comply with the FERC Order execution requirements.
A-9	**Meeting**. When you are ready to review construction drawings with the plan review team. Please contact our Plans Examiner Supervisor Michelle Huebner to make an appointment. mhuebner@bouldercounty.org 720-564-2616.	Construction Activities	Pre-application meetings will be scheduled as requested. A comprehensive list of structures requiring permitting will be developed and submitted with proposed permit application dates in April 2021. Pre-application meetings can be combined to make best use of County staff time.

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
B-1	**Legal Access:** The subject property is accessed via Gross Dam Road, a gravel-surfaced, Boulder County owned and maintained right-of-way (ROW) with a Functional Classification of Collector, from the point at which it departs from State Highway 72 (also known as Coal Creek Canyon Drive), a Colorado Department of Transportation (CDOT) ROW, to the Union Pacific Railroad tracks; this portion of Gross Dam Road is also known as County Road 77S. From the Union Pacific Railroad tracks extending to Flagstaff Road (a Boulder County owned and maintained ROW, with a Functional Classification of Collector), Gross Dam Road is owned and maintained by Denver Water. Legal access has been demonstrated via adjacency to the identified public ROWs.	Project Description	Denver Water agrees, Boulder County controls a permanent easement and maintains Gross Dam Road from SH 72 to the Union Pacific Railroad tracks. From the Railroad tracks to Flagstaff Road, Gross Dam Road is owned or has a permanent easement and is maintained by Denver Water.
B-2	**Legal Access:** Portions of private property exist adjacent to Gross Dam Road, along sections that the applicant has identified for road improvements. Denver Water shall provide documentation of all roadway easements and fee rights-of-way procured for the project where required by roadway improvements or realignments as a result of this project. Roadway Improvement Plans must identify adjacent property owners.	Construction Activities	Denver Water will provide documentation at the appropriate time in the process for all roadway easements and ROW already acquired or necessary to be acquired for the GRE Project along with the Eminent Domain Resolutions authorizing the proposed acquisitions identified at this time. Additionally, Denver Water will identify all adjacent property owners. This information can be supplied with the Roadway Construction Permit application.
B-3	**Traffic Impacts:** A Traffic Impact Analysis (TIA): 60% Design Memorandum, completed by Stantec Consulting Services, September 17, 2020, included with the application materials, was reviewed by staff. The County does not recognize the "in-process" 60% TIA. In order for staff to evaluate traffic impacts for the proposed development, a Final Design Memorandum must be submitted for review and approval by staff.	Transportation	Further refinement of the Traffic Impact Study will be provided to incorporate more current data in a revised report. Current recreation traffic counts for 2021 will not be meaningful before the reservoir opens to the public on the Memorial Day weekend 2021 (5/28/21). Interim data from CDOT will be collected and an updated Traffic Impact Study will be developed to validate the current SH 72 and Gross Dam Road intersection design. The Traffic Management Plan will be developed with inputs from the updated Traffic Impact Study. An updated Traffic Impact Study will be available in March and a final report in June 2021. Note that Denver Water uses the CDOT naming convention for Traffic Impact Study. A preliminary Traffic Management Plan will be provided to Boulder County in April 2021 for initial comment. Denver Water will provide a draft Traffic Management Plan to all stakeholders including Boulder County in early May for a formal 30-day comment review period. Denver Water will address comments received and submit the final plan to the FERC by July 16, 2022, as ordered by the FERC.
B-4	**Traffic Impacts:** With the submission of the Final Design Memorandum, additional clarification of the following components is required: a. Tree removal truck estimations are provided for all phases of the project in average per day/per hour. The applicant must also provide these numbers in average daily traffic (ADT), following industry standard, for accurate comparison and understanding of impacts to the existing traffic system;	Transportation	A Tree Removal Plan is currently being developed and transportation numbers from this plan will be incorporated into the Traffic Management Plan. Standard terms including ADT will be used in the Traffic Impact Study for this activity. Please see response to comment B-3 for details on the schedule.
B-5	**Traffic Impacts:** With the submission of the Final Design Memorandum, additional clarification of the following components is required: b. A system of shuttles for workers was briefly proposed in the 60% TIA, with limited detail. A detailed shuttle plan for workers must be included in the Final Design Memorandum;	Transportation	Through our community outreach efforts, surveys and discussions with Boulder County, it is clear that vehicle traffic is a major concern to our neighbors. Based on this feedback, and to minimize disruptions to our neighbors from construction traffic, Denver Water is willing to require the contractor to implement a ride sharing and bussing program for construction workers during certain periods of the construction activities. The Traffic Management Plan will address ride sharing and bussing of project

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
			commuting workers. The staging area utilization will also be described in the Traffic Management Plan.
B-6	**Traffic Impacts:** With the submission of the Final Design Memorandum, additional clarification of the following components is required: c. For construction generated traffic, the report used the assumption of 3.0 passenger car equivalency factor for trailer trucks. Staff believes that the more appropriate equivalency number is 2.5 passenger cars to trailer trucks. The applicant must explain their assumption in the Final Design Memorandum;	Transportation	The updated Traffic Impact Study will include an explanation of the car equivalency factor used in the analysis.
B-7	**Traffic Impacts:** With the submission of the Final Design Memorandum, additional clarification of the following components is required: d. The applicant is required to implement Transportation Demand Management strategies to reduce the number of trips to the site. Carpooling/vanpooling, or shuttles, with an offsite parking area for workers on the project are two possible strategy examples;	Transportation	The Traffic Management Plan will describe Denver Water's willingness to require the contractor to implement and manage ride sharing and buses for the commuting workforce during certain periods of construction activities. The proposed staging area will be described and sized to accommodate the workforce parking and staged delivery trucks. Delivery trucks will be released during targeted delivery windows.
B-8	**Traffic Impacts:** With the submission of the Final Design Memorandum, additional clarification of the following components is required: e. Recreational traffic estimates must reflect actual conditions more so than outlined in the 60% TIA, which included a traffic count conducted in December 2015, and were adjusted by 10 trips to and 10 trips from the site to account for seasonal differences. Staff does not feel that the recreational traffic estimates accurately reflect the current conditions, nor the peak recreational traffic during the summer months and must be updated.	Transportation	Denver Water is revisiting the recent recreation traffic and will update the Traffic Impact Study to reflect more current data. The 2021 season will be evaluated once the reservoir is reopened to on-water recreation after Memorial Day. The Traffic Management Plan will address the recreation traffic component when updated data is available. Please see response to comment B-3 for details on the schedule.
B-9	**Traffic Impacts:** Additional comments and requirements for traffic impacts are outlined in the referral response provided by the County Engineer.	Transportation	Noted. Thank you for your comprehensive comments. Specific responses are provided in the responses to comments from the County Engineer. (See Letter 'F' comment-responses within this Referral Agency Comment and Response Table.)
B-10	**Traffic Impacts:** The applicant must also develop a Transportation Management Plan (TMP), which must also be approved by the Boulder County Public Works Department and the Community Planning & Permitting Department prior to building permit or Roadway Construction Permit issuance. a. A Transportation Management Plan (TMP) is a documented set of coordinated transportation management strategies used to manage the impacts of construction projects. The purpose of a TMP is to minimize disruptions to motorists, emergency response vehicles, cyclists, pedestrians and communities without compromising public or worker safety, or the quality of work being performed;	Transportation	Please see response to comment B-3 for details regarding development of the draft Traffic Management Plan. Denver Water intends to use the Transportation Management Plan template provided by Boulder County as a basis for the plan. The Traffic Management Plan will minimize disruptions to motorists, emergency response vehicles, cyclists, pedestrians and communities without compromising public or worker safety or the quality of work being performed.
B-11	**Traffic Impacts:** The applicant must also develop a Transportation Management Plan (TMP), which must also be approved by the Boulder County Public Works Department and the Community Planning & Permitting Department prior to building permit or Roadway Construction Permit issuance. b. Boulder County has a TMP Guidance document and TMP template which will allow the applicant to develop a TMP that is comprehensive in nature. The template is attached to this referral.	Transportation	The Boulder County Transportation Management Plan Guidance Document will be used to develop the information to be included in the Traffic. Note that Denver Water uses the FERC naming convention for Traffic Management Plan.
B-12	**Plans:** Multiple phases of construction are proposed by the applicant. Updated plans must be provided as part of the approval of this 1041 permit which reflects activities associated with each	Construction Activities	The design of the proposed GRE Project improvements has been subdivided into separate Work Packages that are geographically and discipline specific. Each package

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
	phase of construction, including, but not limited to: traffic impacts, trail construction, construction staging and parking, staging locations, erosion control and stabilization of disturbed earth, cut and fill locations for earthwork, grading and drainage plans.		will describe the work elements and will be an exhibit for the respective permit applications required by Boulder County. Permanent and temporary controls for each package will be provided. Different packages have different regulatory approval paths that are specific to their regulating jurisdictions. Denver Water will provide a list of Work Packages with their respective scope descriptions and the proposed permitting path proposed for each package. Denver Water may ask for a concurrent review of building permits while the 1041 Permit process is underway to ensure Denver Water can comply with the FERC Order execution requirements.
B-13	**Plans:** Cut and fill locations must be identified for each phase and must also demonstrate the proximity to the reservoir and to private property. New trail construction must also be reflected in cut/fill plans.	Construction Activities	Work Package designs will include grading details including designated cuts and fills. Property lines will be indicated. A new trail will be detailed in the Work Package for the Miramonte parcel connecting trail. Permanent recreation facility plans, which are a separate Work Package will describe new and relocated existing trails associated with the GRE Project. That Work Package development will follow the completion of Dam design and will be based on the approved recreation plans provided with earlier environmental clearance exhibits. A review by Boulder County of proposed permanent recreation improvements will be provided.
B-14	**Plans:** Interior haul roads must be designed and constructed to Boulder County Multimodal Transportation Standards (the Standards). Updated plans must be submitted that identify the location of all haul roads to be constructed and demonstrate compliance with the Standards.	Construction Activities	Interior haul roads will not be open to the public during the construction period. The interior haul roads that revert after construction to public access roads will be described in Work Package design documents. Requirements of other jurisdictions including the USFS, the FERC, and the State Engineer will be considered for roads subject to their jurisdiction requirements. Boulder County will be provided an opportunity to review those designs as well. Access roads developed on the site outside areas that can be accessed by the public will be designed in accordance with regulatory requirements and may not meet Boulder County Standards.
B-15	**Plans:** Spoils areas are indicated on the preliminary plans. Updated plans must indicate what erosion control methods are planned and where those methods will be installed. Erosion control plans must also indicate how and when the spoils areas will be revegetated and restored upon completion of construction activities.	Construction Activities	Denver Water is in the process of developing a final site development plan which will include erosion control measures, and spoil disposal or restoration. Plans will indicate how and when the spoils areas will be revegetated and restored upon completion of construction activities.
B-16	**Plans:** Any staging areas near the reservoir will require slope stability and stormwater controls to ensure that stormflows do not negatively impact nearby waterways or the reservoir. The stormwater controls must be indicated on updated plans.	Construction Activities	Denver Water is in the process of developing a final site development plan which will include erosion control measures, and spoil disposal or restoration. Plans will consider slope stability and ensure that stormflows do not negatively impact nearby waterways or the reservoir. Stormwater controls will be indicated on the plans.
B-17	**Plans:** Several discrepancies were identified between plan sheets provided in the application materials, such as Staging Area 1-2, as identified on page 49 of Exhibit 1: Figures and Design Drawings, labeled as a stockpile area on page 50; Staging Areas 1-1, 1-2, 3-3, 3-4 area identified on several figures – staff was uncertain if any staging areas were omitted, such as 2-1 or 2-2, etc. Updated plans submitted for review must be consistent with labeling and must agree with one another.	Construction Activities	Denver Water is in the process of developing a final site development plan. Staging area labeling will be checked and corrected if necessary. This plan will be provided to Boulder County for review prior to start of construction activities.
B-18	**Plans:** Final grade cuts and fills shall not be steeper than a 1.5 to 1 slope. Grades steeper than a 1-½ to 1 slope will need to be supported by a retaining wall. Retaining walls or series of walls greater than four feet in height measured from the bottom of the footer to the top of the wall require	Construction Activities	The Gross Reservoir site is primarily composed of bedrock granite near or at the surface, and many of the grading features are rock cuts which can safely support a steeper cut than 1.5:1. Denver Water is in the process of developing a final site development plan. Some cuts may be steeper than 1.5:1 if that is consistent with

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
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	building permits for construction. Calculations shall be submitted for all retaining wall heights over 6 feet in height.		geotechnical engineering recommendations. Design documents supporting any slopes or retaining walls that are within areas subject to Boulder County jurisdiction will be provided. Some elements of the dam design may be outside the Boulder County purview. Those areas subject to the FERC and SEO requirements can be reviewed with Boulder County staff.
B-19	**Gross Dam Road Improvements:** The applicant provided plans for improvements along portions of Gross Dam. Updated plans must be submitted as part of the approval of this 1041 permit which include: a. Existing and proposed road widths must be included on the plans, for all areas that are proposed to be improved. Staff requires this information to ensure that the improved areas meet the Standards for width; b. Curve radii must be included on updated plans to demonstrate that the improvements will accommodate the anticipated heavy truck traffic; c. Slopes at a 0.5:1 ratio are allowed only in areas of cut in competent bedrock; fill slopes may not exceed 1.5:1 slopes. A geotechnical report will be required for any slopes that exceed those listed above. The geotechnical report must be submitted to the Community Planning & Permitting Department for review and approval along with the updated plans; d. All road improvement plans must demonstrate positive drainage elements that meet the Standards.	Construction Activities	Improvements to Gross Dam Road will be submitted to Boulder County for review. Road widths will be provided within the plans provided. The applicable vehicle tracking model for curve analysis will be provided in design documents. Any slopes that are proposed steeper than 1.5:1 will be supported by geotechnical report analysis. New drainage elements will be provided in accordance with the standards or, if exceptions are needed to match existing conditions, those locations will be identified.
B-20	**Gross Dam Road Improvements:** The applicant must provide detailed plans for the roads identified on Figure 1-2: Gross Reservoir Components for relocation; no plans were included with the application materials. All new roads must demonstrate that they meet the Standards, for both design and appropriate drainage.	Construction Activities	Site roads that revert after construction to public access roads will be described in Work Package design documents. Requirements of other jurisdictions including the USFS, the FERC, and the SEO will be considered for roads subject to their jurisdiction requirements. Boulder County will be provided an opportunity to review those designs as well. Access roads developed on the site outside areas that can be accessed by the public will be designed in accordance with regulatory requirements and may not meet Boulder County Standards. Some roads identified in Figure 1-2 are adjacent to the dam and will not be accessible to the public.
B-21	**Gross Dam Road Improvements:** The applicant must provide detailed plans for the roads that will be abandoned, if those sections of road will remain un-inundated by the new high-water level. The plans must demonstrate how the roads will be revegetated and restored.	Construction Activities	Denver Water is in the process of developing a final site development plan. Any abandoned roads that are not inundated will have reclamation and revegetation described. Plans will be provided to Boulder County for review.
B-22	**Project Grading:** Language included in Exhibit 05e: FERC Supplemental EA states that 1.6 million cubic yards of material is required for the construction of the dam. Language included in the Exhibit 14: Air Quality Impact Study states that total quarry design production is given as 1,235,100 cubic yards. Staff requests that the applicant clarify and compare these numbers against total earthwork calculations and verify the quantity of material that will be removed from on-site quarries.	Construction Activities	Final quantities for material removal from the aggregate supply quarry depend on a number of factors that have been used in initial estimates of material production. Final foundation profiles for the dam will determine the concrete aggregate requirements. These can then be used to update quarry production requirements which are also influenced by quarry geometry, overburden thickness, rock quality and crushing plant yield. All these factors will be updated in final grading plans and air quality permit applications that follow dam design completion. Updated information about the quantity of material required for dam construction will be provided to the County when Permit applications are submitted.

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
B-23	**Recreation and Public Parking:** The plans submitted with the application included locations and quantities of relocated public parking areas, but the plans included little detail for their construction. Updated parking plans must be submitted to staff which demonstrate how the relocated lots will be designed to comply with Section 5.6.2 of the Boulder County Multimodal Transportation Standards ("MMTS") for Parking Lot Design and the Boulder County Land Use Code (LUC) Article 4-513.D for a Multimodal Parking Facility, by including dimensions for parking spaces and the manner in which the lots will be constructed to ensure the final number of spaces constructed meet the standards, including dimensions for ADA accessible parking spaces and location and quantities of bicycle parking.	Recreation	A detailed Recreation Management Plan is being developed per the FERC Order (Article 416 and Condition 24) which will include design specifications for all recreation related facilities. The Recreation Management Plan previously developed and approved by FERC on May 14, 2004 and Addendum (2013) will be revised and amended to address new and relocated recreation facilities, sites, parking and trails, as well as measures to address recreational, social, environmental, safety and/or sanitation concerns. The FERC Order requires submittal of this Plan to FERC within 1 year of the Order (by July 16, 2021). Denver Water will provide the plan for stakeholder input, including to Boulder County, by April 15, 2021, for a 30-day review period prior to final submission to FERC by July 16, 2021. ADA-accessible parking spaces will be included in the Recreation Management Plan. The previously approved Recreation Plan had not included bicycle parking; however, Denver Water appreciates the recommendation and is exploring inclusion of bicycle parking in our design. Denver Water is updating the Recreation Management Plan per the articles and conditions contained in the FERC Order, and will consider, during our design development, the requirements in Section 5.6.2 of the Boulder County Multimodal Transportation Standards for bicycle parking.
B-24	**Recreation and Public Parking:** In order for staff to evaluate the impacts to recreational and public parking, the applicant must provide information on the number of parking spaces that will be lost due to the expansion of the reservoir. The applicant must provide information as to whether parking will be replaced at a 1:1 ratio or if the total number of recreational and public parking spaces will be different than existing quantities.	Recreation	Per Article 416 of the FERC Order, the Recreation Management Plan requires a 1:1 replacement of parking spaces. The Recreation Management Plan includes a breakdown of where the current parking spaces are and where they will be reallocated to post-project.
B-25	**Construction:** A preconstruction meeting with Public Works and Community Planning and Permitting staff is required prior to the commencement of construction activities. At this meeting, the hours of work, access points, snow removal in the construction zone, traffic management and traffic control and construction and inspection schedules will be discussed.	Construction Activities	Denver Water will meet with Boulder County prior to commencement of construction activities to discuss the requested items. Construction requirements, including work hours, access points, traffic management and control, etc., will be detailed in the Traffic Management Plan.
B-26	**Construction:** Any access blockage or closure to the public ROW or private driveways must be opened by the end of the workday. A minimum of 48-hours' notice must be given to all property owners as well as the County Public Works Traffic Operations Engineer prior to any road or driveway blockage.	Construction Activities	Denver Water will close, and open private driveways as described. Construction activities at the intersection of Gross Dam Road (CR 77) and SH 72 may require longer closures. Additionally, portions of Gross Dam Road owned and maintained by Denver Water will be closed to the public for the duration of construction activities for site security and public safety. Emergency access will be allowed. Denver Water will provide the necessary closure notifications listed.
B-27	**Construction:** The Boulder County Public Works Department requires that the applicant include in their scope of work a project overseer, approved by the County Engineer, to monitor and inspect the project and ensure compliance with Roadway Construction Permit conditions and all other county requirements specific to the Public Work's Department's issues and concerns, as documented here and in subsequent review activities. This overseer shall be both independent of the primary construction contractor and project engineer and have the authority to alter, direct and/or stop any activity that will result in adverse environmental or safety conditions or violates the conditions of the permit(s), county approval, or accepted construction standards. The project overseer/inspector shall provide reports to the Public Works Department on a weekly basis during construction activity.	Construction Activities	Denver Water will include a county representative in its table of organization for oversight of applicable construction activities. Daily reports documenting independent oversight of contractor work on County property or within County easements will be provided. The level of involvement in oversight and testing can be discussed and agreed to as the County desires.

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
	Weekly reports shall consist of a diary of observations throughout the construction process and progress. This overseer is in addition to any other overseer required for the project.		
B-28	**Construction:** The applicant must coordinate with the Boulder County Community Planning & Permitting Communications Specialist for signage and public information dissemination related to project timelines.	Construction Activities	Denver Water's Public Affairs department will coordinate signage and notification of construction activities with Boulder County's designated contact.
B-29	**Construction:** Prior to project commencement, the applicant's contractor must photo-document the conditions of all county roads to be used during construction. All affected roadways must be restored to pre-project conditions or better. Photo-documentation shall be submitted prior to construction.	Construction Activities	Denver Water will document the existing condition of all Boulder County roads prior to the start of construction activities. The roadways will be restored to at least as-found conditions at the conclusion of use. Periodic maintenance will be performed during the GRE Project to maintain the as-found conditions.
B-30	**Required Permits:** Permits that are necessary for construction include, but are not limited to, the following:	Construction Activities	Please see responses to comments B-31 through B-34.
B-31	**Required Permits:** A Roadway Construction Permit is required for the permanent road improvements proposed in the Boulder County ROW. The applicant shall abide by the Standards and comply with the conditions of the Roadway Construction Permit. The applicant should also note that when construction activity is parallel to Boulder County rights-of-way, the rights-of-way shall not be utilized for any construction-related activity including, but not limited to, stockpiling of material, staging construction materials, parking for workers or construction vehicles. Note that, among other things, hours of work are regulated by the Roadway Construction Permit.	Construction Activities	Denver Water will submit planned permanent road improvements as required. Specific elements of the permit application can be reviewed at the pre-application conference.
B-32	**Required Permits:** Stormwater Quality Permit As a part of Boulder County's water quality protection and municipal separate storm sewer system construction program, a stormwater quality permit (SWQP) is required because the area of disturbance on the subject property exceeds one acre in size. The SWQP application will need to be submitted with any building or grading permit applications and obtained prior to any work beginning on this project.	Construction Activities	Denver Water will submit a stormwater quality permit application for ground disturbing activities as required. A separate permit application will be made for distinct areas of the GRE Project. These plans will be included with grading permit applications.
B-33	**Required Permits:** Oversize/Overweight Permit Heavy equipment traffic, including for water delivery, will be subject to any and all weight limit restrictions along adjacent roadways, and will be responsible for repair of the roads should there be any damage, as identified by the County Engineer. If necessary, the applicant shall obtain Oversize/Overweight Permits from the appropriate jurisdictions. Contact Bill Eliasen at (720) 564-2661.	Construction Activities	Denver Water will acquire oversize/overweight permits as needed from CDOT and Boulder County.
B-34	**Required Permits:** Dewatering Permit The applicant must provide evidence with building permit application materials that a State of Colorado Dewatering Permit has been obtained, if necessary, or documentation that it is not required.	Construction Activities	Denver Water will obtain a dewatering permit prior to any excavation that exposes groundwater.
B-35	This concludes our comments at this time. Staff review of the updated plans may result in additional comments and/or requests for information.	General Comment	Thank you for your comments.
B-36	An example of a Transportation Management Plan was included: Fourmile Watershed Coalition Black Swan Restoration Project	Construction Activities	Noted

B	**SI-20-0003 Community Planning & Permitting (Boulder County)** **Date posted: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
B-37	A TMP Guide was include – Guidance for the Development of Transportation Management Plans	Construction Activities	Noted

C	**SI-20-0003 Public Health Environmental Health Division (Boulder County)** **Date posted: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
C-1	**OWTS:** Before beginning construction, the contractor must determine the location of all the existing approved OWTS components in the project area. The documents are scanned into septicmart.org. If there are unapproved OWTS, there may not be any information online. In this case, the owner should help with the general location of the system.	Construction Activities	Denver Water will identify any On-site Wastewater Treatment System in the GRE Project area.
C-2	**OWTS:** Heavy equipment should be restricted from the surface of the absorption field during construction to avoid soil compaction, which could cause premature absorption field malfunction. Caution should be used in conducting trenching and excavation activities so that sewer lines and other OWTS components are not damaged.	Construction Activities	Denver Water will incorporate these recommendations into its site development plan.
C-3	**Air Quality:** BCPH has reviewed the Air Quality Impact Study for the Gross Reservoir Expansion Project and found that it was performed properly and demonstrates that the project can be completed without violating applicable air quality and air pollution regulations. The ability to perform the work and stay within the emission limits identified in the analysis will be highly dependent on the content and implementation of the Fugitive Dust Plan and BMPs adopted for the project and referenced in the Impact Study. BCPH therefore requests to be a participant in the review and approval process for these documents.	Construction Activities	Denver Water will include Boulder County Public Health in the development of a fugitive dust plan and associated BMPs.
C-4	**Drinking Water/Health Equity:** In Exhibit 2, Denver Water's (DW) Integrated Resource Plan, it discusses evaluation of water supply and planning to meet future needs. It reviews increasing source water supply, conservation measures, and use of rates as measures to meet increasing demand until projected buildout of their service communities. While conservation measures and supply were covered in detail throughout this document there is insufficient information to understand how rates are impacting this plan. Review of this information is important to understand the necessity of the project. It is important to state that increasing cost of water utility can be a barrier to accessing clean and healthy drinking water and create health equity issues disproportionately affecting already marginalized populations. Affordability is a foundation of DW in that "... Denver citizens to approve a city-owned water utility that would be non-political, autonomous from other city interests and agencies, and instructed by amendment to the city charter to charge the lowest rates possible consistent with good service."	Socioeconomic	An analysis of this issue was completed during the Corps' NEPA process. Please see section 5.19.1.7 of the Final EIS. In summary, that analysis showed a minor impact to water rates as a result of the GRE Project and that rate increases would occur even if the no-action alternative were selected. Under its strategic plan, Denver Water carefully manages rates and fees to optimize revenue stability from year to year, ensure equity and affordability across customer classes, and promote water use efficiency. According to a standard industry benchmark, Denver Water's rates are affordable. Please see response to comment C-5 for more information.
C-5	**Drinking Water/Health Equity:** Ensuring adequate investment in infrastructure to support and maintain current water services is important to balancing health equity impacts for water access. Exhibit 2 discuss significant infrastructure CIP projects that will be needed in the coming years since a large portion of the distribution system was installed in the 1940's. There is no discussion about the impact on future rates from these CIP projects and/or the project to expand capacity at Gross Reservoir.	Socioeconomic	Denver Water is the largest water utility in Colorado and has been in existence since 1918. Today, the service area covers more than 335 square miles and is funded by water rates, hydropower revenues and new tap fees – not taxes. Each year Denver Water undergoes a budget process which involves the following: Annual Business Plan and Strategic Plan Alignment, Long-Range Financial Plan, and Annual Budget Preparation. Based on the budget for the following year, which includes Capital Projects, and Operations and Maintenance, water rates for the following year are recommended. In 2020, Denver Water raised rates by an average of $0.67 per month inside Denver, and $0.45 to $0.54 per month outside Denver. This price increase includes Capital Projects like the GRE Project, Northwater Treatment Plant, and O&M Projects such as lead pipe replacement and main replacement. Since the expansion of Gross Reservoir is expected to happen within 10 years, the funding for it is already included in the budget process, along with the other noted Capital and O&M Projects. We currently anticipate needing approximately 3-4% rate increases annually to fund Denver Water's operational and capital needs. This is in line with the analysis provided

C	**SI-20-0003 Public Health Environmental Health Division (Boulder County)** **Date posted: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
			in the Corps' Final EIS. Please note that, due to COVID, Denver Water implemented only a 1.5% rate increase in 2020. Denver Water adjusts its financial plan on an annual basis and further revisions to projected rate increases may occur due to COVID, drought, or other factors.
C-6	**Drinking Water/Health Equity:** After reviewing the provided documentation, it was not demonstrated if water conservation plans will prevent rebound effect of more supply - less conservation. Based on the information provided by DW in this application it appears they have taken measures to reduce waste and several consumer programs have been implemented. However, information provided about conservation programs date back to the 1990's and do not discuss current efforts.	Conservation Reuse	Please see responses to comments I-9 and I-10.
C-7	This concludes comments from the Public Health – Environmental Health division at this time. If you have additional questions, please do not hesitate to contact Jessica Epstein at (303) 441-1138.	General Comment	Thank you for your comments.

D	**SI-20-0003 Wildfire Mitigation Team (Boulder County)** **Date posted: 12-10-2020**		
Comment ID	**Comment**	**Category**	**Response**
D-1	Decades of catastrophic wildfires, research, and case studies have shown that extreme wildfires are inevitable in the forests of Boulder County and across the Western US, but loss of life and property does not have to be inevitable. The conditions that principally determine if a structure ignites occur within 100 feet of the structure, including the structure itself. That is why Boulder County has such strong wildfire mitigation requirements in our Land Use and Building Code, and why Boulder County encourages all property owners to voluntarily take responsibility to mitigate their own home and/or structure's risk of igniting in a wildfire through Wildfire Partners.	Fire	Fire preparedness and prevention will be incorporated throughout Denver Water's construction plans. Denver Water is required by FERC to develop a Fire Management and Response Plan (Condition 20 of the FERC Order) within 2 years of the issuance of the FERC Order (by July 2022). Additionally, Denver Water will comply will all fire bans and incorporate fire prevention at recreation areas at Gross Reservoir.
D-2	The biggest risk to loss of life and property in a wildfire is the increase and intensity of activity that could start a wildfire. As such, all regulations involving fire prevention, including following Fire Bans, must be followed.	Fire	Denver Water has and will follow local, state or federal regulations involving fire prevention and fire bans. In 2019, Denver Water installed locking mechanism on all grills in picnic areas at Gross Reservoir to prevent use during fire bans. Additionally, Denver Water hires four Boulder County Rangers to patrol Gross Reservoir during the recreation season.
D-3	Also, all existing and new structures on Denver Water property, or on National Forest Service land and used by Denver Water for this project, will need to have a Wildfire Partners certificate.	Construction Activities	Denver Water's Source of Supply Division performs periodic hazard tree removal and maintains defensible space around Denver Water facilities, including the reservoir headquarters and associated buildings and our caretaker homes. Denver Water relies on the USFS and CSFS for forest thinning and hazard tree removal on National Forest System lands.
D-4	All roads on Denver Water property, or on National Forest Service land and used by Denver Water for this project, the forest must be thinned within at least 30 feet of either side of the roads for safer ingress/egress according to the Colorado State Forest Service publication *Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones – 2012 Quick Guide* (strongly recommend using Fuelbreak Guidelines for Forested Subdivisions & Communities, but that would require the forest to be thinned approximately 150 feet on either side of the road).	Construction Activities	Denver Water will do the required thinning (30 feet either side of the road) on roads within the GRE Project area owned by Denver Water or owned by the USFS.
D-5	**Timeline:** After applying for, but prior to issuance of any permits associated with this project, a Boulder County Wildfire Mitigation Specialist will contact you to schedule a Wildfire Partners assessment and defensible space marking.	Construction Activities	Denver Water will add this requirement to the construction timeline. Denver Water will consider this requirement with each grading permit and building permit.
D-6	**Timeline:** Before scheduling rough framing inspections, the defensible space of the plan must be implemented and inspected. All trees marked for removal must be cut and all slash, cuttings, and debris must be removed and/or properly disposed.	Construction Activities	Denver Water will add this requirement to the construction timeline.
D-7	**Timeline:** At the time of final inspection, all remaining required items in the Wildfire Partners Assessment report are to be fully implemented and inspected. Ground surfaces within three feet of both existing and new structures, and at least 2 feet beyond the driplines of decks, bay windows, and other eaves and overhangs, must be covered with an allowable non-combustible ground cover over a weed barrier material.	Construction Activities	Denver Water will add this requirement to the construction timeline and design specifications.
D-8	If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum land use and building code requirements. I can be reached at 720.564.2625 or via e-mail at kmccatty@bouledercounty.org.	General Comment	Thank you for your comments.

E	**SI-20-0003 Colorado Department of Transportation (CDOT)** **Date posted: 12-23-2020 – Date of Letter: 12-16-2020**

Comment ID	Comment	Category	Response
E-1	**CDOT – Oversize-Overweight Office -** Truck configurations. Namely weight and dimensions. - Details Needed	Construction Activities	Denver Water will submit truck configurations with each oversize and overweight permit request.
E-2	**CDOT – Oversize-Overweight Office -** "No Hauling in City of Boulder" - that was listed under "Tree Removal Operations" only. The opportunity appears to still be there for other movements. Need clarity if all loads - makes sense not to utilize due to mileage.	Construction Activities	Denver Water will clarify the route to be used in the Traffic Management Plan.
E-3	**CDOT – Oversize-Overweight Office -** Use of US 6 (Clear Creek Canyon) - Do not recommend due to road dynamics - traffic and dimensions.	Construction Activities	Denver Water will incorporate this recommendation into the Traffic Management Plan.
E-4	**CDOT – Oversize-Overweight Office -** Use of SH 119 through Black Hawk - 36 loads. (Possible timed restriction for movement)	Construction Activities	Denver Water will incorporate this recommendation into the Traffic Management Plan.
E-5	**CDOT – Oversize-Overweight Office -** Bullet items #2 (E-2) & #4 (E-4) are linked due to traffic concerns through the casino area (#4) and then through Nederland and Boulder/Boulder Canyon.	Construction Activities	Denver Water will incorporate this recommendation into the Traffic Management Plan.
E-6	**CDOT Environmental Unit - Biologist:** The main concern would be any impacts associated with any necessary transportation improvements on SH 72 or the intersection of SH 72 and SH 93. In the draft 1041, under transportation improvements they note: "Denver Water will make any necessary road improvements. The roadways of particular interest are SH 72 from SH 93 to the turnoff for Gross Dam Road and Gross Dam Road from SH 72 to the railroad tracks." CDOT just finished constructing a permanent flood repair project along SH 72 (SA 20334) from MP 24.5 to MP 12.22 in Gilpin, Jefferson, and Boulder Counties. We have a variety of SB 40 mitigation planting locations along the Coal Creek adjacent to SH 72. In addition, there is occupied Preble's meadow jumping mouse habitat near the lower section of SH 72 near the intersection with SH 93 (in the Coal Creek floodplain). If transportation improvements are proposed along SH 93 or SH 72 we would want to see field work and the standard bio submittals completed to ensure compliance with Section 7 and Section 404. We would also require SB40 be completed and also need to check if SB 40 mitigation constructed by 20334 is within any potential disturbance areas being proposed by Denver Water's transportation improvements.	Special Status Species	Denver Water will comply with CDOT regulations and permitting requirements as consistent with the Corps' and FERC's environmental reviews during the NEPA process.
E-7	**CDOT Environmental Unit - Historian:** Based on this review, the proposed improvements to the intersection of SH 72 and Gross Dam Road will require review by CDOT historians and will likely require SHPO consultation. Based on the description of work at SH 72 and Gross Dam Road, which would move the intersection, add new signage, and add a new turn lane, a qualified historian (meeting the standards set forth by the Secretary of the Interior) will be required to prepare the SHPO submittal. This submittal will require a draft SHPO letter, APE map, a site form to document a logical segment of SH 72, and up to 3 other site forms if necessary. Once a qualified historian has been selected, CDOT historians would like to meet with the historian to discuss the project scope.	Cultural Resources	Denver Water will comply with CDOT regulations and permitting requirements as consistent with the Corps' and FERC's environmental reviews during the NEPA process.
E-8	**CDOT Environmental Unit - Historian:** As discussed in DWB Traffic Impact Analysis, 6-4, based on traffic models, additional turn lanes or other improvements to SH 119 are not required. If they do	Cultural Resources	Denver Water will comply with CDOT regulations and permitting requirements as consistent with the Corps' and FERC's environmental reviews during the NEPA process.

E	**SI-20-0003 Colorado Department of Transportation (CDOT)** **Date posted: 12-23-2020 – Date of Letter: 12-16-2020**		
Comment ID	**Comment**	**Category**	**Response**
	become part of this project, we will need to review any improvements along SH 119 for history, and such work will need to be added to the historian's scope if needed.		
E-9	**CDOT Environmental Unit - Historian:** The proposed improvements at SH 72 and Gross Dam Road are in Boulder County. Do you anticipate Region 4 or Region 1 reviewing the future work?	Construction Activities	Boulder County indicates coordination with CDOT Region 1 in their comment F-13. Denver Water will consult with the appropriate CDOT Region as directed by CDOT.
E-10	**CDOT Environmental Unit - Planner:** This expansion of Gross Reservoir does not contain elements that would interfere with and planned CDOT work on SH-72, pending details on the intersection of Gross Dam Road and SH-72. CDOT does not have any projects planned along this segment of SH-72, so R1 Planning concurs with this proposal.	Construction Activities	Denver Water will include coordination with CDOT through the design and construction process for improvements to SH 72 and Gross Dam Road.
E-11	Page 7 – says 6 years to complete, chart / table 4 shows 7. We presume the top line represents "years?"	Construction Activities	Yes, the top line of the chart/Table 4 shows "years".
E-12	Page 8, table 4, the line that says "Site Mobilization" should clarify that this is the time frame when the access permits should be applied for onto SH 72 (Region 1) and onto SH 119 (Region 4) and both intersections reconstructed as warranted in preparation for construction traffic. Site Mobilization is also the recommended time for the contractor to secure oversize-overweight permits, that pertain to and covers different aspects from the access permits.	Construction Activities	Denver Water will apply for all oversize-overweight permits and access permits that are required for the Gross Reservoir Expansion Project prior to beginning hauling of materials.
E-13	Page 14-15 Table 5 ID's "State permits required to construct the project". Should aspects from CDOT which are mentioned above be included as line items? They are not listed.	Construction Activities	Denver Water will acquire the permits listed above. Please see responses to comments E-7, E-8, and E-12.
E-14	Page 25, table 6. There is mention that Denver Water is considering creating a "staging area" for the contractor(s) near the intersection of SH 72 & SH 93. The DWB did mention this to CDOT at an earlier meeting in conversation but had no plans or details to share. CDOT advised that Access permits will be required for such an operation if access is from either highway.	Construction Activities	Denver Water is still in the process of evaluating the need for a staging area at the intersection of SH 72 and SH 93. If a staging area is put at this location, Denver Water will apply for access permits from CDOT. This location is in Jefferson County.
E-15	Page 65 8-507 makes reference to "Additional right-of-way or easements for new or expanded Transportation facilities." It says look at figure 26-2 – but that figure was not part of this packet to examine. From preliminary (30%) sketches CDOT has seen, we expect & anticipate additional RoW, possibly other easements near the reconstructed Gross Dam Rd/SH 72 intersection.	Construction Activities	Figure 26-1 is a key map showing the location of road improvements on Gross Dam Road. The specific details of these improvements are then shown on Figures C6.301 to C6.322 and C6.401 to C6.422. Figure 26-2 follows all these figures and is the key map for the Miramonte multi-use trail. The area shown in Figure 26-2 is a new transportation facility and will not connect to a CDOT ROW.
E-16	Pages 299-311 Contains a significant amount of verbiage about "Transportation Impacts". Please note that it is not the purpose or purview of CDOT Access Permits to address noise from construction related traffic or associated air quality matters. CDOT has requested a meeting to discuss the matter of haul routes and its effect on local and pass-through traffic; that meeting is scheduled for Thursday Dec. 10. Additional issues could be identified (verbally) at that time.	Construction Activities	Comment noted.
E-17	Generally, the document contains references to a Traffic Study that was prepared by Stantec. We believe this to be what was presented to CDOT in a previous referral as a "60% Design Memorandum". Please note that for CDOT Access Permitting, this document is not aligned with the requirements as outlined in our Access Code 2.3(5) "Traffic Impact Studies". The TIS we will require from Boulder County to accompany the permit application for the connection of Gross Dam Rd to SH 72, is much different and will need to be tailored to the specific point of Access.	Construction Activities	Denver Water will conform with the referenced Access Code 2.3(5) when preparing the final Traffic Impact Study. Please see response to comment B-3 for details on the schedule.

F	**SI-20-0003 Public Works (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-11-2020**		
Comment ID	**Comment**	**Category**	**Response**
F-1	1. The Application Letter, P. 2, states that the FERC 7/16/2020 order amends the hydropower license and requires construction of the project according to specified deadlines and milestones. The applicant needs to provide a concise schedule for review prior to approval of the 1041 Permit.	Construction Activities	Denver Water has prepared a milestone schedule per the FERC Order to meet required timelines for construction start. Please see the GRE Project Schedule attached to this response to comments document (Exhibit 21).
F-2	2. As part of approval of this 1041 permit, Boulder County shall be party to any road maintenance, tree hauling or other road use plans and agreements with the US Forest Service, including route approval and maintenance methods for all county owned or maintained roads in the current tree hauling plan prior to implementation of the work under this permit. These roads include Lazy Z Road/CR 97 and Magnolia Road.	Construction Activities	Denver Water agrees and will coordinate with Boulder County on these activities on roads owned or maintained by Boulder County.
F-3	3. As part of approval of this 1041 permit, and similar to the aforementioned maintenance agreement with the US Forest Service, the applicant will also be required to enter into a Road Maintenance Agreement for Gross Dam Road/CR 77S for the duration of the project.	Construction Activities	Denver Water will enter into a road maintenance agreement for the portion of Gross Dam Road maintained by Boulder County for the duration of the GRE Project.
F-4	4. Boulder County must approve the tree removal plan prior to 1041 permit approval.	General Comment	Denver Water will coordinate with Boulder County to solicit input on the Tree Removal Plan. Per the FERC Order, Denver Water is preparing a Tree Removal Plan for submittal to FERC 1 year after the issuance of the FERC Order (due by July 16, 2021). Denver Water will provide the draft Tree Removal Plan to agency stakeholders, including Boulder County, for a 30-day review period with a target date of March 1, 2021.
F-5	5. A Traffic Impact Analysis (TIA), 60% Design Memorandum, included with the application materials, was reviewed by staff. The County does not recognize the “in-process “60%” TIA. In order for staff to evaluate traffic impacts for the proposed development, a Final Design Memorandum must be submitted for review and approval by staff prior to 1041 Permit approval.	Construction Activities	See response to comment B-3.
F-6	6. Given the recommendation in the submitted 60% DM to not improve the Magnolia Road / SH 119 Intersection, the applicant is required to demonstrate the ability to meet design standards at this intersection. This includes corner radii, approach grades, auxiliary lanes, and any other roadway geometry utilizing similar vehicle turning templates and traffic volume data as on other roads and intersections in this project.	Construction Activities	Denver Water will conduct a traffic analysis for this intersection once the Tree Removal Plan has been finalized.
F-7	7. As part of approval of the 1041 permit, the applicant will be required to make improvements to Lazy Z and Magnolia as required by log hauling truck usage as specified in the application materials, similar to Gross Dam Road (CR 77S). All curves, road widths and clearances shall be measured and documented and submitted to Boulder County for review prior to project use. The County will have 14 days to review road improvement plans for all county roads submitted for approval prior to implementation, and no work shall commence until plans and specifications are approved by the county. Each timeframe for submittal for approval will require 14 days to review. The applicant will make all required improvements at their cost and within the timeframe specified by the permit, but no later than 30 days prior to use of the roadway by the project.	Construction Activities	Denver Water will evaluate Lazy Z and Magnolia roads for use by tree removal equipment. Any road improvements will be submitted to Boulder County for review.
F-8	8. The county would need to inspect and approve the improvements to Gross Dam (CR 77S), Lazy Z, and Magnolia Roads as prescribed in the FDM, including, without limitation: a. Gravel depth	Construction Activities	Denver Water will incorporate Boulder County comments into the final roadway design, and construction process and schedule.

F	**SI-20-0003 Public Works (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-11-2020**		
Comment ID	**Comment**	**Category**	**Response**
	b. Side slopes c. Compaction d. Drainage structures e. Erosion control f. Dust control		
F-9	9. As stated in the TIA, all signing and other Traffic Control Devices necessary for the project will be proposed to and approved by Boulder County prior to placement.	Construction Activities	Any signage or traffic control devices will be implemented with input from Boulder County.
F-10	10. Page 2-1 of the 60%DM indicates that truck traffic will not be expected to travel through the city of Boulder. However, p. 3-4 of the 60%DM states the route of truck traffic for tree removal is expected to travel on SH 93 in order to reach the city of Longmont as its final destination. As such, travel through the city of Boulder would be unavoidable. The applicant shall better define the truck route for travel from Gross Reservoir to Longmont if staying out of the city of Boulder is expected. The tree hauling routes would potentially be all on State Highways. The county requires Denver Water to be part of a discussion with the county, CDOT, Jefferson and Gilpin Counties, Colorado State Patrol, and any other local agency expected to be impacted by tree hauling operations within their jurisdictions. The routing must be approved by Boulder County prior to approval of the 1041 permit.	Construction Activities	The specific routes will be defined in the final Tree Removal Plan. Denver Water will consult with other permitting agencies as needed.
F-11	11. The applicant will be required to obtain any and all necessary permits required by the appropriate roadway and highway authorities for tree haling and raw cement material deliveries as part of the 1041 approval.	Construction Activities	Denver Water will consult with other permitting agencies as needed.
F-12	12. Prior to commencement of the project, signing shall be placed westbound in advance of and at the intersection of Gross Dam Road (CR 77S) with Crescent Park Drive to direct trucks to stay on CR 77S to its intersection with SH 72.	Construction Activities	Denver Water will direct traffic to the intersection of SH 72 and Gross Dam Road once improvements have been completed at the intersection of SH 72 and Gross Dam Road.
F-13	13. As has been discussed in the past, Denver Water is required to submit an Access Permit application to Colorado Department of Transportation (CDOT), Region 1 for the proposed realignment of the SH 72 / CR 77S intersection. CDOT has stated that Boulder County is to be the applicant on that Permit. While Denver Water will act as the agent in that application, Boulder County must approve all plans, specifications, requirements and other documentation prior to access permit application submittal. Further, Boulder County will not sign the application until final 1041 permit approval has been granted by the Boulder County Board of Commissioners.	Construction Activities	Denver Water will coordinate permitting activities related to intersection improvements with CDOT and Boulder County. However, the County's intent not to sign an application for the CDOT Access Permit until a final 1041 Permit is issued causes significant timing challenges for Denver Water's compliance with the FERC Order. The FERC Order requires Denver Water to commence construction within 2 years, or by July 16, 2022, to provide FERC final construction drawings and specifications a minimum of 60 days prior to the start of construction (i.e., no later than May 17, 2022), and to complete construction by July 16, 2027. In addition, Denver Water must acquire the property necessary to widen the intersection, which cannot be done until CDOT issues the Access Permit. The Access Permit will dictate the precise contour of the new intersection and inform the amount of property to be acquired. Delays at any step of the process could jeopardize Denver Water's ability to meet the construction deadlines in FERC's order. Denver Water therefore requests that Boulder County authorize a CDOT Access Permit application as soon as possible so the Access Permit approval process runs on a parallel track to the 1041 Permit process.
F-14	14. The Field Inspection Review (FIR) level design plans for the intersection of Gross Dam Road/CR 77S and SH 72 appear to be adequate for showing the proposed basic alignment and accessibility. The alignment appears reasonable given the expected need of the projected	Construction Activities	Denver Water will coordinate permitting activities (including design) related to intersection improvements with CDOT and Boulder County.

F	**SI-20-0003 Public Works (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-11-2020**		
Comment ID	**Comment**	**Category**	**Response**
	turning truck traffic and construction ingress/egress at this location. However, given the challenging topographic constraints, Boulder County cannot consent to the final intersection alignment until Denver Water has progressed design to a point where constraints are identified, and mitigation is proposed and designed.		
F-15	15. The plan sets for roadway improvements along CR 77S must be completed as part of the 1041 approval. The current level of plan completion is not adequate.	Construction Activities	Denver Water will include all roadway improvements in the final Design documents.
F-16	16. Approval of this 1041 permit application does not constitute approval of future permanent access points on Boulder County Roads.	Construction Activities	Denver Water acknowledges that any improvements to roads owned or maintained by Boulder County will require approval from Boulder County.
F-17	17. A Storm Water Quality Permit (SWQP) is required to be obtained from Boulder County, in addition to any other Stormwater Permitting required from the State of Colorado or any other local, state or federal agency. Since additional staffing or consultant services are needed by Boulder County to monitor the SWQP for this project, the applicant will be required to procure the services of a project overseer to administer, process, inspect, monitor, and closeout the SWQP activities. The overseer selected for this effort will be approved by Boulder County Public Works prior to application for the SWQP for this project. Administration, processing, inspection, monitoring and closeout of the SWQP is expected to be required for a minimum of five years. This overseer shall be both independent of the primary construction contractor and project engineer and have the authority to alter, direct and/or stop any activity that will result in adverse environmental or safety conditions or violates the conditions of the permit(s), county approval, or accepted construction standards. The project overseer/inspector shall provide reports to the Public Works Department on a weekly basis during construction activity. Weekly reports shall consist of a diary of observations throughout the construction process and progress. This overseer is in addition to any other overseer required for the project.	Construction Activities	Denver Water will procure the services of a project overseer to administer, process, inspect, monitor and close out the Storm Water Quality Permit activities.

G			
Comment ID	**Comment**	**Category**	**Response**
G-1	Per Article 8-508.C.12 of the Boulder County Land Use Code, the Community Planning & Permitting (formerly Land Use) staff is charged with reviewing application materials required in Article 8-507 for compliance with the Comprehensive Plan, purpose and intent of Article 8, criteria found in Article 8-511, sound planning, and comments from referral agencies and individuals. Community Planning & Permitting (CP&P) staff recognizes that the originally submitted materials generally address the application requirements of Article 8-507, however, staff finds that additional information is needed to understand the proposed project's specifics and to perform a thorough and complete review and analysis of the proposed project's land use impacts.	General Comment	Denver Water has responded herein to specific questions and comments from Boulder County and, within the time available, will endeavor to respond to any additional questions Boulder County may have.
G-2	Staff recognizes that the nature and extent of the proposed project involves the potential for significant potential for environmental damage (i.e., loss of natural resources, alteration of wildlife habitat, changes to groundwater, increased disturbance along roadways, etc.) and so requires Denver Water provide specifics related to less environmentally damaging alternatives. Such alternative might include information related to significantly increased conservation measures to be implemented by Denver Water, smaller infrastructure improvements at a number of locations throughout Denver Water's supply network, various fee structures to incentivize conservation or fine for overuse.	General Comment	As part of the federal permitting process, the Corps as the lead agency, together with FERC as a cooperating agency, completed a robust alternatives analysis examining impacts to natural resources, including wildlife habitat and aquatic resources, traffic impacts, and many other factors. As described in Sections 8-507.D.7.b.ix and 8-511.C.1 of Denver Water's 1041 Permit Application, a broad range of over 300 potential water supply sources and infrastructure components were screened, yielding 34 potential project alternatives. Enhanced conservation, specifically, was considered as part of several alternatives, including the preferred and no action alternatives. Through this NEPA alternatives analysis, the Corps selected expansion of Gross Reservoir as the preferred and least environmentally damaging practicable alternative. See the Corps' Final EIS Chapters 2 through 5 and Appendix B, as well as the Corps' 2017 Record of Decision for more information. Relying upon the Corps' NEPA analysis and its own Supplemental EA, FERC issued an order in July 2020 amending Denver Water's hydropower license. The order directs Denver Water to commence construction of the GRE Project no later than July 16, 2022, and complete construction by July 16, 2027. Boulder County was a party to FERC's process and chose not to appeal FERC's Order. As a FERC licensee, Denver Water must implement the preferred alternative selected in the Corps' Record of Decision and comply with FERC's order to construct this specific project. At this stage of the process, there is no opportunity for Boulder County to evaluate or select a different alternative to expansion of Gross Reservoir. Completion of the prior alternatives analysis took more than a decade, and Denver Water expects that performing this analysis anew would take substantial additional time. Denver Water could not complete a new alternatives analysis and complete the remaining steps of the 1041 Permit process in time for construction of the GRE Project to start by July 2022 and finish by July 2027, as directed by FERC. In addition, the alternatives analysis remains valid and a reanalysis of project alternatives would not yield a different result. For these reasons, Denver Water must respectfully decline to undertake a new alternatives analysis. Denver Water has responded herein to questions and comments about specific alternatives and, within the time available, will endeavor to respond to any additional questions Boulder County may have regarding the alternatives considered to facilitate Boulder County's review of Denver Water's 1041 Permit Application.

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G-3	The inconsistent information, out-of-date data, and lack of information contained in the application related is insufficient for staff to conduct a comprehensive review and analysis of the code criteria. Staff understands Denver Water's application materials rely heavily on materials submitted for federal permitting processes but points out that the Boulder County land use application and review process is significantly different from those federal processes. Based on reviews conducted in the initial referral period staff finds significant additional information is necessary before the application can be considered complete. As you revise the application materials you should review the application requirements (8-507), purpose and intent section (8-202), and the standards for approval (8-511) found in Article 8 of the Boulder County Land Use Code. Denver Water should then submit a response based on the above requirements addressing all issues raised in these referral comments	Legal	Denver Water recognizes and appreciates that there are some differences between the criteria specified in Boulder County's Land Use Code and the criteria and factors that the federal agencies considered through the NEPA and Clean Water Act evaluation process, which led to the selection of Gross Reservoir Expansion as the preferred alternative. At the same time, many of the subjects specified in Boulder County's Land Use Code—such as the purpose and need for the GRE Project, an evaluation of alternatives to achieve the purpose and need, and the environmental impacts of the GRE Project—overlap substantially with evaluations that the federal agencies have already performed and determinations that they have made. As a Corps permittee and FERC licensee, Denver Water must adhere to the Corps' 2017 Record of Decision and the FERC Order issued in July 2020 requiring implementation of the GRE Project, as directed. Within the time available, Denver Water is happy to answer questions about the analysis the federal agencies performed and to provide information to facilitate Boulder County's review of the GRE Project to the extent consistent with the FERC Order and Corps' 404 Permit.
G-4	In reviewing the 16,000+ pages of application materials submitted, staff identified inconsistencies of information, these include but are not limited to: • Discrepancies in listing the number served by Denver Water – materials list number of people dependent on Denver Water for their water needs both as 1.5 million and 1.3 million. • References within plan sheets sets – within various plan sets there are sheets that are provided but not listed on the overall Key Map (e.g., C8.404 not shown on "Area 8 Miramonte Multi-Use Trail Key Map Figure 26-2", areas labeled as Staging Areas on one map are labeled as Stockpile Areas on a different map. • Overall grading calculations are listed in the FERC document as 1.6 million cubic yards while the Air Quality Impact Study attributes approximately 1.23 million cubic yards to the batch plant alone. • Number of trees proposed to be removed in the FEIS is 200,000 while application materials state 650,000 trees are to be removed.	General Comment	Denver Water will address inconsistencies as needed. 1. Denver Water's customer base has increased since the start of the permitting process and now serves 1.5 million Coloradoans. References to 1.3 million are from previously approved Federal permit documents. 2. Denver Water, in an effort to limit confusion, did not add labels for C8.401 to C8.404. Figures C8.301 to C8.304 are the same area as C8.401 to C8.404, but show "Plan and Profile" vs "Grading/Stormwater Management Program", respectively. This same approach was taken for Figure 26-1 and its associated Figures. 3. Final quantities for material removal from the aggregate supply quarry depend on a number of factors that have been used in initial estimates of material production. Final foundation profiles for the dam will determine the concrete aggregate requirements. These can then be used to update quarry production requirements which are also influenced by quarry geometry, overburden thickness, rock quality and crushing plant yield. All these factors will be updated in final grading plans and air quality permit applications that follow dam design completion. Updated information about the quantity of material required for dam construction will be provided to the County when Permit applications are submitted. 4. The 1041 Permit Application uses the most recent estimate of the number of trees to be removed which is 234,000 trees or 24,422 tons (page 211 and 239 [1041 Permit Application]). This is less than the Final EIS estimate of 50,000 tons (page 2-50 [Final EIS]). If there is a reference to a different number in the information provided by Denver Water, please provide the location so we can validate the number.

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G-5	In order to ensure staff is reviewing the complete and accurate proposal, the applicant must review application materials thoroughly to identify inconsistent information and data throughout, edit materials accordingly to provide clear and precise information and data, and provide updated materials for review.	General Comment	Denver Water's comment responses and attached exhibits address those specific issues identified in the comments received. Within the time available, Denver Water will endeavor to respond to any additional questions Boulder County may have.
G-6	Throughout the document various Plans are discussed, but specific information related to these Plans were not provided. In order to analyze land use impacts that might result through such Plans, complete drafts of Plans discussed are needed. Information included in Plans should include, but is not limited to the following:	General Comment	The FERC Order requires Denver Water to consult with the County, along with a number of other entities, on a revised Recreation Management Plan, Tree Removal Plan, Quarry Operation and Reclamation Plans, and a Traffic Management Plan, prior to submitting them for FERC approval. The FERC Order requires Denver Water to file these plans with FERC within 1 year of the date of its order, i.e., by July 16, 2021. Denver Water is currently developing the draft plans and anticipates providing Boulder County and other stakeholders, including USFS, a draft of the plans for a 30-day review and comment period according to the FERC Plans Submittal Schedule attached to these comment responses (Exhibit 22). Completed versions of the plans will not be available until Denver Water addresses comments on the plans from all consulted parties and submits them to FERC. Denver Water expects that its preparation of the plans will run concurrent with, and will not delay, the 1041 process. Pausing the 1041 process until the completed plans are provided to FERC in July 2021 would jeopardize Denver Water's ability to comply with the construction deadlines in the FERC Order. Denver Water is willing to meet with Boulder County as it develops these plans to obtain input prior to circulating drafts to aid in the County's review of the 1041 Permit Application. With respect to other FERC-required management plans for which the FERC Order does not specify that Boulder County is a consulted party, Denver Water intends to submit these plans to FERC by the deadlines established in the Order. For completeness, Denver Water will provide Boulder County a copy of each of the plans at the time Denver Water seeks FERC's approval.
G-7	• Specifics related to routes to be used outside of the project area is crucial to analyzing on-going traffic impacts to state and county roads, as well as roads located in other jurisdictions, and potential traffic impacts to residents. This should include demarcation for all staging and activity areas related to the project.	Transportation	All routes that will be used for truck transportation during the GRE Project will be included in the final Traffic Management Plan which will be shared with Boulder County.
G-8	• Information related to mitigation measures to address potential air pollution from activities such as truck traffic (fugitive dust), operation of numerous diesel engines at the proposed batch plant and quarry operation.	Air Quality	Mitigation measures to address air pollution from construction activities, including truck traffic, will be developed as required through the CDPHE Air Pollution Control Division permit process.
G-9	• Information related to mitigation measures to address potential noise pollution from activities such as batch plant and quarry operations, truck traffic, overall construction and road improvements. The Table of Contents of the provided Noise Study (Exhibit 15) lists "Mitigation Recommendations and Discussion" as being Section 7 of the document. However, within Section 7 of the document staff finds no discussion of specific mitigation measures.	Noise	Per the FERC Order for the GRE Project, Denver Water is required to prepare and submit a Traffic Management Plan (see FERC Article 425) and Quarry Development and Reclamation Plan (see FERC Article 424) within 1 year of the issuance of the FERC Order (due by July 16, 2021). Denver Water will submit these plans to stakeholders, including Boulder County, for a 30-day review period on May 3, 2021.
G-10	• Construction timing – application materials discuss different phases of the proposed project spanning the project's projected seven-year construction timeline. Specifics such as but not limited to type of construction activities, anticipated hours of operation, amount of average	Construction Activities	A GRE Project Schedule with details of each project phase is attached as an exhibit to this response to comments submittal (Exhibit 21).

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	daily trips, natural resource impacts (e.g., water quality, habitat removal, tree clearing, etc.) for each phase are needed.		
G-11	• Application materials include a single rending of the project area after proposed construction is complete and the reservoir is full, but additional discussion and depiction is needed of visual impacts related to ultimate dam height, increased water area, completed reservoir area at less than full capacity, quarry operation site scar,	Visual	In support of the Corps' Final EIS and the FERC Supplemental EA, a comprehensive Visual Resources Analysis was performed for National Forest System lands in the GRE Project area. This includes detailed discussions of where "major," "moderate," and in some cases, no impacts can be anticipated associated with the Project. A photographic rendering (included in the 1041 Permit Application as Figure 23) was prepared to compliment the Visual Resources Analysis by depicting an increased reservoir elevation, including the following areas: right abutment as seen from the North Shore, Final EIS Quarry highwall, Osprey Quarry highwall. This information was considered sufficient by the Corps, USFS and FERC to fully assess the visual impacts of the GRE Project. Short-term, construction-related impacts to visual resources (including, but not limited to construction staging, lighting, signage and fencing) can be addressed through proper planning, coordination and BMPs, where appropriate. In addition, per the FERC Order (Condition 23), Denver Water is required to prepare and submit an addendum to the current Visual Resource Protection Plan (Plan) (approved by FERC on May 22, 2003), developed in consultation with the USFS and subject to prior review and approval by the USFS. The Plan will be submitted to FERC at least 90 days before ground-disturbing or construction activities on National Forest System land and is anticipated to be submitted in early 2022. The Plan will be prepared in accordance with current Forest Plan direction and scenery management guidance in the USDA Forest Service Agricultural Handbook Number 701, "Landscape Aesthetics: A Handbook for Scenery Management," December 1995. The handbook is available online at: https://naldc.nal.usda.gov/download/CAT11132970/PDF The Plan will address: • Measures for mitigating visual impacts from Project-related construction activities on National Forest System land, including reclamation treatments for the quarry, and relocation and/or reconstruction of roads, trails, and recreation facilities. • Measures for reshaping and revegetation of disturbed areas to blend with surrounding visual characteristics on National Forest System land. • Schedule of ongoing facility maintenance and replacement that will incorporate the design considerations included in the current Visual Resource Protection Plan on National Forest System land.
G-12	(from comment G-11) on-going staging areas, all lighting associated with project, construction signage, anticipated fencing.	Construction Activities	See response to comment G-11.
G-13	The out-of-date nature of the data and information used for the applicant's analysis presented in application materials does not allow staff to conduct a thorough review and analysis of the proposed project. For example:	General Comment	Please see Denver Water's responses to comments G-2 and G-3. As discussed there in more detail, Denver Water is required to implement the GRE Project as directed, and within the timeframes specified, in the July 2020 FERC Order. Many of Boulder County's requests for additional information concern matters that have been finally addressed through the federal permitting process, including the purpose and need for the GRE Project and alternatives to the GRE Project. Additionally, Denver Water is

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			concerned that many of Boulder County's requests for additional information and new analyses cannot be completed in time for Denver Water to adhere to the timeframes specified in the FERC Order. Denver Water is responding herein to specific questions and requests to the best of our ability, and within the time available, we are willing to continue to provide requested information and analysis, so long as such requests are not inconsistent with the FERC Order and Corps' 404 permit.
G-14	• The data used to establish the need for the proposed project in the Integrated Water Plan is from 2002, almost 18 years ago. While this data was examined and verified prior to review in 2010 - more than 10 years ago - by the U.S. Army Corps of Engineers (the Corps), the data remains outdated.	Purpose and Need	Denver Water disagrees that the data used to establish the firm yield need for the GRE Project is outdated. Although the demand projections underlying that need initially were based on Denver Water's 2002 IRP, the Corps independently verified and updated the demand analysis in 2012 using the most recently available demographic and socioeconomic information. The Corps released the updated demand analysis for public comment when it published the Final EIS in 2014 (Final EIS Chapter 1 and Appendix A), and the Corps responded to comments on the analysis when it published its Record of Decision in 2017 (Record of Decision Attachment B), ultimately finding that the demand analysis was reliable and accurate. The firm yield need is just one of several interrelated needs that the Corps, together with FERC as a cooperating agency, identified for the GRE Project during the NEPA process. As explained in Chapter 1 of the Final EIS, the additional water supply and reservoir storage to be developed at Gross Reservoir also will help to address a current imbalance between Denver Water's North and South Systems that poses a water security risk to over one quarter of Colorado's population. This imbalance is causing system-wide vulnerability issues, limits Denver Water's operational flexibility to respond to water collection system outages, and seriously threatens Denver Water's ability to meet its present-day water needs. The Corps, together with FERC as a cooperating agency, evaluated multiple alternatives and ultimately selected the proposed expansion of Gross Dam and Reservoir to meet the integrated purpose and need for the GRE Project, as well as increase the hydroelectric power generating capacity of the dam. FERC has ordered Denver Water to begin construction on the GRE Project by July 16, 2022 and to complete construction by July 16, 2027. Because Denver Water cannot implement an alternative not selected by the Corps and FERC, there is no reason or opportunity to revisit the GRE Project's purpose and need or alternatives to the GRE Project at this stage of the process. Denver Water nevertheless is responding herein to specific questions and requests to the best of its ability. Within the time available, Denver Water is willing to provide requested information and analysis, so long as such requests are not inconsistent with the Corps' decision and FERC's Order. In that vein, Denver Water is providing the attached Colorado Water Conservation Board's 2019 Technical Update to the Colorado Water Plan to this response to comments submittal (Exhibit 24). According to this report, by 2050, municipal water demands in the Denver Metro Region will increase by between 134,000 to 280,000 AF/yr compared to a 2015

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			baseline. Those figures account for decreasing per capita water use in the Metro Region. A substantial increase in demand is predicted in every planning scenario, including those that assume high rates of water conservation. p. 146 Table 4.8.7 and Figure 4.8.12. The report further shows that, by 2050, the South Platte Basin, in which Denver Metro Region is located, will face an annual average gap in water supply of 136,600 to 390,600 AF/yr. Again, a substantial supply gap is predicted in every planning scenario, including those that assume high rates of water conservation. p.150 Table 4.8.11 and Figure 4.8.20. Importantly, those figures used the most recently available water-use data from Denver Water, and they assume that Gross Reservoir will be expanded because the GRE Project was included in the Identified Projects and Processes that the CWCB used to project future supplies. The Technical Update concluded that, even when Gross Reservoir is expanded, by 2050, "the persistent nature of the time series of gaps … points to the need for projects that will provide firm yield," and that "[w]ithout new projects, higher demands will draw storage down to lower levels," and "[c]oncurrent drier conditions will impede full recovery of reservoirs . . . ," which will require water suppliers to "acquire additional supplies or build new projects to boost reserves." p.150-51. Thus, even if addressing increased demand were the sole purpose of the GRE Project (which it is not), the Technical Update is consistent with and provides additional support for the demand analyses in the Final EIS.
G-15	• Application materials indicate the Corps eliminated Denver Water's alternatives 6 and 7, Indirect Potable Reuse Project and Reusable Water respectively, however, CP&P staff believes significant additional information and discussion is required as part of the application in order to address Article 8-202.B.10: Require that municipal and industrial water projects shall emphasize the most efficient use of water, including, to the extent permissible under existing law, the recycling and reuse of water.	Purpose and Need	Indirect potable reuse and reusable water alternatives were combined with other aspects to create several alternatives considered by Denver Water and the Corps. Alternatives 8a and 10a both used reusable water supplies to meet part of the 18,000 AF of supply and were considered "Practicable Alternatives" and are described in the same detail as the Preferred Alternative in the Final EIS. Additionally, Denver Water is committed to developing 30,000 AF of gravel pit storage which will allow the reuse of reusable water supply. This is in addition to the water exchanges and delivery of reusable water currently taking place. Lastly, Denver Water and Aurora have partnered with municipalities in the South Metro area to develop the WISE Project which makes use of existing infrastructure and Denver Water's and Aurora's reusable water supplies to provide additional water supply. Denver Water is also reusing "Black" water at its new administration building. The wastewater from the building is captured, treated, and then used for irrigation and toilet flushing. Rainwater is also harvested for irrigation uses.
G-16	• Information and data related to other aspects of the project are also significantly outdated, evidenced in information such as conservation measures implemented by Denver Water – statement that 29,000 AF/yr conservation between 1980 and 2000, wildlife populations – elk herd post-hunt population numbers from 2009 and mountain lion and black bear data from 1994, and reliance on floodplain mapping that is not the most accurate available (CHAMP mapping provided to FEMA in 2018).	General Comment	Please see Denver Water's response to comment I-9 for information on Denver Water's conservation efforts. Other data used was the best information at the time the analysis was completed, and Denver Water believes it is still an accurate representation of the conditions. Please see responses to comments L-1 through L-10. Denver Water met with Boulder County's Community Planning & Permitting Floodplain Management Program on

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			February 8, 2021, to discuss the applicability of land development permit requirements on this project and potential need for floodplain mapping data.
G-17	Application materials also lack information related to the proposed project's potential impacts on climate change. Climate change is an issue identified by Boulder County elected officials as one that is significant. County Commissions have consistently instructed staff to review applications with an eye on proposed projects' potential impact on climate change and to recommend conditions of approval intended to mitigate any potential negative impacts. Denver Water's application materials do not address this issue in any detail, and staff requests additional, detailed information related to the potential impacts of the Dam and Reservoir Expansion project on climate change. For example, the proposed removal of 650,000 trees represents a significant loss of biomass, how is this proposed to be offset? The proposed preservation of the Toll Property ensures biomass located on those acres will not be lost but does not address the loss of the biomass located within the proposed project area.	Climate Change	Please note that 650,000 is not the correct estimate of trees to be removed. See Denver Water's responses to comments G-4 and M-3 for clarification of the correct number. The Corps performed analyses of GRE Project-related carbon emissions in sections 4.4, 4.6.13, 5.13, and Appendix I of the Final EIS. The Corps also responded to multiple climate-change related comments, including those from Boulder County, in Appendix B to its Record of Decision. The Corps explained that Denver Water's agreement to convey more than 500 acres of property (the "Toll Property") to the USFS was appropriate mitigation for the GRE Project's impacts to forest resources on National Forest System lands. Additionally, in section 5.1.11.2 of its Supplemental EA, FERC responded to comments concerning carbon emissions from tree removal, stating that "the proposed removal of trees would reduce carbon uptake, and combustion would release carbon dioxide; however, we are not aware of any reliable models that would enable analysis of these effects on climate conditions. Based on the scale of the GRE Project in comparison to other sources of greenhouse gas in the atmosphere, we expect the effects of tree removal and disposal on global climate change would be minor." As an organization, Denver Water has long been committed to stewarding our environment and mitigating emissions from its operations. For example: • Denver Water's From Forests to Faucets Program has revegetated over 300 acres and accomplished over 100,000 acres of forest treatments since 2010. • Denver Water is a registered participant with the Climate Registry, a nonprofit collaboration among North American entities that sets consistent standards to calculate, verify and publicly report greenhouse gas emissions into a single registry. • Denver Water obtained LEED certification for its recent Operations Complex Redevelopment project. • In 2020, Denver Water produced more emissions-free energy from hydropower and solar than its total energy consumption, effectively achieving net-zero energy usage for 2020. • Denver Water is recognized by the CDPHE as a Gold Partner for reducing waste at our water treatment plants. • The GRE Project itself will result in increased hydropower generation at Gross Dam, which will allow Xcel Energy to offset approximately 2,823 tons/year of CO_2e. Consistent with our commitment to environmental stewardship efforts, Denver Water plans to responsibly address the carbon emissions from the GRE Project and is willing to discuss options, including possible revegetation projects or forest treatments within or adjacent to Zones of Concern in Boulder County.

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			In addition to efforts by Denver Water, the City of Denver has embarked on an effort to achieve net zero energy use in all new buildings by 2030. A plan was recently published and defines net zero energy as "highly" energy-efficient building or home that is powered by renewable energy and a provider of demand flexibility for the power grid. In Denver, buildings and homes made up 63% of all greenhouse emissions in 2019. This plan will update building codes and have a requirement to "perform as designed." https://www.coloradopolitics.com/denver/denver-plans-to-achieve-net-zero-energy-in-all-new-buildings-and-homes-by-2030/article_88ae3668-60c8-11eb-ac21-3bc441fb4a16.html
G-18	Community Planning & Permitting staff anticipates additional questions and discussions will result after the review of any revised or additional information submitted by the applicant and looks forward to collaborating with Denver Water during this process.	General Comment	Thank you for your comment. Denver Water is looking forward to continuing conversations with Community Planning & Permitting staff through the 1041 Permit Application review and approval process.

H	**SI-20-0003 Community Planning & Permitting – Historic Preservation Advisory Board (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
H-1	On November 5,2020, Boulder County Community Planning and Permitting staff presented the development proposal, SI-20-0003: Gross Dam Expansion, to the Historic Preservation Advisory Board (HPAB). Staff requested that HPAB provide comments on the proposal as it relates to impacts on cultural and historic resources. The following comments reflect the conditions of approval requested by HPAB during this meeting:	General Comment	Thank you for your comment.
H-2	1. The applicant shall provide County staff with a copy of all documentation included in the signed Programmatic Agreement including the HAER documentation and the HPMP.	Cultural Resources	Denver Water will provide copies of reports prepared (e.g., Historic American Engineering Record documentation, Historic Properties Management Plan) as required in the Programmatic Agreement (refer also to the response to comment H-5).
H-3	2. The applicant installs interpretational signage related to the history of the dam and flume for public education. a. All plans, which shall include signage location and content, for interpretational signage shall be reviewed and approved by HPAB or Community Planning & Permitting staff before installation.	Cultural Resources	Denver Water will install two signs. One on Winiger Ridge describing the Resumption Flume and the second near Gross Dam. Language on the signs will be developed in consultation with Boulder County.
H-4	3. A monitor shall be on site during construction to ensure additional historic/cultural resources are documented before being damaged or lost from construction activity.	Cultural Resources	Denver Water will have an on-site inspector during construction to ensure compliance with environmental permit requirements including cultural resources.
H-5	HPAB also requested additional information on the following: • Existing conditions and other applicable information on other historic/cultural resources in the project area that were identified in the Cultural Survey that are either not going to be impacted or would be lightly impacted to ensure HPAB can adequately comment on them if they are found to be disturbed by the project in the future.	Cultural Resources	Denver Water will provide all cultural survey reports to Boulder County that have been completed as part of the Corps' Final EIS and that will be completed per the FERC Order Article 415 (Archaeological Plan and Historic American Engineering Record documentation). These reports will be made available upon issuance of the 1041 Permit. Please reach out to Denver Water to coordinate the transmittal.

I	**SI-20-0003 Community Planning & Permitting – Long Range Planning (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
I-1	Denver Water's Gross Reservoir Expansion Project application (the application) dated 9/21/20 is a 370 page document which then includes multiple exhibit documents which must be referenced to obtain pieces of information not included in the application. These exhibit documents are each 100s of pages and present different information than is presented in the application. The application should provide complete summary information of the detailed reports provided as exhibits. The application should be amended to provide all relevant information in a complete and consistent manner so that it may be understood when reviewed by agencies, the public, and decisions makers.	General Comment	Thank you for your comment.
I-2	Denver Water's need for the project is discussed in an 18 year old Integrated Water Resource Plan (2002) referred to as Exhibit 2 and to an extant on page 5 and 6 of the application. In the 2002 plan the Gross Dam and Reservoir Expansion would help address drought concerns at the Moffatt Treatment Plant (MTP) as the plan states "the problem is not lack of overall water supply...but unequal distribution of the available water. That is, Denver Water currently has adequate water supply in its supply systems but not enough water is available for treatment at the Moffat plant". (Figure 7-1 of Exhibit 2 is referenced to show the North and South System however in Exhibit 2 there isn't a Figure 7-1 as the figures are titled using roman numerals.) The Moffatt Treatment Plan is being replaced by a new plant at Ralston Reservoir so the conclusions of the 2002 IWRP which are based on the problems with the MTP are hard to understand given the changes in the Denver Water system.	Purpose and Need	Denver Water's need for the GRE Project is discussed in detail in Chapter 1 of the Corps' Final EIS. As discussed there, Denver Water has multiple interconnected needs for the GRE Project. Not only will the additional firm yield developed from the GRE Project meet the projected future water demands of Denver Water's customers, the additional water supply and reservoir storage to be developed at Gross Reservoir will help to address a current imbalance between Denver Water's North and South Systems that poses a water security risk to 1.5 million people, or over one quarter of Colorado's entire population. This imbalance is causing system-wide vulnerability issues, limits Denver Water's operational flexibility to respond to water collection system outages and threatens Denver Water's ability to meet its present-day water needs. The new treatment plant will replace the existing treatment plant and has the same role in the distribution system, the same water supply, and the treatment rate will remain approximately the same. In other words, the new treatment plant will not change system operations and also will not change the purpose or need for the GRE Project.
I-3	The plan includes adding new water to the system and supporting hydroelectric power development at Gross Dam as benefits. It isn't clear if this document is relevant at this point as the application mentions on page 5 only the need to add storage and supply to the system in addition to adding storage to the north portion of Denver Water's system to balance the system. It isn't clear how the hydroelectric portion of the project has factored into Denver Water's consideration or development of the Gross Dam project. Is hydroelectric generation a primary purpose of this project?	Purpose and Need	The Gross Reservoir Hydroelectric Project is an essential component of the City of Denver's municipal water supply system. Because Gross Reservoir occupies land designated as a federal power reserve, to utilize the reservoir for water supply purposes, Denver Water must produce hydropower at Gross Dam. The Federal Power Act grants to the FERC exclusive jurisdiction to license and regulate the construction, operation, and maintenance of hydropower projects. Denver Water therefore was required to and has successfully obtained a FERC license to develop hydropower at the site, including from the expanded reservoir. Gross Reservoir currently is used principally to store and deliver water to meet municipal needs, with hydropower production a secondary purpose. The GRE Project generates electricity when water is released from Gross Reservoir to meet municipal water supply needs, typically during the six-month period from April through September. Although the purposes of the GRE Project are to increase the reliability, flexibility and resiliency of Denver Water's municipal water system and to meet projected future water demands, as a result of the increased water that will be available for municipal water supply needs, the Hydroelectric Project's generating capacity will increase from 7,598 to 8,100 kW. Denver Water plans to sell the additional power it will produce from the proposed expanded facilities on the wholesale market or use this power in its own water supply operation, which will

I	**SI-20-0003 Community Planning & Permitting – Long Range Planning (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 11-13-2020**		
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			ultimately offset costs for its water supply customers. As FERC pointed out in its Order amending the hydropower license for the Hydroelectric Project, the additional clean, emissions-free power will eliminate the need for an equivalent amount of fossil-fuel produced energy, which helps conserve nonrenewable resources and decreases atmospheric pollution.
I-4	An updated IWRP would also be useful in understanding Denver Water's current situation as the 2002 plan includes and discussion on conservation and projects that were proposed to be completed by now and to understand if the shortfall described were reduced through the implementation of the Plan's near term "the period up to the year 2030" strategies. The Moffatt System is shown on the Integrated Water Resource Plan (IWRP) table of Long-Term Supply options Table which includes "West Slope Storage; East Slope Storage; Conjunctive Use" as opportunities, is this the portion of the 2002 plan being implemented by the project or is additional expansion of Gross Dam anticipated?	Purpose and Need	Please see responses to comments G-14 and I-9 for information on how the water demand and conservation numbers were updated and independently verified through the Corps' NEPA process. Beyond the GRE Project, Denver Water does not have plans to further expand Gross Dam.
I-5	On page 1-16 of the EIS Figure 1-5 shows the 34,000 AF deficit anticipated by the Denver Water in 2032. While conservation measures are anticipated to address 16,000 AF of this deficit a Gross Reservoir expansion of 72,000 AF is to address the remaining 18,000 AF 2032 shortfall. Why is a storage amount four times the identified 18,000 AF shortfall that is needed being proposed?	Purpose and Need	As explained in section 1.4.2 of Chapter 1 of the Final EIS, Denver Water plans around the "firm yield" of its system. Firm yield is a measure of a system's ability to reliably supply water to meet demand during drought periods and is dependent on many factors, including the amount and timing of supplies and demands, reservoir operations, and physical and legal constraints. The Final EIS goes on to explain in section 1.4.3.5. that to provide an additional 18,000 AF/yr of firm yield, Gross Reservoir would need to be enlarged by 72,000 AF to a total capacity of 113,811 AF (not including the Environmental Pool). Denver Water determined the 72,000 AF using the PACSM modeling program by increasing the simulated storage at Gross Reservoir until it was large enough to meet an additional annual demand of 18,000 AF without a shortage during the 4-year critical drought period (1953-1957). In other words, based on hydrologic modeling, Denver Water needs 4 years' worth of supply in storage as a "savings account" to ensure it can provide water each year (i.e., firm yield) through a drought to its customers. Thus, the 4:1 storage to firm yield ratio of 72,000 AF to 18,000 AF.
I-6	Has there been climate change impact analysis which factored into Denver water's needs assessment and the impact analysis of this project? Is the proposed Gross Reservoir expansion anticipated to also play a role in resolving Denver Water's year 2050 89,700 AF shortfall? If not has Denver Water begun planning to address this longer term shortfall?	Climate Change	The Corps performed analyses of GRE Project-related carbon emissions in sections 4.4, 4.6.13, 5.13, and Appendix I of the Final EIS. The Corps also responded to multiple climate-change related comments, including those from Boulder County, in Appendix B to its Record of Decision. As explained in those comment responses, there is not a generally accepted scientific method by which current climate change information is translated into predictable stream flow changes and assimilated into water supply decision-making. Consequently, the Corps provided a qualitative assessment of how climate change may impact Denver Water's water supply, explaining that scientific studies have projected that since the stream flow may peak earlier, evapotranspiration may be higher and droughts may be longer and more severe, it is also likely that water demands would increase in correlation with rising air temperatures. Annual variability will increase in both directions, with wet years continuing to take place and even potentially intensifying due to a warming climate. This situation may require water managers to address greater extremes in water systems in the foreseeable future. By

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			addressing the reliability, vulnerability and flexibility needs detailed in Chapter 1 of the Final EIS, the GRE Project would help Denver Water to manage these climate-related risks and secure the water supply for more than one quarter of Colorado's population. Although expanding Gross Reservoir is designed to address the present-day and short-term planning horizon needs identified in Chapter 1 of the Final EIS, the GRE Project does play a role in addressing long-term needs as well. If the GRE Project were not to take place, Denver Water would lose access to the additional 18,000 AF/yr of additional firm yield to be developed at Gross Reservoir. Denver Water would then have to attempt to use other supplies and strategies to increase the reliability and flexibility of its system and make up the additional shortfall in supply, as discussed in the "no action" alternative scenario found in Chapter 2 of the Final EIS. This would hamper Denver Water's ability to address its long-term needs through 2050 and beyond.
I-7	Neither the EIS or the 2002 IWRP reflect the new Northwater Treatment Plant next to Ralston Reservoir, the system analysis is out of date. Additionally, much of the analysis and rationale for the project is based on a system analysis where lack of available water at the Moffatt Treatment Plant is the critical flaw being resolved by this project. Updated materials reflecting a more accurate picture of the Denver Water system should be provided.	Purpose and Need	The new treatment plant will replace the existing treatment plant and has the same role in the distribution system, the same water supply, and the treatment rate will remain approximately the same. In other words, the new treatment plant will not change system operations.
I-8	The 2002 IWRP on page 66 notes (as options to solve the water availability problem at the MTP) "other potential solutions – enlarging Gross Reservoir; building a new off-channel reservoir; or recycling water for drinking purposes- would have the additional benefit of adding new water to Denver Water's system to help meet future demand". Though the construction of an off-channel reservoir and water recycling projects were identified as options in 2002 they are not included the alternatives analysis presented in the Environmental Impact Statement. No alternatives analysis was presented in the application. The EIS includes Chapter 2 Proposed Action and Alternatives in which several variations of a Gross Reservoir expansion are discussed. No alternatives to an expansion of Gross Reservoir were considered: why wasn't the construction of an off-channel reservoir(s) examined as suggested in 2002? A new Leyden Gulch Reservoir is considered but no discussion of expanding Ralston Reservoir is mentioned. It is understandable that Denver Water does not see a no action alternative as acceptable but, it isn't clear that any options other than expanding Gross Reservoir have been explored. The alternatives analysis provided in the EIS is unacceptable for the purposes of this 1041 application.	Purpose and Need	As part of their analysis, the federal agencies screened more than 300 potential water supply sources and infrastructure components. These specifically included new reservoirs, including a Leyden Gulch Reservoir (included in Alternatives 1.b, 1.c, 1.c.1, 1.d, 1.d.1, 2.b, 3.b, 6.b, 7.b, 8.b, 9.b, 10.b, and 13.b) as well as expansion of Ralston Reservoir (included in Alternatives 2.c, 4.a, 5.b, 6.a, and 7.a). The reasons these options were not selected are discussed in Chapter 2 of the Final EIS, included with Denver Water's 1041 Permit Application. Please also see attached to these responses to comments the 2007 Alternatives Screening Report for more information (Exhibit 25). FERC has directed Denver Water to implement the GRE Project as specified in its July 2020 Order. Denver Water must start and complete construction within the timeframes provided in that Order and cannot implement an alternative not approved by FERC and the Corps. Please see Denver Water's responses to comments G-2 and G-3 for more detail.
I-9	In Colorado's Water Plan former Governor Hickenlooper is quoted as saying that "every conversation about water should start with conservation" but conservation efforts are not discussed in any depth in the application, rationalization for the project, and no commitment to conservation projects or programs is made. According to the application "the system capacity of Denver Water's collection system ... identified a 34,000 acre-feet per year (AF/yr) deficit in Denver Water's supply compared to projected demand. This shortfall would be met by 16,000 AF/yr of additional conservation and the 18,000 AF/yr Project (72,000 acre-foot [AF] expansion of Gross Reservoir). Denver Water has committed to implement the programs necessary to realize 16,000 AF/yr of conservation savings by 2030. None of the materials provided in the	Conservation Reuse	Denver Water has been implementing efficiency programs that result in sustainable water savings for decades *(see additional information detailed in response to comment I-10).* It is not true that Denver Water has implemented no new water conservation or efficiency efforts since 1998. For example, in 2007, Denver Water accelerated its conservation goals to reduce customers' water use by 22% by 2016. The Corps' analysis showed that, despite the reductions in water use resulting from Denver Water's accelerated conservation plan, Denver Water still needs an additional 18,000 AF/yr of new firm yield. The conservation portion of the shortfall was the result of an independent review of previous conservation measures and achievement and future

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	application indicate what these programs are or will be and it isn't clear if these programs could do more to reduce the shortfall and thus reduce the need for new water supplies. How was the conservation portion of the shortfall determined? Of particular concern is that conservation efforts discussed Section V of the 2002 Integrated Water Resource Plan report no new conservation measures implemented after 1998. A 2001 study cited in the IWRP indicated that achieving the goal 29,000 acre foot annual savings by 2050 was not possible given current conservation measures.		conservation potential. See Chapter 1 and Attachment A to the Corps' Final EIS for more information. Sections 1.4.1.2 and 1.4.3 of the Final EIS describe numerous measures that Denver Water has been taking to reduce consumption and increase water reuse and recycling. Additional information on Denver Water's conservation program can be found in Appendix A-3 to the Final EIS and in Denver Water's attached Water Conservation Plan Update (Exhibit 26), which has been approved by the Colorado Water Conservation Board to achieve sustainable long-term reductions in demand. Water conservation, while important, cannot by itself meet the purpose and need for the GRE Project. As explained in Chapter 1 of the Final EIS, the additional water supply and reservoir storage to be developed at Gross Reservoir also aims to address a current imbalance between Denver Water's North and South Systems that poses a water security risk to over one quarter of Colorado's population. This imbalance is causing system-wide vulnerability issues, limits Denver Water's operational flexibility to respond to water collection system outages, and seriously threatens Denver Water's ability to meet its present-day water needs.
I-10	Following the 2001 study Denver Water staff analyzed additional potential conservation measures but made no commitments to additional conservation efforts. Additionally, the EIS states on page 1-23 "there is no compelling analyses or basis to be confident that these saving will occur." What are the additional conservation methods to be implemented? Since growth in Denver Water service area is a driver of water demand how have water saving actions been incorporated into land use planning within the service area? Water conservation is an aspect the use and development of the water resource in a sustainable manner, sustainability is a cross-cutting theme of the Comprehensive Plan but also a specific goal. How has Denver Water implemented sustainability efforts within their service area and as part of the proposed project?	Conservation Reuse	Please see Denver Water's response above. Denver Water and CDPHE have been jointly chosen for the 2021 WateReuse Awards for Excellence in the category of Advocacy Achievement. The WateReuse Awards for Excellence recognize individuals and/or projects that are making significant contributions in support of greater adoption of water reuse. This year's nominations and selection process were highly competitive, and the selection by the Awards Committee demonstrates Denver Water's and CDPHE's success in advancing the development of alternative water supplies through water recycling. The presentation of the award will take place at the virtual event in March 2021 during the 36th Annual WateReuse Symposium. In the past several decades, Denver Water also has been recognized for our successful efforts in conservation, reuse and sustainability programs. Below is a sampling of those awards and recognitions Denver Water has received since 2014 that highlight our successful efforts. ***2014***: Conservation. We achieved 1,212 AF of water savings in 2014 through active programs for every customer type, including 15,000 educational touches, 4,000 audits and 24,000 incentives and rebates. The team created online rebate applications, making it faster to apply for and receive a rebate as a check or credit on a bill. Senate Bill 103. Denver Water spearheaded the effort to pass Senate Bill 15-103 phasing in the sale of WaterSense water fixtures in Colorado. This was a significant team effort that will save Colorado at least 40,000 AF/yr by 2050.

			2015: Conservation. We achieved 1,220 AF of water savings in 2015 through active programs for every customer type, including 2,000 educational touches, 2,000 audits and 23,000 incentives and rebates. Conservation staff developed streamlined irrigation audit requests to ensure customers received specific information about their water use and property, often times without scheduling an irrigation audit or rolling a truck. Global Water Award for Excellence in Sustainability (runner-up) recognized Denver Water's sustainability efforts as demonstrated through the WISE project, Colorado River Cooperative Agreement, and Colorado River System Conservation Program. Excellence in Promoting WaterSense Labeled Products Award from the EPA. ***2016:*** Conservation team hosts multiple meetings with a diverse stakeholder group. The group is moving to consensus on a benchmark of 12 gallons per square foot for outdoor use for all customer types (single family, multifamily, and public spaces) and 40 gallons per person, per day for residential water use (single family and multifamily). ***2017:*** Gold leader status. The CDPHE recognized Denver Water's treatment plants with a "Gold Leader Award" as part of the CDPHE Environmental Leadership Program. This recognizes outstanding environmental achievements by organizations that voluntarily go beyond compliance with state and federal regulations and show a commitment to continual environmental improvement. Water Efficiency Plan. The Denver Water Board approved the 5-year Water Efficiency Plan to continue engaging customers in water efficiency programs and projects, with the goal of gaining an additional 3,400 AF of savings at a cost of $6.8 million. The plan changes the focus from conservation to targeted communications to inefficient customers who are in scope for water efficiency programs. By targeting inefficient customers rather than all customers, Denver Water can achieve reductions in demand through cost-effective programs. This effort used a stakeholder input process to develop recommendations for efficiency benchmarks and programs to achieve those benchmarks. ***2018:*** Regulation 84. To achieve regulatory approval for the innovative wastewater treatment system in the new Administration Building, Denver Water led an initiative to expand water reuse regulations in Colorado. The CDPHE expanded Regulation 84 to now permit toilet/urinal flushing with reclaimed water, as well as the implementation of localized systems. The Leading Utilities of the World. Denver Water became one of the newest members of the Leading Utilities of the World network. Utilities must demonstrate outstanding innovation in various Leading Utilities of the World categories. Our categories included response to drought or scarcity with the From Forests to Faucets partnership with the USFS and CSFS, energy efficiency with Denver Water's Sustainability Plan and

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			hydroelectric operations and human resource development with our Continuous Improvement efforts. Sustainable Water Utility Management Award. The Association of Metropolitan Water Agencies awarded Denver Water the Sustainable Water Utility Management Award. It goes to utilities that balance innovative and successful efforts in areas of economic, social, and environmental endeavors. That includes managing resources, protecting public health, meeting community responsibilities, and providing cost-effective services to ratepayers. Friend of Conservation Award. Denver Water received honorable mention in the 2018 Friend of Conservation Award from the National Association of Conservation Districts. The Jefferson Conservation District is one of our partners in the From Forests to Faucets Program. The award highlighted Denver Water as a leading partner in water and land conservation and for our engagement with program partners. Water Efficiency Plan. All programs combined for 614 AF of savings, exceeding the first-year target of 600 AF. We made significant progress communicating with single-family residential customers with both outdoor and indoor efficiency messages delivered via email. PureWater Colorado Demonstration Project. We partnered with WateReuse Colorado at our Recycling Plant to demonstrate how treated wastewater could be retreated to a potable standard. This project was an important step in expanding water reuse in Colorado by engaging stakeholders and decision makers to learn more about potable reuse. The project received national recognition at the WateReuse Association's annual symposium in September. ***2019:*** WateReuse Community Water Champion. The WateReuse Association awarded the Community Water Champion award to Denver Water for the WISE project. The award recognizes utilities that showcase exemplary water reuse projects or systems. Water Efficiency Plan. The plan in its second year incorporates a portfolio of programs ranging from residential-fixture rebates to new rate-setting approaches. These programs can be adjusted to respond to factors like drought, Colorado River curtailment, code changes, customer participation and program cost. The plan offers specific solutions to customers whose water use exceeds efficiency benchmarks. The 5-year program goal is approximately 3,500 AF of savings at a total cost of approximately $6.7 million. Spending in 2018 was $1.3 million with associated water savings of 614 AF, resulting in a cost per acre-foot of $2,161. Year-to-date water savings in 2019 is 266 AF. Total 2019 spending is projected at $1.9 million. The actual water savings achieved by the plan since its inception is greater than projections. ***2020:*** U.S. Water Alliance Water Prize. Denver Water received this recognition for developing an integrated water management strategy in the redevelopment of our Operations

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			Complex. The redevelopment addressed active rainwater harvesting, on-site black water reuse, passive stormwater irrigation, drought-tolerant landscaping, centralized heating and cooling to minimize potable water use, wastewater effluent streams, stormwater impacts and energy needs. Denver Water's reuse and conservation team continues to focus on holistic water efficiency, where the approach is to first reduce water use and then find the appropriate source of water (using nonpotable water where appropriate). This team focuses on driving customer adoption of traditional conservation tactics (e.g., low flow fixtures, water-efficient landscapes) and alternative water sources (e.g., municipal recycled water, grey water, localized reclaimed water). An example of this is major changes in landscaping and residential construction. Denver Water has found that the average demand on the recycled water system is around 10,000 AF/yr. Additional policy achievements for alternative water sources include: • New regulations under development for direct potable reuse; Denver Water has been supporting this effort since 2016 and the public rulemaking process is underway. • Denver Water's localized reclaimed use system is undergoing commissioning to prevent further delays beyond what occurred due to pandemic remote work requirements. Additionally, the framework that Denver Water has developed for this system will be available for others (e.g., Pikes Peak) to use. • Denver Water is supporting changes to Regulation 84 to allow water reuse in oil and gas operations. • First residential installation of greywater systems commenced in 2020 and will continue through 2021. • Two additional commercial building designs are under review for incorporating greywater systems. • Denver Water is part of the Core Planning Team in the Denver One Water Plan; this is being led by the City and County of Denver and funded by the CWCB and aims to align policies among Denver metro area water/wastewater service providers and better coordinate land use planning/water service. • Water budget management tools have been created for commercial and industrial customers to access water use data and improve water efficiency across complex properties and multiple sites. • More than half of single-family residential customers are receiving monthly communications about their outdoor water use and options for increased efficiency.

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			• The City and County of Denver Green Codes is incentivizing new development to be water efficient beyond standard building codes and incorporates high-efficiency landscape and fixture requirements and alternative water source options. In terms of land-use planning, much of the growth in the Denver Water service area is done through redevelopment and higher density housing. Higher densities contribute to a phenomenon known as the heat island effect which significantly raises temperatures in these dense, urban areas. In order to reduce the heat island effect, more trees, landscaping, and green infrastructure is needed. This will increase the current water need in these areas.
I-11	The Additional Countywide Policies portion of the Comprehensive Plan was approved by Planning Commission in 1983. CW 1.04 an CW 1.09 speak to the desirability of reviewing expansions of water systems and assessing the environmental impacts of land use proposals. These long standing policies remain relevant today as the 1041 process and its environmental impact assessment and alternatives analysis implement these policies. Without a thorough application and critical review of such proposals these Comprehensive Plan policies are disregarded as is the guiding principal which directs the County to pursue "goals and polices that achieve significant reductions in our environmental footprint".	General Comment	Please see responses to comments G-2 and G-3.
I-12	The Environmental Resources Element of the Boulder County Comprehensive Plan (BCCP) identifies a number of resources in the project area including: Winiger Ridge Environmental Conservation Area (ECA), Overland Habitat Connector which links the Winiger Ridge ECA to the Hawking Gulch/Walker Ranch/Upper Eldorado Canyon ECA to the east, an Elk Migration Corridor, Riparian Areas and Wetlands along the creeks flowing into the reservoir, Winiger Gulch a High Biodiversity Significance Area to the southwest of and adjacent to the reservoir, and Winiger Ridge Natural Landmark. These areas are all anticipated to be impacted by the project contrary to the various policies in the element which seek to protect and preserve them. Additionally, the first goal found in the sustainability element directs the County to promote outcomes consistent with the principals of sustainability focusing on the protection of resources.	General Comment	Please see responses to comments S-3, S-4, S-25, S-38, and S-43.
I-13	The transportation impacts of this project are anticipated to be significant and enduring for years. These impacts are not only traffic related but also result in the emissions of climate impacting greenhouse gasses and impacting local air quality. The Comprehensive Plan Goal 4 of the Sustainability Element directs the County to reduce such emissions. Transportation Element policies direct the County to Design Complete Corridors (TR1.02) , Prioritize Travel Corridors (TR 3.01), Enhance the Bicycle and Pedestrian Network (TR 1.03), Encourage Alternative Transportation (TR2.02), Reduce Single-Occupant-Vehicle Travel (TR 4.01), Minimize reliance on Fossil Fuels (Goal 5), and Promote Public Safety (TR 6.04). Coal Creek Canyon (HWY 72) is a narrow winding corridor that provides one of only a few access points into the region along and beyond the corridor. The anticipated traffic impacts along this corridor conflict with these stated goals and policies. What is Denver Water doing to address the sustainability and traffic impact concerns related to transportation impacts?	Transportation	Traffic related impacts and mitigation measures will be addressed and finalized in the final Traffic Management Plan. Denver Water will provide that plan to Boulder County.
I-14	The project entails a six year long project (operating 24 hours per day at times) to increase the height of the existing dam by 131 feet and thus increasing the reservoir storage capacity inundating	General Comment	The increase in water elevation of 124 feet will add 77,000 AF of storage space which includes the 5,000 AF Environmental Pool.

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	additional areas to add 124 feet in elevation to the current water surface elevation achieving 72,000 (77,000 is also stated in the application) acre feet of additional water storage.		
I-15	The project includes an on site quarry and concrete plant and area road improvements. Traffic to the site includes supply trucks, tree hauling, construction equipment and workforce commuting. It is clear that the proposed project will have permanent substantial impacts within Boulder County and significant additional impacts during the six year construction phase.	Construction Activities	Your comment is noted. Impacts to resources are addressed in other responses within this document. As explained elsewhere in these comment responses, Denver Water has worked hard to minimize disruptions to the community and mitigate those impacts that cannot be avoided. Denver Water has invested in local restoration, enhancement and recovery activities to benefit the natural environment, including by participating in South Boulder Creek stream restoration planning, relocating the quarry site within the inundation area, agreeing to implement a carpool and/or bussing plan during peak construction periods, planning to obtain aggregate on site, assisting neighbors during and after the 2013 floods, providing temporary water flows in Eldorado Springs, performing other flood control activities in 2013, and supporting the City of Boulder and City of Lafayette's successful application for a storage right in the environmental pool that will benefit South Boulder Creek. Regarding the mitigation that Denver Water has already agreed to as part of the GRE Project, please see: • The Final Mitigation Plan for the Moffat Collection System Project, 401 Water Quality Certification, U.S. Fish and Wildlife Service Biological Opinions, and Section 106 Programmatic Agreement attached to the Corps' Record of Decision (Exhibit 5c). • The FERC's Supplemental Environmental Assessment (Exhibit 5e). • Denver Water's Settlement Agreement with the USFS attached to Denver Water's hydropower license amendment application (Exhibit 5i1). • Denver Water's IGA with the Cities of Boulder and Lafayette for an Environmental Pool in Gross Reservoir (Exhibit 27). • Denver Water's IGA with CDOT, Grand County, and the Town of Winter Park for the Fraser Sediment Pond (Exhibit 28). • The Colorado River Cooperative Agreement (1041 Permit Application Exhibit 5j). • Denver Water's IGA with Grand County, The River District, and the Middle Park Water Conservancy District for the Learning By Doing Cooperative Effort (Exhibit 29). • Grand County Mitigation and Enhancement Coordination Plan (Exhibit 30).
I-16	As proposed Boulder County bears a significant burden to meet the needs of Denver Water yet the application fails to describe any actions by Denver Water which attempt to relieve this burden and locate the impacts of the water utility needs within the Denver Water service area and require those benefitting from the service to minimize demand through deep and meaningful conservation and land use planning programs. Given the lack of information and the concerns identified it is difficult to find the application on compliance with Comprehensive or the Land Use Code.	General Comment	Please see responses to comments G-2, G-3, I-9, and I-10.

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I-17	This concludes the Department of Community Planning & Permitting comments at this time. We look forward to continuing to provide feedback and input throughout this process.	General Comment	Thank you for your comments.

J	**SI-20-0003 Colorado Parks and Wildlife** **Date posted: 12-23-2020 – Date of Letter: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
J-1	Thank you for the opportunity to comment on the Gross Reservoir Expansion Project 1041 permit application. CPW's statutory mission is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. This mission is implemented through our 2015 Strategic Plan and the goals it embraces, which are designed to make CPW a national leader in wildlife management, conservation, and sustainable outdoor recreation for current and future generations.	General Comment	Thank you for your comment.
J-2	CPW'S role in participating in the analysis of the Gross Reservoir Expansion Project (aka Moffat Firming Project) has been to protect the interests of Colorado's fish and wildlife resources. We have fulfilled this role by participating as a cooperating agency and by requiring that the project proponent, the City and County of Denver, acting by and through its Board of Water Commissioners (Denver Water), commit to mitigation and enhancement measures required under Colorado law (Section 37-60-122.2, C.R.S.).	General Comment	Denver Water concurs.
J-3	In accordance with this law, a Fish and Wildlife Mitigation Plan (FWMP) and a Fish and Wildlife Enhancement Plan (FWEP) were developed by Denver water and subsequently recommended by the Colorado Parks and Wildlife Commission and the Colorado Water Conservation Board as the state position on the mitigation of fish and wildlife resources for the Moffat Firming Project; this position was communicated by Governor Hickenlooper to the U.S. Army Corps of Engineers on October 11, 2011. Significant portions of the FWMP were included as a condition of the U.S. Army Corps of Engineer's Record of Decision for the project.	General Comment	Denver Water concurs.
J-4	Furthermore, Colorado Parks and Wildlife entered into a Memorandum of Understanding with Denver Water on March 24, 2014 to memorialize the commitments and understandings of the FWEP. The FWMP and FWEP continue to reflect CPW's position on fish and wildlife mitigation and enhancement for this project.	General Comment	Denver Water concurs.
J-5	Thank you again for the opportunity to comment on this project. If you have any questions please do not hesitate to contact District Wildlife Manager Sam Peterson at 970-776-6939 or samuel.peterson@state.co.us.	General Comment	Thank you for your comment.
J-6	The Fish and Wildlife Mitigation Plan was included as an attachment to the letter from CPW.	General Comment	Thank you for your comment.

K	**SI-20-0003 Colorado Division of Water Resources** **Date posted: 12-23-2020 – Date of Letter: 10-19-2020**		
Comment ID	**Comment**	**Category**	**Response**
K-1	This office has reviewed the application materials for the Gross Reservoir & Dam Expansion project, SI-20-0003, and has no formal comments to provide at this time. The signed referral form is attached for your records.	General Comment	Thank you for your comment.
K-2	The Division of Water Resources' Dam Safety Branch is reviewing the project separately with Denver Water and their engineers from a dam safety perspective and has been engaged with Denver Water for the past 2+ years to ensure that all dam safety comments have been addressed.	General Comment	Comment noted.
K-3	Any comments or concerns regarding aggregate mining at the site will be addressed through the Division of Reclamation, Mining and Safety permitting process at the time a reclamation permit is applied for.	Construction Activities	Comment noted.
K-4	Denver Water has indicated that a temporary water supply will likely be required for office use at the Gross Reservoir site for a period of approximately five years. Denver Water has committed to working with this office to ensure a legal source of water for the site.	Construction Activities	If needed, Denver Water will apply for a well permit and augmentation plan.
K-5	We have reviewed the proposal and have no conflicts. Letter is enclosed.	General Comment	Thank you for your comment.

L	**SI-20-0003 Community Planning & Permitting (Boulder County) Floodplain Management Program** **Date posted: 12-23-2020 – Date of Letter: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
L-1	The proposed project is located within the county's Floodplain Overlay District. An Individual Floodplain Development Permit (FDP) is required prior to construction. In addition, because the proposed project would require substantial revisions to the Preliminary Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs), a Conditional Letter of Map Revision (CLOMR) must be approved by FEMA before an FDP may be issued. Upon project completion, a Letter of Map Revision (LOMR) must be approved by FEMA to revise the regulatory floodplain.	Floodplain	The South Boulder Creek Floodplain analysis is included in the Corps' Final EIS at section 5.1.1.2 and in Denver Water's FERC hydropower license amendment application at Volume II, section 3.3.1. The Corps and FERC evaluated this issue and concluded that there would be no increase in South Boulder Creek floodplain boundaries that could be attributed to the GRE Project. Of note, in 2009, the City of Boulder completed a study of the floodplain along South Boulder Creek below Gross Reservoir beginning at Eldorado Springs. Resulting floodplain mapping has not yet been adopted by FEMA for regulatory purposes, but the City of Boulder already uses the new maps to issue permits for properties within the South Boulder Creek Basin. The study assumed that Gross Reservoir was full during the design storm, i.e., that it provided no attenuation of the peak flows. Given that assumption, there would be no change to the floodplain below Boulder Canyon that can be attributed to the GRE Project. It is possible that an enlarged Gross Reservoir would result in reductions in the floodplain size due to the ability to capture additional South Boulder Creek flows. Based on the federal agencies' analysis, there is no need to go through a floodplain map revision process as part of the 1041 permitting process, and Denver Water could not do so and still meet our FERC-ordered construction deadlines. Denver Water requested a meeting with Boulder County's Community Planning & Permitting Floodplain Management Program to discuss the applicability of land development requirements on the GRE Project that could be accomplished at a later date, separate from the 1041 permitting process. This meeting was held on February 8, 2021 (see Exhibit 23, Meeting Record, attached to these responses to comments) for a mutual understanding. Consistent with the discussions at that meeting, Denver Water is willing to prepare a Conditional Letter of Map Revision (CLOMR) for the GRE Project. The effective hydrology model at Gross Reservoir has not yet been received, but an initial comparison of the existing to proposed reservoir/spillway configurations, assuming storage capacity only above the spillway and flow only leaving through the spillway, shows a decrease in peak flows immediately downstream of Gross Reservoir. The modeling assumptions in the preliminary model will be checked, but it is anticipated that the peak flows in the proposed conditions will not increase as compared to existing conditions. The HEC-RAS Model downstream of the reservoir will be updated with the proposed flow rates and the water surface elevations will be compared to preliminary Flood Insurance Study (FIS) Model results and existing conditions. Denver Water will review the results with Boulder County and then determine next steps in the CLOMR process, including determining whether further analysis downstream is warranted. Again, these activities and discussions will be conducted outside of the 1041 permitting process.
L-2	The regulatory floodplain for South Boulder Creek upstream of Eldorado Springs, which includes Gross Reservoir, is the result of a flood hazard study conducted by the Colorado Water Conservation Board (CWCB). This study was completed through the Colorado Hazard Mapping	General Comment	See response to comment L-1. The preliminary Flood Insurance Study models will be used as a basis of the analysis upstream of Eldorado Springs.

L	**SI-20-0003 Community Planning & Permitting (Boulder County) Floodplain Management Program** **Date posted: 12-23-2020 – Date of Letter: 11-12-2020**		
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	Program (CHAMP) and submitted to FEMA in 2018. On September 30, 2019, FEMA released a Preliminary FIS and FIRMs based on this study. On January 1, 2020, the Boulder County Board of County Commissioners approved Land Use Docket Z-19-0001, thereby incorporating the Preliminary FIS and FIRMs into the county's Floodplain Overlay District. The county anticipates that these will supersede the currently effective FIS and FIRMs in 2022.		
L-3	The CLOMR application must include an analysis and report conducted by a Colorado-licensed Professional Engineer that fully demonstrate the impacts of the project on base (1% annual chance) flood hydrology, hydraulics, and floodplain map compared with the Preliminary FIS and FIRM for South Boulder Creek. The hydrologic analysis must also demonstrate the impacts of the project on other flood recurrence intervals for South Boulder Creek that are included in the Preliminary FIS. The required CLOMR application, analysis, and report must be completed in accordance with FEMA standards.	Floodplain	Acknowledged – see response to comment L-1.
L-4	Pursuant to Boulder County Land Use Code Article 4-404.2.E.4.d, any increase in base flood elevations that are a direct result of the proposed project and that impact an insurable building will not be allowed. This includes any increases resulting from greater 1% annual chance discharges from the proposed spillway.	Floodplain	Acknowledged – see response to comment L-1.
L-5	Any roadwork, grading, construction staging, or material stockpiling in the Floodplain Overlay District will also require an Individual FDP. All staging and stockpiling areas must avoid the regulatory floodplain unless it is demonstrated to the county's satisfaction that doing so is unavoidable. Staging or stockpiling in the regulatory floodway will not be permitted without an approved evaluation of alternatives and emergency evacuation plan.	Construction Activities	Denver Water will prepare a map showing the location of proposed disturbance and staging areas as they relate to the effective and/or preliminary floodplain limits. If any disturbance areas encroach on the floodplain, additional analysis will be completed and coordinated with Boulder County as discussed during a coordination meeting between Boulder County and Denver Water on February 8, 2021.
L-6	Our review of the application materials revealed that the applicant has not provided a quantitative analysis of the project's impact on regulatory base (1% annual chance) flood discharges, flood elevations, and floodplain extent on South Boulder Creek. Without a quantitative analysis based on regulatory data, the county cannot evaluate the impacts of the project on the regulatory floodplain.	Floodplain	Acknowledged – see response to comment L-1.
L-7	The CLOMR application process, which is required for the Individual FDP, will allow both the county and FEMA to review floodplain impacts. However, in accordance with the 1041 Review Criteria, the impacts downstream of Gross Reservoir must be more thoroughly evaluated as part of the 1041 Review to determine whether the project will result in any rises in base flood elevations that impact insurable buildings downstream of the reservoir. In accordance with Boulder County Land Use Code Article 4-404.2. E.4.d, such rises will not be allowed.	Floodplain	Acknowledged – see response to comment L-1.
L-8	Therefore, in order to complete our 1041 Review of the proposed project, the applicant must provide an analysis and report conducted by a Colorado-licensed Professional Engineer that describe the impacts of the project on regulatory base flood hydrology, hydraulics, and floodplain extent downstream of Gross Reservoir, based on the Preliminary FIRM and FIS for South Boulder Creek. The analysis and report must either a) certify that there will be no changes to the regulatory hydrology or hydraulics downstream of the reservoir, or b) describe the changes to the regulatory hydrology, hydraulics, and floodplain extent downstream of the reservoir and certify that no insurable buildings will be impacted by any rise in base flood elevations resulting from the project.	Floodplain	Acknowledged – see response to comment L-1.
L-9	The regulatory hydrology for South Boulder Creek downstream of Gross Reservoir comes from the MIKE 11 rainfall-runoff model completed by the City of Boulder in 2007 (CH2M, 2008). The results	Floodplain	Acknowledged – see response to comment L-1.

L	**SI-20-0003 Community Planning & Permitting (Boulder County) Floodplain Management Program** **Date posted: 12-23-2020 – Date of Letter: 11-12-2020**		
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	of the MIKE 11 model were used to set the flows in the CHAMP hydraulic analyses and to tie-in with existing floodplain mapping through the City of Boulder. The MIKE 11 rainfall-runoff model accounts for flood storage in Gross Reservoir. The regulatory hydrology for South Boulder Creek upstream of Gross Reservoir is based on a HEC-HMS model completed by the Colorado Department of Transportation and CWCB (CH2M 2015). The regulatory hydraulics and mapping for South Boulder Creek are the results of the CHAMP study and are modeled in HEC-RAS 4.1.0.		
L-10	Please contact Virginia Gazzetti, Floodplain Program Planner, at 720-564-2865 or vgazzetti@bouldercounty.org to discuss this referral and to obtain the effective hydraulic model and supporting materials for South Boulder Creek. This concludes our comments at this time.	General Comment	Thank you for your comments.

M	**SI-20-0003 Gilpin County** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
Comment ID	**Comment**	**Category**	**Response**
M-1	The Gilpin County Board of County Commissioners ("Board") expresses their opposition to the Gross Reservoir Expansion Project ("Project").	General Comment	Thank you for your comments.
M-2	Impacts on Gilpin County and other eastern slope communities have not been adequately considered and addressed. The Board respectfully requests that the Boulder County Board of County Commissioners and Denver Water not proceed with the Gross Reservoir Expansion Project as currently proposed until Gilpin County, Denver Water, and the above-addressed jurisdictions meet to discuss and address the concerns and serious impacts from the Project. This discussion is necessary to provide a fair and objective review and resolution of the concerns Gilpin County and other impacted communities have related to this Project.	General Comment	Denver Water met with the Gilpin County Commissioners and staff on February 17, 2021, to discuss the County's concerns over the GRE Project. Denver Water looks forward to continued coordination with local agencies.
M-3	Environmental Impacts. The removal of 600,000 trees, creating a new quarry site, and building an enlarged dam is an ecological disaster for this area. We do not believe the Project should be approved but at the very least a new Environmental Impact Statement should be required.	General Comment	The Corps' Final EIS and FERC application stated "approximately 200,000 trees" would be cleared. Please see responses to comments S-3, S-4, S-25, S-38, and S-43 regarding steps that Denver Water has taken to mitigate the impacts of the GRE Project, including acquisition and transfer of 539 acres of the Toll Property, located in Gilpin County, to the USFS.
M-4	Wildlife Impacts. The headwaters for South Boulder Creek are located in Gilpin County and the channelization of this creek for the purpose of filling Gross Reservoir in the 1950's is visible to this day. We are concerned about the loss of fish habitat that will occur when maximum water flows are needed to fill the proposed enlarged reservoir.	Aquatic Biological Resources	The maximum amount of water diverted by the Moffat Collection System will not change as a result of expanding Gross Reservoir. Existing system water capacities already limit the amount of water diverted. In South Boulder Creek, the limiting area is near Pinecliffe. When flows at the USGS station approach 1,200 cfs flooding issues start and Denver Water limits diversions through the Moffat Tunnel. Additionally, the Corps Final EIS evaluated the impact of changes on South Boulder Creek above Gross Reservoir – the following is the Corps' conclusion: "There would be mostly minimal changes in trout habitat availability. However, there would be increased bank instability in Segments 1 and 2 of South Boulder Creek, which could alter habitat somewhat. The increases in runoff flows could have an effect on benthic invertebrate populations as well. The Proposed Action would result in a minor adverse impact and could result in decreased density of macroinvertebrates, or macroinvertebrate community composition could shift towards species that prefer fast moving water". Denver Water, in order to address possible future bank instability, will develop a monitoring program for bank stability with CPW and the USFS as described in the 2011 Fish and Wildlife Mitigation Plan with CPW and the 2016 Settlement Agreement with the USFS.
M-5	Sustainability and Conservation. Water conservation rather than expansion was not considered as a viable alternative to the expansion Project. Beautiful forests and treasured wilderness and environmental areas should not be sacrificed to perpetuate continued non-sustainable water use and inefficient water irrigation practices in metropolitan areas and elsewhere. Colorado has a semi-arid climate and is considered a high dessert. We need to adjust to that reality with our water practices and become champions of water conservation.	Conservation Reuse	Additional conservation was considered in the Purpose and Need. In fact, of the 34,000 AF shortfall, almost half (16,000 AF) will be met with additional conservation. Please see response to comment I-9 for more information.
M-6	Traffic Impacts. As currently proposed, Gilpin County's most used and relied on county-wide roadway, SH 119, will see the addition of at least 36 heavy trucks per day hauling tree materials from the Project through Gilpin County. SH 119, which is west of Gross Reservoir and runs south from the Nederland area through Gilpin County, is a two-lane road through an historic and scenic	Transportation	Denver Water is required by FERC to develop a Tree Removal Plan. This plan will specify traffic routes and the number of trucks expected from tree removal activities. Denver Water is willing to meet with agencies to learn how traffic associated with the GRE Project can be minimized and mitigated.

M	**SI-20-0003 Gilpin County** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
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	natural area, specifically the Peak to Peak Scenic and Historic Byway. SH 119 also serves as a major access point for Gilpin County citizens, businesses and employees as well as visitors seeking to enjoy the businesses and beauty of Gilpin County. SH 119 is also the only highway that traverses the entire County, serving as a gateway to the County from both the north and south of the County. US 6, part of the Project's planned SH 119 route for transport of tree removal material, serves many Gilpin County residents, businesses, and visitors as they travel to Gilpin County and others heading west to or east from 1-70. US 6 is also already overburdened with heavy truck traffic from the Frei Quarry located along US 6. Additionally, US 6 and SH 119 serve as a major route for the millions of visitors for the recreation opportunities in Gilpin County including the casinos, which generate significant revenue for the County and the State. We are also concerned about impacts to other roads serving Gilpin County. Coal Creek Canyon (CO 72) is the state highway that serves many of our residents in northern Gilpin County. The impact that construction and logging trucks will have on this curvy mountain road is so extreme that it will create dangerous conditions for residents commuting to work or to services below.		
M-7	It appears other more direct, shorter, safer, faster, less costly, less polluting, wider (multiple lanes per direction) and more eco-friendly routes are available for transporting tree materials from the Project. As presently proposed, 15 percent of truck traffic hauling tree materials destined for Longmont will travel an additional 90 miles, approximately 30 miles of which is through Gilpin County, to avoid a direct route to the north through Boulder.	Transportation	The only routes eliminated from consideration for construction activities have existing limitations. For example, SH 72 from Gross Dam Road to SH 119 will not accommodate large trucks. The same is true for Flagstaff Road which connects the North shore of Gross Reservoir to the City of Boulder.
M-8	Additionally, the Union Pacific's Moffat Tunnel Subdivision rail line appears to be a possible alternative. UP's Moffat Tunnel Subdivision line travels west from Denver and comes very near Gross Reservoir where it crosses and is accessible from Gross Dam Road. This rail line also travels close to SH 72 and SH 93 and crosses those highways at various locations providing additional access points for transferring tree and other materials for transport south or north on SH 93, or to 1-70, or for taking materials and equipment to Gross Reservoir.	Transportation	The use of rail was evaluated by Denver Water and is not viable for several reasons based on discussions with Union Pacific Railroad, which owns and manages the rail line in the area. The line that runs near Gross Reservoir is a main line. Thus, a train cannot stop on the main line to unload material. A siding (third line) is located near Gross Dam, but this siding is only large enough to accommodate about 15 rail cars for unloading which may not be sufficient during peak dam production. Additionally, part of the siding is bisected by Gross Dam Road. Thus, when train deliveries were occurring the crossing would be blocked at times. Space is also very tight in the area. In order to offload the rail cars, land in the area would need to be developed to allow the additional infrastructure needed. This would reduce open space land around the railroad tracks. Scheduling requirements based on dam production may not be able to be met with other rail uses on the same line.
M-9	We understand this proposed Project will impact several communities. We look forward to discussing all of these issues so that impacts are fairly and effectively addressed.	General Comment	Thank you for your comments.

N	**SI-20-0003 Grand County and Northwest Colorado Council of Governments** **Date posted: 12-23-2020 – Date of Letter: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
N-1	Thank for you for the opportunity for Grand County and the Northwest Colorado Council of Governments, by and through its Water Quality/ Quantity Committee (NWCCOG), to submit comments on the Gross Reservoir and Dam Expansion Project ("Project") proposed by Denver Water.	General Comment	Thank you for your comment.
N-2	Grand County is providing these comments as a signatory to the Colorado River Cooperative Agreement ("CRCA") between west slope local governments and Denver Water. The CRCA includes a range of benefits to the water resources in Grand County and the headwaters of the Colorado River Basin that are tied to the Gross Reservoir Expansion.	General Comment	Thank you for your comment. Denver Water agrees that the commitments entered into the Colorado River Cooperative Agreement are designed to improve current stream conditions throughout Grand County and in the Colorado and Fraser River Basins. The Colorado River Cooperative Agreement provides a framework for numerous actions to benefit water supply, water quality, recreation and the environment. Please note that many of these commitments are contingent on final approval and implementation of the GRE Project.
N-3	The impetus of the CRCA was, in part, to address the impacts that have occurred in the Upper Colorado River watershed during dry years and in dry seasons because of Denver Water's existing, pre-law water diversions through the Moffat Tunnel. In addition, Grand County has a long history of using 1041 regulations to address impacts to the County from water projects, and was a defendant in the earliest cases that upheld county authority to regulate water projects proposed by municipal governments. Grand County supports Boulder County's tenacious efforts to regulate through such means.	General Comment	Thank you for your comment.
N-4	NWCCOG's interest in this matter includes the fact that several member counties are signatories to the CRCA described above, and because it has been focused for more than 45 years on preserving county authority to permit municipal water projects. NWCCOG is the designated regional water quality management agency for the region that includes the headwaters of the Colorado River, where additional water will be taken to Gross Reservoir. In this role, NWCCOG adopts and implements the regional water quality management plan under Section 208 of the Clean Water Act, 33 U.S.C. § 1288(a) ("208 Plan").2 The primary goal of the NWCCOG 208 Plan is "the protection of the existing water quality and designated uses of waters in the region." NWCCOG, Grand County, and other local government members of NWCCOG have been focused on water quality issues associated with the Moffat Tunnel transmountain diversion system since the 1970s. NWCCOG members, including Grand County, have used 1041 authority to regulate, and even deny, major water projects that did not meet 1041 standards. Grand County and NWCCOG have long supported and protected 1041 authority and continue to support Boulder County's authority to regulate this Project through 1041 permitting just as NWCCOG members have done for decades.	General Comment	Thank you for your comment.
N-5	Unfortunately, the headwaters region will not gain the benefits negotiated in the CRCA that are designed to address the environmental and socio-economic impacts caused by Denver Water's historic, pre-law water diversions with the Project in place. Only by allowing the new diversions during wet years that would be made possible by the Project can we ensure additional releases of water during the critical low flow periods that are necessary for the survival of aquatic life and the aquatic environment.	General Comment	Denver Water concurs with this comment. As NWCCOG notes, many of Denver Water's resource commitments are contingent upon the issuance of permits necessary for the construction of the GRE Project.
N-6	Grand County and NWCCOG recognize a shared interest with Boulder County in protecting water resources and offer their experience with permitting major water projects that have resulted in net water quality gains for affected water segments. Grand County and NWCCOG believe that a	General Comment	Denver Water concurs with this comment.

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	collaborative, problem solving approach could allow Boulder County to issue a 1041 permit for the Gross Reservoir Expansion that can benefit the area where Project impacts are to be experienced- Boulder County- and also provide the Upper Colorado River system with the water that is so crucial to protecting the aquatic environment.		
N-7	The Boulder County 1041 regulations explicitly consider the efficient utilization of the Gross Reservoir and Dam Expansion Project, including the source of the needed water supply. As Denver Water points out briefly in its 1041 Permit Application, the source of the water supply for the Project is the Fraser and Williams Fork Rivers and tributaries, which will be diverted through the existing Moffat Tunnel transmountain diversion to be stored in the expanded Gross Reservoir.	General Comment	The main source of water for the expanded Gross Reservoir is the Fraser and Upper Williams Fork River Basins. However, to achieve the entire yield of the GRE Project, additional diversions will occur from the Blue River, South Platte River and South Boulder Creek.
N-8	The Project would allow Denver Water to use existing water rights in the headwaters to the Colorado River. This Project is expected to increase diversions in wet years from these basins by 15-20%. When paired with existing Denver Water diversions, an estimated 80% of flows will be diverted from the Fraser River. When the Project was first proposed, Grand County and NWCCOG were alarmed that this Project would exacerbate the already-degraded conditions of the Fraser and Upper Colorado River caused in large part by existing water diversions from the Colorado River system to the Front Range. Their first instinct was “not another drop.” However, Grand County, NWCCOG, and its member local governments ultimately decided that negotiating with Denver Water (which resulted in the CRCA) was a more prudent course of action than the scorched-earth litigation which has characterized water wars for over 100 years. The benefits derived from these negotiations should be taken into account when Boulder County assesses Denver Water’s efficient utilization of water supplies, under Section 8-511.C.2. of the County’s Land Use Code. Elements of the CRCA are evidence the Project would satisfy this standard, including: [*list follows in comments below*]	General Comment	Denver Water agrees with the statements that negotiating the Colorado River Cooperative Agreement, a multiparty agreement by and between various entities to benefit water supply, water quality, environmental resources, and recreation, has and will provide benefits on both sides of the Continental Divide. Denver Water, along with Grand County, Summit County, The River District, and numerous other entities, signed the Colorado River Cooperative Agreement which provides a framework for numerous actions to benefit water supply, water quality, recreation and the environment.
N-9	An adaptive management process that takes into account current, pre- and post-Project, and cumulative impacts on the Colorado Headwaters. That process, called Learning By Doing, makes Denver Water a key funder and partner along with Grand County, other west slope governments, nonprofits like Trout Unlimited, state agencies, and others who work jointly to adaptively manage river health. Learning By Doing is an historic approach to managing water supplies that for the first time asks the Project proponent to remain engaged for the life of the Project. Impacts to the environment of water projects cannot be predicted with accuracy, and mitigation is not an exact science. Thus, meeting regularly to assess real world changes to the environment rather than relying on pre-packaged mitigation is the only way to make protect environmental resources, especially in light of climate change.	General Comment	Denver Water concurs with this comment.
N-10	Additional “wet water” for towns, districts, and ski areas in Grand and Summit Counties to service the needs of the communities and improve water quality and environmental health, and funding to improve existing degraded conditions.	General Comment	Denver Water concurs with this comment.
N-11	Limiting the use of transmountain diversion water to Denver Water’s existing service area. The vast majority of water supply for the Project, as a result, will not result in an expansion of Denver Water’s service area that would otherwise contribute to urban sprawl on the Front Range.	General Comment	Denver Water concurs with this comment.

N	**SI-20-0003 Grand County and Northwest Colorado Council of Governments** **Date posted: 12-23-2020 – Date of Letter: 11-13-2020**		
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N-12	Extensive conservation and reuse throughout Denver Water's system, including conservation of 29,000 AF of water by 2045, consistent with Denver Water's 1996 Integrated Water Management Plan. In order to reuse transmountain water to extinction, or as close as possible, Denver Water also committed to the construction of 30,000 AF of gravel pit storage and construction of its recycled water system, which is currently accepting contracts.	General Comment	Denver Water concurs with this comment. Additionally, these sources of water were included in the modeling completed in the Corps' Final EIS and other permitting efforts.
N-13	With the commitments made in the CRCA, the NWCCOG region will see improved water quality, environmental health, recreational flows, and collaborative partnerships with Denver Water, and the Project would be consistent with NWCCOG's 208 Plan.	General Comment	Denver Water concurs with this comment.
N-14	Grand County and NWCCOG understand and support Boulder County's emphasis on water quality protection and mitigation of overall project impacts to the County through its 1041 regulations. Grand County recently issued a 1041 permit for the Windy Gap Firming Project, another expansion of an existing transmountain diversion project by Northern Water Conservancy District ("Northern"). In that instance, Northern agreed to apply for a 1041 permit "under protest." Commitments made in a series of Intergovernmental Agreements (IGAs) were incorporated as conditions of Grand County's 1041 permit to ensure that 1041 standards were met. Commitments included Northern's participation in Learning By Doing and water and funding commitments for the impacted area on a similar level to the CRCA. This led to NWCCOG's determination that, with all of these commitments, Northern's project will be consistent with the NWCCOG 208 Regional Water Quality Plan, and with Grand County's issuance of the 1041 permit. Now, because of these negotiated commitments, Denver Water and Northern are already meeting regularly with Grand County, NWCCOG, other local governments, and the environmental community. This group, through Learning By Doing, jointly issues and plans system operations that take into account the aquatic environment and local socio-economic impacts, not just water supply goals. In 2017, Learning By Doing collaboratively developed a river restoration project on the Fraser River that shows promising initial signs of greatly improved fish habitat. Relationships continue to grow, and Learning By Doing is working well.	General Comment	Denver Water agrees with these statements and is committed to and engaged in the robust Learning By Doing collaborative group in Grand County through an IGA (see Exhibit 29 attached to these responses to comments). The goal of Learning By Doing is to cooperatively maintain, restore, and enhance the aquatic environment in the Fraser and upper Colorado River basins. The explicit purpose of Learning By Doing is to *"maintain and, where reasonably possible, restore or enhance the condition of the aquatic environment in Grand County"*. The parties to Learning By Doing intend *"to build and promote a stable, permanent relationship that respects the interests and legal responsibilities of the parties, while achieving the goals of the Cooperative Effort"*. Learning By Doing is dedicated to managing the aquatic environment on a permanent cooperative basis. All the parties to the Learning By Doing IGA have agreed to contribute resources on an ongoing basis. The most significant resources are those provided to Grand County by Denver Water under the Colorado River Cooperative Agreement. The actions undertaken by Learning By Doing in Grand County are coordinated with mitigation actions related to the GRE Project, thereby increasing the effectiveness of both efforts.
N-15	Based on Grand County and NWCCOG's experience, this comment letter includes some potential 1041 permit conditions that the County may wish to consider, or may already be considering, while evaluating the Project against Boulder County's 1041 regulations.	General Comment	Thank you for your comments.
N-16	Possible Condition(s): Adaptive Management and commitments to collaborative responses to Project impacts Drawing on the early success of the Grand County Learning By Doing Adaptive Management Committee, Boulder County could benefit from integrating adaptive management or ongoing collaborative commitments into permit conditions in order to flexibly address impacts from the Project in Boulder County as they are realized. For example, in Section 8-507.D.7.b.ii.C, Denver Water references Condition 15 of its § 401 state water quality certification as a mechanism to mitigate impacts to surface water quality from the Project. Condition 15 states that, if monitoring Denver Water has committed to perform indicates water quality impairment, Denver Water will initiate an investigation and deliver a report to	Mitigation	Denver Water concurs with this comment.

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	Colorado Department of Public Health and Environment. If the impairment is shown to be because of the operation of the Project, then Denver Water would prepare a mitigation plan. This Project mitigation would lend itself to an adaptive decision making body that includes a broader group than just Denver Water. We would be happy to work with the County to explain some of the procedures we have developed through Learning By Doing which Boulder County might find interesting.		
N-17	Possible Condition(s): Review and approval of all plans serving as mitigation in other agreements As a 1041 Permit condition for the Windy Gap Firming Project, Grand County required Northern Water to submit monitoring plans for approval. Grand County is currently working with Northern Water to resolve its concerns. Boulder County may wish to consider the same approach for monitoring requirements. Examples of plans that Boulder County may want to review and approve for consistency with the 1041 application include the Pit Development and Reclamation Plan, the Tree Removal Plan, and various monitoring commitments made as conditions in the § 401 state water quality certification.	Mitigation	Denver Water concurs with this comment.
N-18	Possible Condition(s): Incorporate existing agreements into the 1041 permit The Windy Gap Firming Project 1041 incorporated relevant existing agreements that were necessary to mitigate impacts under the 1041 permit. Existing agreements are likely essential to evaluating the Project 1041 permit application as well. Examples of existing agreements that serve as mitigation include: • Denver Water/USFS Settlement Agreement, which includes wetlands construction, invasive species management, and wildlife habitat protections. • Agreements that led to the environmental pool in Gross Reservoir, including the 2010 Intergovernmental Agreement (IGA) between Denver Water and the cities of Boulder and Lafayette and requirements in the FERC permit. The processes established in the above agreements would benefit from ongoing reporting to, and participation from, Boulder County on actions taken under those existing agreements as they relate to standards in the 1041 permit.	Mitigation	Denver Water concurs with this comment.
N-19	Grand County and NWCCOG encourage the Boulder County BOCC to consider the recent outcomes of negotiated agreements in the Colorado River headwaters and consider similar approaches to ensure impacts are addressed and properly mitigated. As the west slope learned through the CRCA and Windy Gap Firming Project negotiations, mitigating impacts from projects in a meaningful way that considers ongoing real-time impacts, not just modeled and anticipated impacts, is possible and prudent. Thank you for your consideration of these comments. We welcome any questions you might have.	General Comment	Denver Water concurs with this comment.

O	**SI-20-0003 Jefferson County – Director of Transportation and Engineering Division** **Date posted: 12-23-2020 – Date of Letter: 12-14-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-1	Thank you for reaching out to me last week to review the truck routing related to the tree clearance and construction being planned at Gross Reservoir. This project is currently in a Boulder County Land Use Review process. The issues of concern from our meeting were:	General Comment	Thank you for your comments.
O-2	1. There will be as many as 228 truck trips per day or 17 to 25 trucks per day accessing the site during different phases of the project between 2024 and 2026.	Transportation	The numbers you reference were estimates at the time. Denver Water will finalize the volume, route and frequency of vehicle traffic in the final Traffic Management Plan.
O-3	2. Denver Water has stated that truck traffic will not utilize routes through the city of Boulder to access a processing site in Longmont. The number of trucks accessing Longmont will be fewer than 20% of the total truck trips. All other traffic will access the landfill site at SH93 just south of SH 72.	Transportation	Denver Water will finalize the routes to be used by truck traffic in the final Traffic Management Plan.
O-4	3. Alternative routes to between Gross Reservoir and Longmont that do not enter the city of Boulder could impact other municipal and unincorporated areas both within and outside of Jefferson County.	Transportation	Denver Water will finalize the routes to be used by truck traffic in the final Traffic Management Plan.
O-5	4. There is no specific plan described in the application for truck routing other than a broad statement that tucks will be utilizing SH 72 (Coal Creek Canyon) and SH 93.	Transportation	Denver Water will finalize the routes to be used by truck traffic in the final Traffic Management Plan.
O-6	5. All truck traffic within Jefferson County will use CDOT-maintained roads and CDOT has limited authority to dictate the route of legally-loaded, non-oversized trucks.	Transportation	Thank you for your comment.
O-7	Please let me know if I am incorrect in describing any of these facts. In response to your request for comments related to the land use case for the Gross Reservoir expansion, please see the following Jefferson County comment: *Jefferson County requests more specific information about the planned routing of trucks accessing Gross Reservoir to and from both the east and west sides of the project. Jefferson County's concerns include the noise and traffic impact of trucks to unincorporated areas of Jefferson County and incorporated areas including the cities of Golden, Arvada, and Wheat Ridge. If routing of trucks will occur through incorporated areas within Jefferson County, the applicant should conduct outreach to staff at those cities.*	Transportation	Thank you for your comment. Denver Water will finalize the routes to be used by truck traffic in the final Traffic Management Plan. If final truck routes are located through incorporated areas of Jefferson County, Denver Water will be in contact.

P	**SI-20-0003 City of Lafayette** **Date posted: 12-23-2020 – Date of Letter: 9-30-2020**		
Comment ID	**Comment**	**Category**	**Response**
P-1	No comments or concerns from Lafayette on this referral.	General Comment	Denver Water appreciates the City of Lafayette's consideration and review.

Q	**SI-20-0003 Town of Nederland** **Date posted: 12-23-2020 – Date of Letter: 12-1-2020**		
Comment ID	**Comment**	**Category**	**Response**
Q-1	We support and appreciate your application of the 1041 regulations to Denver Water's proposed expansion of Gross Reservoir. We agree that it is critical that the project be thoroughly and carefully reviewed under Boulder County's land use and environmental regulations.	General Comment	Thank you for your comment.
Q-2	We have concluded because of data provided that the proposed expansion is unnecessary and that the installation of water conservation low flow devices and more efficient toilets, as well as xeriscaping in homes within Denver Water's service area would achieve the same conservation goals, while providing more jobs and no negative environmental impacts.	Purpose and Need	Please see responses to comments G-2, G-3, G-14, and I-9. The demand analysis in Chapter 1 of the Corps' Final EIS accounts for the types of active and passive conservation efforts described in this comment.
Q-3	The expansion project will have severe negative environmental impacts by releasing massive amounts of carbon into the atmosphere.	Air Quality	Please see response to comment G-17.
Q-4	The expansion will require the removal of 200,000 trees, that are badly needed for carbon sequestration.	Climate Change	Please see response to comment G-17. Please also see responses to comments S-4 and S-38 for information on the Toll Property parcels that Denver Water is transferring to the USFS to mitigate impacts to National Forest System lands, including impacts to trees.
Q-5	It will require millions of tons of cement that also releases massive amounts of carbon when processed.	Climate Change	Please see response to comment O-A-03.
Q-6	There will be tens of thousands of trucks traveling on Boulder County roads damaging them severely with unrecoverable costs that will be passed on to taxpayers.	Transportation	Construction trucks associated with the GRE Project are estimated to be in the 10,000 range. The final number will be dependent on how the trees cleared for the inundation area are to be processed and disposed. Please see response to comment B-26 related to road condition and repairs.
Q-7	The truck traffic will also have a very negative impact on our already deteriorating air quality.	Transportation	Please see response to comment O-A-03 in Exhibit 20 – Public Organization and Individual Comment and Response Table.
Q-8	This project is completely inappropriate in the middle of a climate crisis. Climate change makes it extremely unlikely that the reservoir will ever be filled because of decreasing moisture and increasing temperatures and evaporation rates.	Climate Change	Please see response to comment I-6. Additionally, when responding to comments on the Final EIS, the Corps explained in detail why it disagreed that there would be insufficient water to fill the expanded reservoir. See Attachment B to the Corps' Record of Decision, where the Corps responds to Save the Colorado's October 27, 2015, comment letter. There, the Corps explains how the additional storage space at Gross Reservoir will allow Denver Water to operate its entire system in a more flexible manner so that, in average to wet years, additional water can be stored in Gross Reservoir as a buffer against future drought.
Q-9	The Colorado River is overwhelmed with too many states demanding water. A project planning to withdraw water from the river is a very shortsighted, misguided idea.	General Comment	Please see section 2.1.3 of Attachment B to the Corps' Record of Decision, where the Corps responds to similar comments regarding a possible compact call on the Colorado River. In short, planning for the future of the Colorado River Basin to avoid compact

Q	**SI-20-0003 Town of Nederland** **Date posted: 12-23-2020 – Date of Letter: 12-1-2020**		
Comment ID	**Comment**	**Category**	**Response**
	We oppose the project and respectfully request that you deny it.		calls is being addressed through a U.S. Bureau of Reclamation process in coordination with the Basin states, water providers, and stakeholders.

R	**SI-20-0003 City of Boulder Open Space & Mountain Parks** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
Comment ID	**Comment**	**Category**	**Response**
R-1	Thank you for the opportunity to comment on this application. The subject property is located outside the Planning Area for the Boulder Valley Comprehensive Plan (BVCP), a jointly adopted plan by the city and county. However, in the spirit of the ongoing cooperation between the City and County, and consistent with the Boulder Valley Comprehensive Development Plan Intergovernmental Agreement, we are providing the following referral comments. Additionally, as discussed below, the City of Boulder also has an interest in an environmental pool in the enlarged Gross Reservoir that will be used by Boulder to enhance stream flows in South Boulder Creek.	General Comment	Thank you for your comments.
R-2	The City submitted comments and participated in other major permitting processes for Denver Water's proposed project, including the FERC licensing, US Army Corps of Engineers' Record of Decision on the Environmental Impact Statement, Section 404 permit, and Section 410 certification. Those processes have resulted in construction requirements, mitigation measures and enhancement projects the city finds acceptable. Should the project be modified, changed or altered in any way, the city requests the opportunity to review and comment on proposed changes and potential impacts to city interests.	General Comment	Denver Water will be available to meet with the City of Boulder (upon request) to discuss any aspect of the GRE Project.
R-3	In addition to participating as a referral agency in the previous permitting efforts, the City's comments on this 1041 application are provided in the context of the City and County's ongoing efforts around water resource planning, as summarized in the following policies of the BVCP:	General Comment	Thank you for your comments.
R-4	3.26 Protection of Water Quality *Water quality is a critical health, economic and aesthetic concern. The city and county have been protecting, maintaining and improving water quality and overall health within the Boulder Valley watersheds as a necessary component of existing ecosystems and as a critical resource for the human community. The city and county will continue to reduce point and nonpoint sources of pollutants, protect and restore natural water systems and conserve water resources. Special emphasis will be placed on regional efforts, such as watershed planning, and priority will be placed on pollution prevention over treatment.* Should the project be approved, the City expects Denver Water will mitigate the construction impacts and perform their ongoing regulatory requirements identified in Table 6 of the application and as required under other permits and agreements, including the water quality monitoring measure; prevention of aquatic invasive species.	General Comment	Denver Water intends to perform on the regulatory requirements described in Table 6 as currently required or as modified by the signatory parties.
R-5	3.27 Water Resource Planning & Acquisition *Water resource planning efforts will be regional in nature, consider climate change and incorporate the goals of water quality protection as well as surface and groundwater conservation. The city will use a variety of strategies, such as water conservation, demand management, reuse and acquisition of additional water supplies to meet the adopted municipal water supply reliability goals while balancing in-stream flow maintenance and preservation of sustainable agriculture. The city will seek to minimize or mitigate the environmental, agricultural and economic impacts to other jurisdictions and seek to prevent the permanent removal of land from agricultural production elsewhere in the state in its acquisition of additional municipal water rights. The city and county may continue to acquire water rights for Open Space purposes.*	General Comment	Denver Water intends to perform on the regulatory requirements described in Table 6 as currently required or as modified by the signatory parties. Denver Water will adhere to Colorado Water Law regarding water rights and water supplies.

R	**SI-20-0003 City of Boulder Open Space & Mountain Parks** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
Comment ID	**Comment**	**Category**	**Response**
	Should the project be approved, the City expects Denver Water will mitigate the construction impacts and perform their ongoing regulatory requirements identified in Table 6 of the application and as required under other permits and agreements. The City also expects that construction impacts will not negatively impact operation of water rights or water supplies.		
R-6	3.29 In-Stream Flow Program *The city will pursue expansion of the existing in-stream flow program consistent with applicable law and manage stream flows to protect riparian and aquatic ecosystems within the Boulder Creek watershed.* Should the project be approved, the City expects the project will be consistent with this policy upon implementation of the environmental pool described further below. The city requests that Boulder County not place conditions or requirements on the project approval that would conflict with the operation of the environmental pool.	General Comment	Denver Water supports this request from the City of Boulder.
R-7	Supported by these policies, and pursuant to the 2010 Intergovernmental Agreement amongst the City of Boulder, City of Lafayette and Denver Water, Denver Water will establish a 5,000 AF environmental pool in the enlarged Gross Reservoir. Boulder and Lafayette will store their Boulder Creek basin water rights in the environmental pool and coordinate releases to meet target stream flows in South Boulder Creek. Boulder is also party to a 2017 Intergovernmental Agreement with Denver Water for the South Boulder Creek Stream Restoration Project. Accordingly, Boulder supports the mitigation measures proposed by Denver Water to mitigation impacts to the aquatic resources in South Boulder Creek associated with the Gross Reservoir Expansion Project.	General Comment	Denver Water agrees with the comment.
R-8	Additional comments/requests for clarification: 1. The City requests confirmation that there will be no interruption to normal stream flow through the reservoir to downstream water users during construction.	Construction Activities	Denver Water confirms that the normal deliveries of water, depending upon hydrologic conditions, will continue during construction activities. Denver Water is not proposing to halt deliveries of water to downstream water users or instream flows during the construction process. The GRE Project construction is not expected to impact normal stream flows and operations to South Boulder Creek.
R-9	2. Please revise the last paragraph on page 2-1 of the Traffic Impact Analysis and other documents and permits as necessary to include the following sentence. “If heavy construction traffic or tree removal traffic anticipate traveling on streets in the City of Boulder the contractor will contact the City’s Transportation & Mobility Department to ensure there are no weight or size limits on those streets.”	Transportation	Denver Water will make the suggested change.

S	**SI-20-0003 Parks and Open Space (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
Comment ID	**Comment**	**Category**	**Response**
S-1	The Boulder County Parks and Open Space Department (BCPOS) staff has reviewed this application and associated materials. If you or the applicant have questions regarding this referral, please contact me at jmoline@bouldercounty.org (303-678-6270).	General Comment	Thank you for your comments.
S-2	Introduction The department's review of the application materials covered both the discussion of environmental resources in the project area as well as the projected impacts to those resources. BCPOS staff concentrated our attention to sections of the application that described wetlands, riparian areas, and other vegetative and forest resources as well as terrestrial and aquatic life. Along with those natural resources, staff reviewed the application for its discussion of impacts to the environmental resources identified by the Boulder County Comprehensive Plan (BCCP) that occur in the area: Winiger Ridge Environmental Conservation Area (ECA), Winiger Gulch High Biodiversity Area, and the Winiger Elk Herd Migration Corridor. Additionally, staff reviewed the application's discussion about visual resources and recreation impacts, especially as that applies to nearby county open space properties. Finally, staff provided comments on forestry aspects of the project. Several attachments to the referral provide more detail 1. BCPOS Wildlife Staff's comments about Preble's Meadow Jumping Mouse, 2. BCPOS Wildlife Staff's comments about the Toll Mitigation property, 3. BCPOS Wildlife Staff's comments on the Environmental Resource impacts of the project, 4. BCPOS Plant Ecology Staff's comments on the proposal, 5. BCPOS Forestry Staff's comments about the proposed tree removal plan, and 6. POSAC minutes.	General Comment	Denver Water appreciates the Boulder County Parks and Open Space comprehensive review of the application materials. Denver Water also appreciates the opportunity for the virtual meeting with Boulder County Parks and Open Space held on February 3, 2021, to further discuss the comments provided below. See Exhibit 23, Meeting Record, for summary notes and presentation slides from the meeting.
S-3	Staff recognizes that while this single project will have dramatic effects on hundreds of acres of forested lands, some of the more critical environmental resource impacts are to relatively small areas that are already uncommon in the overall landscape yet often provide habitat values critical to animal species that range into other portions of the region including more common forest types. For example, this project will directly impact four acres of riparian habitats, representing less than one percent of the total area affected. However, the importance of those four acres to the ecosystem within the project area extends outside those lost acres and into the habitat types of the surrounding and adjacent forest as many terrestrial animals are drawn to those areas at critical times during their life histories. Additionally, some of these relatively small areas, such as wetlands and riparian zones, are habitat for many rare and sensitive species of flora and fauna, the Sprengle's sedge community for example. These areas harbor crucial biodiversity to the area. While the application's treatment of the project effects on these small sites will be discussed below, staff finds the impacts to some of the affected resources to be either significant or unknown at this time, raising important concerns about the project.	Special Status Species	Denver Water understands Boulder County Parks and Open Space's concerns but believes that the mitigation measures already developed with federal and state agencies address many of those concerns. For example, as part of the NEPA process and after opportunities for review and comment by stakeholders, including Boulder County, Denver Water completed a Fish and Wildlife Mitigation Plan that was approved by the Colorado Parks & Wildlife Commission and the Colorado Water Conservation Board pursuant to state law (see November 12, 2020 Colorado Parks & Wildlife comment letter on Denver Water's 1041 Permit Application). After surveying the GRE Project's impacts to plant, animal and aquatic communities and habitat, the Plan listed various mitigation and enhancement measures that were, in the State's view, sufficient to protect the interests of Colorado's fish and wildlife resources. Included in those mitigation measures were actions to address the impacts that Boulder County Parks and Open Space focuses on in its comments. Denver Water also entered into a settlement agreement with the USFS to address the impacts to National Forest System lands that Boulder County Parks and Open Space identifies in its comments (see Exhibit 5i1 to Denver Water's 1041 Permit Application). Denver Water's commitments in these documents were listed as conditions of approval for the Corps' 404 Permit and were incorporated into the FERC's order amending the hydropower license for the GRE Project. Additionally, Denver Water received a Clean Water Act Section 401 water quality certification from CDPHE. Its review of project impacts, mitigation, and enhancements (West Slope and East Slope) concluded that there would be "no significant degradation" due to the GRE Project.

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			For more information on the mitigation that Denver Water has already agreed to implement for the GRE Project, please see response to comment I-15. If Boulder County Parks and Open Space believes that this mitigation is insufficient to address the impacts of the GRE Project, Denver Water is willing to meet to discuss the County's ideas for further appropriate mitigation. Denver Water is open to participation in a Learning By Doing-style effort as proposed by Boulder Flycasters (see Letter "O-C" in Exhibit 20, Public Organization and Individual Comment and Response Table) and believes that there may be opportunities for collaboration on forest restoration, wildfire mitigation, and watershed health projects, habitat enhancement, and recreational amenities like trail connections. Similarly, if Boulder County Parks and Open Space has additional information regarding potential impacts to rare and sensitive species of flora and fauna, Denver Water is willing to consider it and options for mitigation.
S-4	While some of the most critical environmental resources and predicted project impacts are on those uncommon elements of biodiversity, staff finds that other project impacts are best viewed through a regional "geographic area" lens. At this more local scale, losses of the effective habitat of the site are better gauged to assess the real impact to wildlife and natural communities. For example, the application notes that the project will result in the loss of 198.8 acres of effective habitat on U.S. Forest Service (USFS) lands which is a very small change in the overall acreage when viewed at the forest-wide perspective—the Arapaho and Roosevelt National Forest (ARNF) totals approximately 860,000 acres of effective habitat according to application documents. However, when viewed locally, this represents a notable reduction from 59% to 55.5% in the effective habitat of the Thorodin Geographic Area—the ARNF land management unit that includes the Gross Reservoir project.	Special Status Species	The USFS reviewed these impacts to National Forest System lands and determined that the mitigation and other measures specified in its settlement agreement with Denver Water (see Exhibit 5i1 to Denver Water's 1041 Permit Application) were sufficient to offset those impacts. Included in those measures was Denver Water's commitment to acquire and transfer to the USFS 539 acres of forested lands (more than twice the affected acres of effective habitat on National Forest System lands) that possess conservation values of great importance to the USFS. These parcels, known as the Toll Property parcels, are described in Denver Water's hydropower license amendment application for the GRE Project: "Per the Denver Water/USFS Settlement Agreement, Denver Water will convey the 539-acre Toll Property to the USFS to be administered and protected as part of the Roosevelt National Forest as mitigation for resource values that will be lost on Denver Water and National Forest System lands due to inundation and construction related ground disturbance. The 539 acres of private, forested lands will be protected and accessible to the public through its addition to the National Forest. The Toll Property parcels are surrounded by the Roosevelt National Forest and contain diverse vegetation types (forest, grassland, fens, wet meadows, pond, stream, and riparian habitat). The property will protect two PCAs: Mammoth Gulch PCA with Very High Biodiversity Significance due to the occurrence of a unique iron fen plus imperiled woodland species and the Middle and South Boulder Creek PCA with High Biodiversity Significance due to the occurrence of a globally vulnerable forested fen and shrubland community. The Toll Property also preserves valuable wildlife habitat including elk and mule deer summer range and migration corridors, potential habitat for lynx (federally threatened and state endangered species), habitat for boreal toad (state endangered and USFS sensitive species), and a wide range of habitats for small mammals and birds." Transfer of the Toll Property parcels to the USFS is currently in process. Please see attached memo on the ecological values of the Toll Property parcels (Exhibit 31).

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S-5	In a wildland urban interface landscape such as this, impacts to effective habitat, high biodiversity areas, and environmental conservation areas will have significant effects since the local plant and animal communities will respond to impacts at these smaller geographic components of the landscape. These effects are compounded because there are many existing impacts to the landscape upon which this project will add to in a cumulative manner. Staff concludes that the local impact of the proposal does represent a significant loss of wildlife habitat for species remaining in the area.	Special Status Species	As explained above, the federal and state agencies that manage, preserve and protect these resources have reviewed the impacts from the GRE Project, provided stakeholders like Boulder County with opportunities to comment, and agreed that Denver Water's mitigation and enhancement commitments are sufficient to offset those impacts.
S-6	The remainder of the report is organized to present staff's review of the existing resources, the project's impacts upon them, and then in a second part to assess those impacts with compliance to the Boulder County Comprehensive Plan and the environmental resources sections of the 1041 Standards of Approval. Comments are included in each section of this memo as appropriate.	General Comment	Thank you for your comprehensive comments.
S-7	Wetlands BCPOS acknowledges that the project has wetlands impacts as outlined in the application and recommends that these sites be resurveyed prior to construction to document any changes since their initial mapping. The relatively small amount of wetland acreage impacted by the project is notable; due to the steep terrain in this climatic regime, only small ribbons of wetland habitats are found along stream courses. The U. S. Army Corps of Engineers (USACE) in their 404 Permit for the project indicated that the project will not significantly change the aerial extent of wetlands in the area. The application includes correspondence between Denver Water and the USACE acknowledging and approving the acquisition of 3.36 acres of wetland mitigation credits at the Four Mile Mire site near Fairplay in South Park, Colorado. While acknowledging the importance of the mitigation credits, BCPOS staff requests the applicant describe how the proposed mitigation addresses wetland impacts to the project area.	Riparian and Wetlands	See responses to comments S-8 and S-9.
S-8	1. An updated wetland survey prior to project commencement would provide the most accurate wetland acreage impacts.	Riparian and Wetlands	Denver Water disagrees that an updated wetland survey is warranted. The Corps inventoried the wetlands to be impacted by the GRE Project as part of the Clean Water Act permitting process, and there is no information to suggest that the Corps' inventory is inaccurate or incomplete.
S-9	2. A description of how the proposed wetlands mitigation addresses wetland impacts to the project area is critical to properly assess the project impacts.	Riparian and Wetlands	See section 1.1.3 of Denver Waters' mitigation plan, which is included in the Corps' Record of Decision (Exhibit 5c of the 1041 Permit Application). In summary, the Corps is the federal agency responsible for permitting activities which impact Waters of the U.S., including certain wetlands. Once wetland impacts have been identified and minimized, the applicant has three options for mitigation (listed in the order of preference): mitigation bank, in-lieu fee program, and permittee responsible mitigation. The wetlands bank used as mitigation for this project (Four Mile Fen) is owned and operated by Denver Water and is in the same EPA ecoregion as Gross Reservoir. The mitigation bank has a higher ecological value than the impacted wetlands, and the Corps and EPA accepted the bank credits as appropriate mitigation for the GRE Project's wetlands impacts. Additionally, the Toll Property parcels to be conveyed to the USFS contain wetlands and forested riparian habitat of significant conservation value near the GRE Project area. See responses to comments S-4 and S-38 and the attached memo on the

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			ecological value of the Toll Property parcels for more information (Exhibit 31). While these wetlands were not used as formal mitigation for the GRE Project's wetlands impacts, the preservation of these wetlands in the South Boulder Creek basin is a benefit to the ecosystem.
S-10	BCPOS staff acknowledges that the project will result in the permanent loss of 455.8 acres of vegetative communities. While the scope of this level of vegetative impact is nearly unprecedented for a single project, a critical aspect of this impact is the loss of 4.9 acres of sensitive plant communities. The applicant states that no federal or state threatened and endangered plants are projected to be impacted. However, there are impacts to special status plants and, because the applicant has not completed full surveys for CNHP and Boulder County plant species of concern, the impact to these rare and imperiled species and communities is unknown at this time.	Vegetation	See response to comment S-11 regarding the FERC-required Special Status Species Plants Relocation Plan for National Forest System lands. See response to comment S-14 regarding the desktop analysis that Denver Water is preparing to assess presence of Boulder County and Colorado National Heritage Program special plant species or plant communities in the GRE Project area.
S-11	The USACE considered the riparian impacts of the proposal to be "major." The sensitive plant communities also included about one acre of ponderosa pine old growth (0.1 percent of the total old growth on the whole ARNF) and impacts to Sprengle's Sedge (a special status plant). The applicant proposes that the protection of the Toll Property, which includes 253 acres of riparian woodlands, should offset impacts at the Gross Reservoir site. Additionally, the applicant has proposed that if sensitive plant species are encountered there would be an effort to relocate individual plants to other locations. Staff recognizes the significant challenges with these kinds of efforts and given their typical unsuccessful outcomes, does not consider this an appropriate mitigation, rather a last-ditch effort to save plants that would otherwise be destroyed. Staff recommends the applicant provide a specific plan in order to guarantee greater success of a transplanting effort and document other locations where such relocations have been successful in the semi¬arid, southern Rocky Mountains.	Vegetation	Per the FERC Order (Condition 22), Denver Water is required to prepare and submit a Special Status Species Plants Relocation Plan for National Forest System lands. The plan is required to be prepared within 2 years of the FERC Order (by July 16, 2022) and within at least 2 years before tree removal for inundation. The Plan will be developed in consultation with the USFS and include evaluation of special status plants including threatened, endangered, Forest Service sensitive, Forest Service Species of Conservation Concern, Management Indicator Species, Focal Species, or plant species of local concern. The Plan will detail how Forest Service special status plant species found on National Forest System lands within the new inundation area and new areas to be disturbed for the relocated recreation facilities will be collected and transplanted. The Plan will include locations of all suitable sites for transplanting species, seed collection and transplant timing, quantities of seeds and transplants, and timing of voucher collecting. Locations of all suitable sites for transplanting species discussed below will be developed in consultation with the USFS. Specifically, the Plan will detail relocation of these species: • Wild sarsaparilla (Aralia nudicaulis). Transplant 200 individuals from affected sites to suitable nearby sites that would not be affected by inundation or, if the USFS determines that seed is an effective translocation method, collect and distribute seed from affected sites • Dewey sedge (Carex deweyana). Transplant all affected individuals to suitable nearby sites. • Sprengel's sedge (Carex sprengelii). Transplant all affected individuals to suitable nearby sites. • Enchantress's nightshade (Circaea alpina). Collect and distribute seed to suitable nearby sites. Alternately, surveys may be used to document additional locations that would not be affected. • Tall blue lettuce (*Lactuca biennis*). Collect seed from affected plants for 2 years and spread seed in suitable nearby unaffected habitat.

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			• Maryland sanicle (Sanicula marilandica). Collect seed from affected plants and spread seed in suitable nearby unaffected habitat. Alternately, surveys may be used to document additional individuals that would not be affected upstream of the known location. • False melic (Schizachne purpurascens). Collect seed from affected plants and spread seed in suitable nearby unaffected habitat. Denver Water intends to solicit input from Boulder County on this Plan during development and prior to final submittal to FERC in July 2022.
S-12	Old growth development areas occupy 450 acres above the existing reservoir, about half of the terrestrial habitat on USFS lands in the project area and the application indicates that 195.4 acres of low-elevation old growth development area would be permanently lost. Given these numbers, this represents a loss of about 43% of this resource in the project area. This is a significant loss from a cumulative impacts standpoint particularly for low elevation stands. Staff assumes that "low elevation" corresponds to ponderosa pine/Douglas fir forest; only 1 percent of existing old growth on the entire ARNF is ponderosa pine—a rare habitat that will lose a significant amount of future acreage with this proposal.	Vegetation	The USFS addressed the GRE Project's impacts to National Forest System lands through its Settlement Agreement with Denver Water. Please see response to comment S-4 for more information.
S-13	From the application, Denver Water has committed to develop an Invasive Plant and Noxious Weed Species Management Plan for Forest Service lands in consultation with the USFS. Staff recommends that a similar plan be prepared for Denver Water lands inside the project area.	Vegetation	Per the FERC Order (Condition 17), Denver Water is required to prepare and submit an Aquatic Invasive Species/Noxious Weed Plan. Denver Water will provide the plan for stakeholder input, including to Boulder County, by March 15, 2021, for a 30-day review period prior to final submission to FERC by July 16, 2021. Denver Water will include Denver Water lands within the FERC Project boundary in the Aquatic Invasive Species/Noxious Weed Plan.
S-14	1. In order for staff to fully assess the impacts of the project, it must be determined if Boulder County and CNHP special plant or plant communities are present in the project area and if they will be impacted. Staff is expecting this information will be supplied by the applicant.	Vegetation	Additional field surveys of plant species cannot be performed until late spring after spring thaw and plants bloom. Given the construction deadlines set by the FERC Order, it would not be practicable to conduct full field surveys as part of this 1041 Permit Application process. Therefore, Denver Water will be evaluating the presence of Boulder County and Colorado Natural Heritage Program special plant species or plant communities in a desktop analysis. In addition, the desktop analysis will evaluate the presence of Boulder County and Colorado Natural Heritage Program special terrestrial and aquatic species. To conduct this desktop analysis, Denver Water requests that Boulder County Parks and Open Space staff provide us with a clearer list of Boulder County sensitive plant and terrestrial species that you recommend Denver Water evaluate in our desktop study. We have referenced the Boulder County Parks and Open Space letter from Jeff Moline (dated December 17, 2020), Attachment 4 "Boulder County Plant Ecology Review of Plant Species of Concern and Significant Natural Communities," however it is not clear as to which Boulder County plant species or communities that County staff request further evaluation. We also request clarification on terrestrial species of interest to Boulder County that are requested to be included in our study. Please

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			provide this list by **March 5, 2021** in order for us to complete the desktop study by March 31, 2021. Our findings and recommendations will be detailed in a memo to be provided to Boulder County for consideration on March 31, 2021. Denver Water remains willing to work with Boulder County Parks and Open Space to address concerns related to special plant species or plant communities as information is developed and findings are determined, but does not believe that a delay to the 1041 Permit process is warranted.
S-15	2. If special plant or plant communities will be impacted, staff expects that the applicant should propose methods for successfully mitigating those impacts.	Vegetation	See response to comment S-11.
S-16	3. While not viewed as adequate mitigation, staff recommends that the applicant prepare a specific plan for the relocation of individual rare and sensitive plant species in order to improve chances of success in this effort.	Vegetation	See response to comment S-11.
S-17	4. Staff recommends that an Invasive Plant and Noxious Weed Species Management Plan be prepared for Denver Water lands inside the project area.	Vegetation	See response to comment S-13.
S-18	1. Based on the confirmation of occupied habitat by Preble's meadow jumping mouse in close proximity to Gross Reservoir and confirmed suitable habitat within Winiger Gulch, BCPOS disagrees with the determination by the applicant and concurrence by U.S. Fish and Wildlife Service (in the 2006 Biological Opinion) that 'project activities impacting these sites should not have direct adverse effects to Preble's or Preble's habitat.' Please see the attached 1041 review document (Attachment 1) by BCPOS staff for details.	Special Status Species	Denver Water disagrees that the information in Attachment 1 to the Boulder County Parks and Open Space comment letter warrants reinitiated consultation with the FWS concerning impacts to Preble's meadow jumping mouse. Nothing in the attachment undermines the reasoning or conclusions of the 2005 habitat evaluation report that FWS relied upon to conclude that Preble's is unlikely to be present in the GRE Project area. The attachment does not assert that Preble's has been found within the previously surveyed stream areas on the west side of Gross Reservoir. Rather, the trapping surveys discussed in the attachment took place in areas east of the reservoir that will not be impacted by the GRE Project.
S-19	2. Given that additional information regarding Preble's, as outlined above, has become available, the county should require the applicant re-initiate consultation with USFSW in accordance with the 2006 Biological Opinion.	Special Status Species	For the reasons stated above in response to comment S-18, Denver Water respectfully disagrees that further consultation with FWS is warranted.
S-20	3 Staff also reviewed the Habitat Conservation Plan for PMJM provided by Denver Water and provides comments and recommendations for the applicant on the management of Leyden Gulch and Ralston Creek to improve conditions for PMJM.	Special Status Species	Denver Water will take these recommendations into consideration, but these areas (Leyden Gulch and Ralston Creek) are not within the GRE Project area and are not at issue in Boulder County's 1041 Permit Application process.
S-21	4. If Preble's are found in the area, the applicant would need to detail impacts and propose mitigation.	Special Status Species	See response to comment S-18.
S-22	5. In order for staff to assess the true environmental impacts of this project, the applicant must provide information about all of the Boulder County species of concern, whether they occur on the site, if they will be impacted by the proposal, and whether any impacts are to be mitigated.	Special Status Species	See response to comment S-14.
S-23	6. Many of the studies included in the application are several years old now. Staff is concerned that the proposal could have environmental impacts on resources that have changed.	General Comment	NEPA directs federal agencies to collect and analyze currently available data in preparing a Final EIS. For this project, the Corps utilized the most recently available information in its obligations under NEPA to evaluate impacts and require mitigation measures in their Clean Water Act Section 404 Permit authorization. In accordance

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			with this principle, FERC also utilized the most recent available information in its Supplemental EA. Denver Water believes the federal impact assessments utilizing these data remain appropriately descriptive of the affected environment and impacts associated with the GRE Project.
S-24	7. The application notes that many county species of concern (both flora and fauna) may occur in the project area but that the applicant has not surveyed for their presence. There are also no conclusions or even discussions about the project's likely impacts on the county species of concern. Without these species being surveyed for and the project's impacts assessed on their presence, BCPOS is unable to assess the environmental impacts of the project on these elements of the landscape that provide crucial biodiversity to the area.	Special Status Species	See response to comment S-14.
S-25	8. While the application finds that the project will have an impact on elk, BCPOS staff concludes that the impact will be significant. The applicant has not proposed mitigation for these effects such as increased conflicts with private landowners as noted in the application.	Wildlife	Denver Water agreed to mitigation measures for the loss of elk habitat with CPW (the agency responsible for managing elk herds in Colorado) during development of the Fish and Wildlife Mitigation Plan (June 9, 2011), as well as through its conveyance of the Toll Property parcels to the USFS. See responses to comments S-3 and S-4 for more information. CPW's comment letter on Denver Water's 1041 Permit Application confirms that the Fish and Wildlife Mitigation Plan continues "to reflect CPW's position on fish and wildlife mitigation and enhancement for this project." The loss of elk winter range due to the GRE Project represents less than 2% of the severe winter range and 3% of the winter concentration area within 3 miles of the reservoir. A wide variety of factors may influence wildlife to congregate in one area versus another, but due to the limited amount of activities on Winiger Ridge during the winter, it is unlikely that elk will avoid the area due to Denver Water activities. It is important to note that the majority of construction activity will occur between April and October, which is largely outside the time that elk would be expected to inhabit the winter range.
S-26	1. Staff requests that no new gamefish species be added to those already established in the existing reservoir.	Aquatic Species	Denver Water will not stock any fish into Gross Reservoir. However, Gross Reservoir, like many water bodies in the Colorado, is managed by CPW. Management objectives for those water bodies are determined by CPW and actions such as fish stocking and regulations are implemented accordingly.
S-27	1. In order to assess the visual impacts of the project, additional visual renderings and discussion shall be provided by the applicant.	Visual	In support of the Corps' Final EIS and the FERC Supplemental EA, a comprehensive Visual Resources Analysis was performed for National Forest System lands in the GRE Project area. The analysis includes detailed discussions of where "major," "moderate," and in some cases, no impacts can be anticipated associated with the GRE Project. A photographic rendering (included in the 1041 Permit Application in Exhibit 1, Figure 23) was prepared to complement the Visual Resources Analysis by depicting the following areas: right abutment as seen from the North Shore, Final EIS Quarry highwall, Osprey Quarry highwall. The Corps, USFS, and FERC reviewed this information and considered the analysis sufficient to fully assess the visual impacts of the GRE Project, as documented in the previous federal permit documents. In addition, per the July 2020 FERC Order (Condition 23), Denver Water is required to prepare and submit an addendum to the current Visual Resource Protection Plan,

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			approved by FERC on May 22, 2003, prior to the initiation of ground-disturbing activities. The Visual Resource Protection Plan will be developed in consultation with the USFS, and is subject to prior review and approval by the Forest Service. The Visual Resource Protection Plan will be focused on National Forest System lands, and although no new analyses of impacts to visual resources in the GRE Project area will be performed, it includes measures for mitigating visual impacts on National Forest System lands. Mitigation measures will be in accordance with current Forest Plan direction and scenery management guidance in the USDA Forest Service Agricultural Handbook Number 701, "Landscape Aesthetics: A Handbook for Scenery Management," December 1995. The Plan is available online at: https://naldc.nal.usda.gov/download/CAT11132970/PDF
S-28	2. The applicant shall update the Recreation Management Plan for the area and address: how the future recreation sites in the project area will accommodate increased visitation; measures to reduce traffic on local roads by recreationists; input from local stakeholders including BCPOS; and the proposed BCCP regional trail in the area.	Recreation	See also response to comment B-23. A detailed Recreation Management Plan is being developed per FERC Order (Article 416 and Condition 24) which will include design specifications for all recreation related facilities. The Recreation Management Plan previously developed and approved by FERC on May 14, 2004 and Addendum (2013) will be revised and amended to address new and relocated recreation facilities, sites, parking, and trails, as well as measures to address recreational, social, environmental, safety, and/or sanitation concerns. The FERC Order requires submittal of this Plan to FERC within 1 year of the Order (by July 16, 2021). Denver Water will provide the plan for stakeholder input, including to Boulder County, by April 15, 2021, for a 30-day review period prior to final submission to FERC by July 16, 2021. Denver Water will be partnering with USFS to implement an adaptive management approach to the natural resources connected to recreation. Adaptive management is a technique used to assess and respond accordingly to the impacts that may arise from recreational activities and traffic. Assessment of the resource on an annual basis, which includes scoring the areas for resource impacts. As impacts reach a critical level, remedial steps may be necessary to restore the resource. Examples of responses may include (but not limited to) altered maintenance approaches, boundary setting with landscape measures, and closures (typically temporary). Denver Water is in the process of implementing a program that provides traffic and parking monitoring around the site. This program will track use numbers and deliver real-time parking occupancy updates to the public via an app.
S-29	3. BCPOS will provide the applicant with updated visitation information for Walker Ranch so that any potential recreation and visitation impacts to Walker Ranch can be better determined.	Recreation	Denver Water is preparing a Recreation Monitoring Plan (note that the Recreation Monitoring Plan will be a separate plan from the FERC-ordered Recreation Management Plan also discussed throughout these responses to comments) per the FERC Order with a final due date within 1 year of the Order (by July 16, 2021). Denver Water respectfully requests that Boulder County Parks and Open Space transmit the updated visitation information for Walker Ranch so that we may incorporate these data into our recreation visitation use analysis and monitoring plan. At the meeting between Denver Water and Boulder County Parks and Open Space staff on February 3, 2021, Denver Water reaffirmed this request for data (see Exhibit 23, Meeting Record).

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			Denver Water acknowledges Jeff Moline with Boulder County provided visitation numbers for Walker Ranch on February 15, 2021. Denver Water is reviewing this information and will contact Boulder County for any additional information or questions.
S-30	1. The harvesting plan should be run on the current version of LOGCOST, 12.0 to accurately reflect corrected calculations & current conditions.	Timber	Denver Water will follow the USFS requirements for estimating the amount of timber to be harvested (see Forest Service Handbook 1909.12 Land Management Planning Handbook, Chapter 60 Forest Vegetation Resource Management). The current Tree Removal Plan being developed per FERC Order (Article 423, Condition 27) uses LOGCOST 18.1. Lastly, the USFS will conduct a cruise of the timber to be removed.
S-31	2. Ground-based operations with wheeled equipment should be limited to areas with less than 30-35% slope maximum due to the unstable soils located within the project area.	Timber	Slope steepness will be considered when determining the type of equipment to be used for tree removal activities and will be detailed in the FERC-required Tree Removal Plan.
S-32	3. Cable yarding units should be limited due to the extensive temporary road construction required.	Timber	The Tree Removal Plan will consider all equipment options for tree removal activities and make a recommendation based on site conditions. Denver Water hosted a virtual meeting on February 10, 2021, with Boulder County Planning and Permitting staff, Gilpin County staff, Jefferson County staff, CDOT staff, and Town of Superior staff to discuss tree removal activities in order facilitate a common understanding of timelines and expectations related to vegetation clearing, disposal and transportation methods for the GRE Project. See Exhibit 23, Meeting Record, for summary notes and presentation slides from the meeting.
S-33	4. Aerial yarding would be highly preferred for harvesting units where ground-based operations are not feasible/desired due to site damage potential.	Timber	The Tree Removal Plan will consider all equipment options for tree removal activities and make a recommendation based on site conditions.
S-34	5. Boulder County requests that a BMP plan as it relates to vegetation removal & water quality plan be submitted for review.	Construction activities	A Vegetation Management Plan is in place and will be updated per the FERC Order. The plan will detail interim erosion control and BMP features as well as long-term management controls. Note that seeding protocol (including seed mix, use of weed free straw, and specifications for keeping vehicles weed-free) will be provided in construction specifications. In addition, the Vegetation Management Plan will include noxious weed management protocol including manual, mechanical, or chemical controls as approved by USFS on National Forest System lands. Water quality features, including use of straw waddles, straw bales, and other tools will be discussed in the FERC-required Erosion Control Plan.
S-35	6. Boulder County is opposed to the use of Air Curtain Destructors as proposed as a primary means of residue disposal due to the volume over duration and the subsequent effect on the airshed.	Timber	The Tree Removal Plan will consider all disposal options for tree removal activities and make a recommendation based on site conditions. See also Exhibit 23, Meeting Record, for summary notes and presentation slides from the February 10, 2021, meeting on GRE Project tree removal activities.
S-36	7. The project should explore every avenue, within reason, for utilization of the harvested material. Following the example of the USFS Stewardship contract is recommended.	Forestry	The Tree Removal Plan will consider all disposal options for tree removal activities and make a recommendation based on site conditions, transportation logistics, and practicable utilization. See also Exhibit 23, Meeting Record, for summary notes and presentation slides from the February 10, 2021, meeting on GRE Project tree removal activities.

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S-37	8. Applicant should ensure that the associated impacts with the proposed primary haul routes and secondary roads for the Tree Removal Plan are factored into the overall project transportation impacts.	Transportation	Estimated traffic resulting from tree removal activities will be included in the Traffic Management Plan to the extent possible.
S-38	1. The application notes the importance of the 539-acre Toll Property as an off-license agreement environmental mitigation site. BCPOS needs more information to understand and assess the value of the property as mitigation. The applicant shall submit a report and map that outlines the specifics of the property, which lands are part of the OLA and how they will be managed in the long-term to ensure that the important environmental resources identified on them would be protected for the term of the OLA and project, if not in perpetuity.	Mitigation	Denver Water has attached a memo on the ecological values and environmental characteristics of the Toll Property (Exhibit 31). See also response to comment S-4. The Toll Property parcels that Denver Water is transferring to the USFS also should not be viewed in isolation. Including the 539 acres conveyed by Denver Water to the USFS, the Toll Property in total is 4,700 acres in size within the South Boulder Creek watershed upstream of Gross Reservoir. For the remainder of the Property that Denver Water did not acquire, the USFS's Forest Legacy Program, partially funded through the Great American Outdoors Act and the FY21 budget bill, and the Land and Water Conservation Fund, supported the establishment of a conservation easement. The Conservation Fund facilitated the multi-year and multi-agency effort to establish the land holding in a conservation easement to be conserved in perpetuity. Included on the Conservation Fund website, Boulder County Commissioner, Deb Gardner, recognized the importance of this effort (source: https://www.conservationfund.org/projects/south-boulder-creek): *"Completing this conservation easement proves how a collaborative partnership of land trusts and local, state and federal government can work with private landowners to achieve a significant legacy of land preservation for generations to come."* —Deb Gardner, Boulder County Board of Commissioners The parcels that Denver Water acquired for transfer to the USFS were an important step to completing the system, as they include the ecologically important Mammoth Gulch riparian corridor.
S-39	2. As there is no enforcement condition as part of many of the proposed mitigations, the County would like to see a mechanism that ensures progress and implementation of the variety of mitigation measures and enhancement agreements. This could be implemented as a monitoring and reporting agreement showing progress towards establishment, spending and completion of the variety of restoration and mitigation progress as agreed to in this 1041 application. Land in Boulder County is being impacted directly by this development, and so, it is in the county interest to know that the variety of resource mitigations both within and outside of Boulder County are on track to be completed.	Mitigation	The mitigation and enhancement features that Denver Water has agreed to with federal and state agencies are binding legal obligations as they were listed as conditions of approval for the Corps' Clean Water Act Section 404 Permit and incorporated into the FERC's Order amending the hydropower license for the GRE Project. Denver Water is willing to work with Boulder County staff to identify a reasonable and efficient method to track mitigation and enhancement features in Boulder County.
S-40	1. BCPOS staff finds the project to have major, significant impacts on environmental resources identified in the BCCP.	General Comment	Denver Water believes that all impacts of the GRE Project have been appropriately mitigated through measures agreed to by federal and state agencies, after opportunities for review and comment by stakeholders, including Boulder County. Please see responses to comments I-15 and S-3 to S-4.
S-41	2. The application does not provide information about many critical elements of Boulder County's BCCP-identified environmental resources—especially county wildlife and plant species of concern. Without this information, BCPOS staff cannot fully assess the project's impact on these important and crucial components of the area's biodiversity.	General Comment	See response to comment S-14.

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S-42	There has never been a project with such a magnitude of impacts since before the county's first Comprehensive Plan was written in 1978, 42 years ago. These significant impacts are expanded upon below. The application (page 65) states that "Denver Water has concluded that the Project is consistent with the [Boulder County] Comprehensive Plan." Staff disagrees; the proposal is not in conformance with the Comprehensive Plan. The application's conclusion appears to be based on a comparison of "...the Project area and potential impacts with the resource maps included in the Comprehensive Plan." Staff addresses these map comparisons below, after presenting some of the Comprehensive Plan's fundamental language.	General Comment	Denver Water notes staff's disagreement and responds to specific issues below.
S-43	The description of Environmental Conservation Areas, on page 148 in the application, is incorrect. The Comprehensive Plan states that, "Environmental Conservation Areas (ECAs) encompass the largest remaining relatively natural...forest...landscapes in Boulder County. [In the county,] broad shifts in animal and plant communities are occurring as a result of *development, habitat degradation*, climate change, and the exclusion or disruption of natural processes. ECAs are a planning tool developed...for analyzing land use and land management decisions in the context of the *cumulative effects of development*, roads, trails and increased human presence at a landscape-scale on these large and complex ecosystems. ...[L]and use and land management decisions...can be made within a framework that seeks to: protect species that may be wide-ranging, ecologically specialized or disturbed by human presence; encourage the return of species lost from the county; *prevent additional habitat fragmentation*; and limit increases in invasive non-native species in these ecologically-significant areas" (emphases added).	General Comment	Denver Water has reviewed the definition of Environmental Conservation Areas provided by staff. The Fish and Wildlife Mitigation Plan that Denver Water developed with CPW recognizes that the GRE Project will cause a loss of 17% of Winiger Gulch Potential Conservation Area and 7% of Winiger Ridge Environmental Conservation Area. Despite these impacts, in terms of habitat fragmentation, CPW agreed that the GRE Project would have only a minor effect on big game movement. The Fish and Wildlife Mitigation Plan that Denver Water executed with CPW and the Settlement Agreement that Denver Water executed with the USFS contain mitigation measures to address these impacts, and these measures were already subject to review and comment by stakeholders like Boulder County. Please see responses to comments S-3 and S-4 for more information.
S-44	The Magnolia Area Environmental Preservation Plan is incorporated by reference into the Boulder County Comprehensive Plan, listed as a local government plan. The application does not discuss or conclude how the project conforms with the plan.	General Comment	Denver Water cannot find a reference to the Magnolia Area Environmental Preservation Plan in the Boulder County Comprehensive Plan. Denver Water requests further clarification at your convenience. A member of the Preserve Unique Magnolia Association provided a comment on this topic as part of the Corps' Final EIS process, primarily raising traffic impacts to the Magnolia Area located outside of Nederland. The Corps responded in Final EIS Appendix N, Comment #459. Please see responses to comments in Letter "B" (Boulder County Community Planning & Permitting), Letter "F" (Boulder County Public Works), and comment M-7 for further information on measures to address traffic impacts. Traffic-related impacts and mitigation measures will be addressed and finalized in the final Traffic Management Plan per the requirements of the FERC Order. Denver Water will provide that plan to Boulder County.
S-45	Staff disagrees with the application's narrative for this section. The Project *will* significantly degrade the quality of terrestrial and aquatic life, based on the above discussions of 1) elk migration corridors; 2) elk winter concentration areas; 3) elk severe winter range; 4) the Environmental Conservation Area; 5) the High Biodiversity Area; and 6) habitat fragmentation from the impact of enlarging the reservoir to small and medium-sized mammals, reptiles, and amphibians. Further, it is unknown what impacts would occur to numerous terrestrial and aquatic county wildlife species of concern (Exhibit 17) that have not been inventoried nor addressed in the application.	1041 Standards for Approval - 8-511.B.5.f – Terrestrial and Aquatic Life	See responses to comments S-3, S-4, S-25, and S-43. As discussed in response to comment S-14, Denver Water will be evaluating the presence of Boulder County and Colorado Natural Heritage Program sensitive terrestrial wildlife and aquatic species in a desktop analysis. Our findings and recommendations will be detailed in a memo to be provided to Boulder County for review on March 31, 2021. Denver Water remains willing to working with Boulder County Parks and Open Space to address concerns related to terrestrial and aquatic species of concern as information is developed and findings are determined.

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S-46	The application states that the project *may affect* Preble's meadow jumping mouse, a threatened species. As discussed above, BCPOS needs more information on this species in the project area to determine the impact of the proposal on threatened species.8-511.B.5.f.v – Habitat and Critical Habitat Necessary for Protection and Propagation of Terrestrial Animals Staff disagrees that this standard for not significantly degrading this aspect of terrestrial life can be met. Referencing the above discussions, all three of the elk habitat types (migration corridor, winter concentration areas, and severe winter range) are critical elk habitats. Yet the proposed mitigation of preserving summer range on the Gilpin County Toll property site does not and cannot compensate for these losses of winter and migration habitats. Summer range is not a limiting factor for elk and cannot be compared to the critical habitats for which there is *no* mitigation of those losses proposed in the application.	Special Status Species	See responses to comments S-3, S-4, S-18, S-25, and S-43.
S-47	Staff does not agree with the application's conclusion that the project will not significantly degrade the quality of terrestrial and aquatic plant life. As noted above, staff is unable to determine what impacts could occur to at least 13 county plant species of concern that have not been inventoried nor addressed in the application. Additionally, there are plant community types of county concern that are not addressed.	Special Status Species	See responses to comments S-3, S-4, S-11, S-13, and S-14.
S-48	The application states that completion of an Aquatic Invasive Species Monitoring Plan and an Invasive Plant and Noxious Weed Species Management Plan for Forest Service lands in consultation with the USFS would meet this standard, yet neither the Monitoring Plan or Management Plan has been submitted nor reviewed by the county. Without the plan, staff is unable to assess if simply completing such a plan would be adequate to meet this standard. The reservoir does represent a substantial potential host site to several invasive species already known from Colorado.	General Comment	See response to comment S-13. Per the FERC Order (Condition 17), Denver Water is required to prepare and submit an Aquatic Invasive Species/Noxious Weed Plan which will include management actions to control invasive and noxious weeds as well as monitoring in specific locations if needed and as stipulated per the Condition.
S-49	Attachment 1 – Preble's Meadow Jumping Mouse. Boulder County disagrees with the determination by Denver Water and concurrence by U.S. Fish and Wildlife Service (2006 Biological Opinion) that '*project activities impacting these sites should not have direct adverse affects to Preble's or Preble's habitat.'*	Special Status Species	As a point of clarification, Denver Water did not make the determination that Preble's Meadow Jumping Mouse was unlikely to be present. This determination was made by the Corps in consultation with the FWS. Please see Denver Water's response to comment S-18 for more information.
S-50	Attachment 1 – Preble's Meadow Jumping Mouse. Preble's Meadow Jumping Mouse has been found in the following locations: Tom Davis Gulch – 2007 and 2015 Meyer's Gulch – 2018 (note – these two gulch's are separated by Flagstaff Road)	Special Status Species	Please see Denver Water's response to comment S-18.
S-51	Attachment 1 – Preble's Meadow Jumping Mouse. It is therefore reasonable to conclude that Preble's could be present in Winiger Gulch, as evidenced by known populations in close proximity, as well as more current information on dispersal distances including upland movements. Winiger Gulch is potentially connected Tom Davis Gulch and Meyers Gulch via ephemeral drainages, and undeveloped upland areas.	Special Status Species	Please see Denver Water's response to comment S-18.
S-52	Attachment 1 – Preble's Meadow Jumping Mouse.	Special Status Species	As a point of clarification, comments made on the Draft EIS (2010) were submitted directly to the Corps. Any information submitted to the Corps would have been considered in the 404 Permitting process for the GRE Project.

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	Information on Boulder County's trapping results was presented to Denver Water on June 19, 2019 during a meeting with Denver Water representatives. Information was also conveyed to Denver Water during the Draft EIS public comment period in 2010. (Comment #779-21, ID 5035).		
S-53	Attachment 1 – Preble's Meadow Jumping Mouse. Given that additional information regarding Preble's, as outlined above, has become available, Boulder County requests Denver Water re-initiate consultation with USFSW in accordance with the 2006 Biological Opinion.	Special Status Species	Please see Denver Water's response to comment S-18.
S-54	Attachment 1 – Preble's Meadow Jumping Mouse. This decline in riparian condition was attributed to 'heavy' impacts from cattle grazing. At present, it is unknown if Leyden Gulch has any areas fenced off from cattle grazing, but observations of the site indicate that when cows are present, they have full access to all riparian areas, including wetlands and riparian corridors. It is recommended that Denver Water adhere to their stated objectives in the HCP and make efforts towards improving Leyden Gulch habitat values, as riparian corridors are critical for several species, and general development along the foothills transition zone along the Front Range has impacted many riparian corridors. Further, improvement of the habitat conditions along Leyden Gulch could off-set losses of suitable habitat in Winiger Gulch with inundation caused by the expansion project. Further, current active construction (North System Renewal) by Denver Water adjacent to Ralston Creek below Ralston Dam has impacted upland habitat adjacent to Ralston Creek. Ralston Creek is known to be occupied by Preble's, although farther west than the disturbance footprint of this project. However, due to this permanent alteration of land adjacent to Ralston Creek, improvement or enhancement of Leyden Gulch and the surrounding upland areas is of increased importance. Boulder County has achieved successful enhancement of riparian and upland areas by removing cattle grazing practices. On some properties, installation of riparian corridor fencing with an upland buffer, to exclude cattle, has been implemented with success as well. As per Denver Water's stated objectives (Denver Water HCP), this effort seems to qualify as realistically 'practicable' on behalf of Preble's.	Mitigation	See response to comment S-20.
S-55	Attachment 2 – Review of Proposed Toll Property Mitigation It is unclear why Denver Water has retained the two parcels noted and has not conveyed them to the USFS as part of the Denver Water/USFS Settlement Agreement. Additionally, protecting these parcels from human disturbance in the form of social trails, dispersed camping or motorized vehicles is strongly encouraged.	Mitigation	Denver Water is in the process of conveying the last parcels of land involved in this transaction to the USFS. The USFS and Denver Water agreed that the transfer should be completed within 1 year of issuance of the FERC Order to provide time for the USFS to complete its due diligence on the parcels. Protection of the land and resources will be the responsibility of the USFS and will be managed in accordance with the forest management plan that USFS has promulgated for the area.
S-56	Attachment 2 – Review of Proposed Toll Property Mitigation	Mitigation	Denver Water has continued its partnership with the USFS, CSFS, and National Resources Conservation Service through the From Forests to Faucets Program since

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	Additional mitigation measures recommended include encouraging Denver Water's continued partnership with the USFS, both through the Forests to Faucets program, but also through consideration of funding additional USFS staff positions. It is therefore unclear if this land conveyance will result in the enhanced protections of this area, based on a lack of staffing resources available to ensure these protections.		2010 and continues to be committed to the healthy forest principles and management of watersheds on Denver Water lands. The USFS is both the landowner and the federal agency legally charged with managing and protecting National Forest System lands according to the principles in the National Forest Management Act, NEPA, the governing forest management plan for the area, and other federal laws and policies. The ecological and conservation values of the parcels are of great significance to the USFS, which is why the USFS agreed that Denver Water's acquisition and transfer of the parcels to the USFS for integration into the surrounding National Forest System lands was appropriate mitigation for the GRE Project. If Boulder County remains concerned about management status of the parcels after their transfer to the USFS, the appropriate action would be to engage the USFS.
S-57	Attachment 2 – Review of Proposed Toll Property Mitigation The Toll property is also used as mitigation for some of the wetland impacts, totaling 5.78 acres, including: • Permanent impacts to 2.24 acres of Corps jurisdictional wetlands surrounding Gross Reservoir and 0.21 acres of temporary impacts. • Permanent impacts to 3.54 acres of Corps jurisdictional Other Waters of the U.S. and 0.50 acre of temporary impacts to Other Waters of the U.S.	Mitigation	A total of 5.78 acres of Waters of the U.S. will be impacted. The total impacts to wetlands are 2.24 acres. Although the Toll Property parcels that Denver Water is transferring to the USFS do contain wetlands, those wetlands are not being used as formal mitigation of wetlands impacts. Rather, impacts to 2.24 acres of wetlands were mitigated using a wetlands mitigation bank created and owned by Denver Water near Antero Reservoir in Park County (the Four Mile Fen property). The remaining 3.54 acres of impacts are to Water of the U.S. that are not classified as wetlands. These impacts are being mitigated through the South Boulder Creek Restoration Project that provide improve low-flow conditions; repair natural instream diversity and channel stability; and establish a minimum of two riffle/pool complexes (section 7.2.1 of the Corps' Record of Decision).
S-58	Attachment 2 – Review of Proposed Toll Property Mitigation Additional mitigation measures for wetland impacts include purchasing credits in the Four Mile Mire wetland mitigation bank as part of the 404 permit conditions, and the creation of the 5,000 AF Environmental Pool. Boulder County has previously asked that any wetland mitigation credit is used in the South Boulder Creek watershed, but it is unclear if and where this would occur.	Mitigation	The mitigation for impacts to the wetlands were credits in the Four Mile Fen property created and owned by Denver Water. The 5,000 AF Environmental Pool was not used as mitigation credit. Impacts to other Waters of the U.S. was accomplished by doing stream restoration on South Boulder Creek on land owned by the City of Boulder. Denver Water was unable to find wetland credits to offset wetland impacts in the South Boulder Creek watershed that the Corps would accept. This is one of the reasons Denver Water purchased the Toll Property parcels for transfer to USFS, as the area contains forested riparian habitat and wetlands with significant conservation value.
S-59	Attachment 2 – Review of Proposed Toll Property Mitigation While we have not been able to find details about this purchase and transfer agreement between Denver Water and the USFS, it does seem reasonable that Boulder County could request a seat at the table in management decisions about this parcel and any protections it may receive. With further knowledge of the resources of the property and adjacent uses, it may be reasonable for Boulder County to ask for limiting public access or constructing fences to protect the resources present that provide for much of the natural resource mitigation of Denver Water's proposed project.	Mitigation	Denver Water and the USFS have already agreed to the terms of the transfer of the Toll Property to the USFS. Part of the transaction has already taken place and the remainder of the transfer is scheduled to take place by July 2021. Denver Water supports Boulder County in additional protections for sensitive areas within the Toll Property. However, the USFS would need to initiate these protections as the manager of the land.

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S-60	Attachment 3 – Wildlife Impact Mitigation Memo The tree cutting and removal methods associated with the Gross Dam expansion will require the development of haul roads and skid roads. These roads, unless fully mitigated by long-term, monitored reclamation, will increase fragmentation in an area that is currently relatively undisturbed.	Timber	To the greatest extent possible, any new roads needed for tree removal will be placed below the new high water line (7,406 feet). Any roads above the new high water line will be reclaimed after tree removal activities are complete.
S-61	Attachment 3 – Wildlife Impact Mitigation Memo The aspiration of the Winiger Ridge ECA #6 is to limit or reverse habitat fragmentation and allow free movement of wildlife. The effective core preserve of this ECA is jeopardized by the scope and magnitude of the Gross Dam expansion project.	Wildlife	In the Fish and Wildlife Mitigation Plan, after providing opportunities for review and comment by stakeholders like Boulder County, CPW agreed that, despite impacts to Winiger Ridge Environmental Conservation Area, the GRE Project would have only a minor effect in terms of habitat fragmentation and big game movement, and the mitigation already agreed to by Denver Water is sufficient to offset those impacts. See responses to comments S-3, S-4, S-25, and S-43 for further information.
S-62	Attachment 3 – Wildlife Impact Mitigation Memo As the Winiger Gulch PCA is currently relatively undisturbed, Boulder County requests that recreation remains an emphasis on the east side of Gross Reservoir and is not emphasized on the west side. Although the west side of Gross Reservoir is open to the public, it currently has limited recreation occurring. The concern with the addition of several skid roads and haul routes associated with the tree removals is that these temporary roads often lead to the development of social trails and more access. If recreation increases due to the implementation of the Gross Dam expansion, the habitat values for wildlife such as elk will decrease and will lead to an amplification of impacts over time.	Recreation	Recreational facilities on Winiger Ridge will be replaced in kind and the number of designated camping sites will not change. Access will not be improved, and no changes are proposed to the times of use. Any haul roads above the new high water line will be reclaimed after tree removal activities. Denver Water is not expanding recreation opportunities on the west side of Gross Reservoir.
S-63	Attachment 3 – Wildlife Impact Mitigation Memo The 1041 application materials noted that “additional fish species” may be established at Gross Reservoir after completion of expansion. Staff requests that no “new” gamefish species be added to those already established. This is in keeping with the South Boulder Creek mitigation and stream restoration for native fish. Introduced game fish are the primary threat, along with low minimum stream flows, to the survival of state-listed native fish species. Escapement downstream, and migration upstream, of these newly introduced species of non-native game fish will only serve to exacerbate the threats to native fish of county and state concern.	Aquatic Resources	Denver Water is not proposing to stock new fish species at Gross Reservoir. Management of the fishery will continue to be the responsibility of CPW.
S-64	Attachment 3 – Wildlife Impact Mitigation Memo As there is no enforcement condition as part of many of the proposed mitigations, the County would like to see a mechanism that ensures progress and implementation of the variety of mitigation measures and enhancement agreements. This could be implemented as a monitoring and reporting agreement showing progress towards establishment, spending and completion of the variety of restoration and mitigation progress as agreed to in this 1041 application. Land in Boulder County is being impacted directly by this development, and so, it is in the county interest to know that the	Mitigation	See response to comment S-39.

S	**SI-20-0003 Parks and Open Space (Boulder County)** **Date posted: 12-23-2020 – Date of Letter: 12-17-2020**		
Comment ID	**Comment**	**Category**	**Response**
	variety of resource mitigations both within and outside of Boulder County are on track to be completed.		
S-65	Attachment 4 – Plant Species of Concern and Significant Natural Communities Plant Ecology staff reviewed Exhibit 18 of the 1041, (Boulder County Plant Species of Interest Boulder County Rare Plant Species and Significant Natural Communities Species of Special Concern List), with a focus on species and communities that may be present on within the project site. Per our assessment, ten species shifted from a 2 to 3 or a 3 to 4. Many of these species have records of occurrence within OSMP lands east of the project area, including three species found on Green Mountain.	Special Status Species	See response to comment S-14.
S-66	Attachment 4 – Plant Species of Concern and Significant Natural Communities It is noted that the 1041 application includes an assessment of Other Special Status Plant Species (Table 51; 1041 Application). That list includes USFS Region 2 sensitive species, ARNF plant species of local concern, and CNHP-listed species. However, this list is missing 32 of the species listed on the County's list in Exhibit 18, including many that do have a CNHP ranking. It does not appear if any of these 32 species were formally assessed or surveyed for within the project area as perhaps those within Table 51 were. Of those 32 species, 13 could possibly occur (ranking 3 or more) within the project site, including: [*see Table listing of 13 species in this letter attachment*]	Special Status Species	See response to comment S-14. Denver Water notes that 13 plant species listed in the 1041 Permit Application Exhibit 18 do not appear in Table 51 of the 1041 Application. These species will be addressed in the desktop analysis to be prepared by Denver Water, as described in response to comment S-14.
S-67	Attachment 5 – Forestry Staff Review Boulder County strongly advises against the use of Air Curtain Destructors as the primary means of residue disposal.	Timber	See response to comment S-35. See Exhibit 23, Meeting Record, for summary notes and presentation slides from the February 10, 2021, meeting on GRE Project tree removal activities.
S-68	Attachment 5 – Forestry Staff Review Boulder County recognizes that utilization by local markets is problematic. The bark beetle epidemic which has affected the region over the past few years has created a severe excess of material that can't be absorbed by an already depressed market. That being said, there are limited diverse opportunities that may help alleviate at least some of the disposal & utilization issues associated with this project.	Timber	See response to comment S-36. All options are being considered and disposal opportunities may change in the future. Denver Water will address these issues to the best of its ability in the Tree Removal Plan being prepared for FERC. See Exhibit 23, Meeting Record, for summary notes and presentation slides from the February 10, 2021, meeting on GRE Project tree removal activities.
S-69	Attachment 5 – Forestry Staff Review The USFS Long Term Stewardship Contract currently underway on the Arapaho and Roosevelt and Pike National Forests being implemented by West Range Reclamation is an example of utilization possibilities.	Timber	See response to comment S-68. All options are being considered and disposal opportunities may change in the future.
S-70	Attachment 5 – Forestry Staff Review Other local options would include the 5 local biomass heating plants that are within reasonable transportation distances from the project. These include: Gilpin County Transportation Building, NREL in Golden, Boulder County Jail, Boulder County Parks and Open Space & Transportation Complex, and the Foothills Facility at CSU. Local firewood sales are also an option but would be small-scale relative to the disposal & utilization needs of the project.	Timber	Thank you for these suggestions. See reply above – all options are being considered and disposal opportunities may change in the future. See Exhibit 23, Meeting Record, for summary notes and presentation slides from the February 10, 2021, meeting on GRE Project tree removal activities.

Exhibit 20 – Public Organization and Individual Comment and Response Table

This exhibit contains Denver Water's responses to more than 900 comments from public organizations and individuals on Denver Water's Gross Reservoir Expansion (GRE) Project 1041 Permit Application. For organizational comments, Denver Water first coded comments by assigning a Letter ID to the source organization, as shown in Table 1 below. Denver Water then assigned a unique Comment ID to each comment within each letter and drafted a response, as shown in Table 3 below.

For individuals, given the large number of comments on the same topics, Denver Water first assigned Issue Numbers, as listed in Table 2 below. Denver Water then assigned Comment IDs to each comment within each letter, grouped the Comment IDs with their corresponding Issue Numbers, and drafted a response, as shown in Table 4 below. Many comments from public organizations and individuals were associated with campaign letters, which are listed in Table 5 below. Denver Water has responded to comments in the campaign letters in Tables 3 and 4.

For reference, a copy of the original letters coded with Letter and Comment IDs are included in Exhibit 35.

Table 1 – Comments from Organizations

Comment Letter ID	Organization	Date Comment Submitted	Page Number in this Document
O-A	The Environmental Group & Save The Colorado	12/16/2020	5
O-B	The Environmental Group & Save The Colorado	12/11/2020	17
O-C	Boulder Flycasters Chapter of Colorado Trout Unlimited	12/9/2020	18
O-D	Coal Creek Canyon Parks and Recreation District	12/8/2020	21
O-E	The Environmental Group & Save The Colorado	11/13/2020	22
O-F	Boulder County Audubon Society	11/13/2020	34
O-G	The Environmental Group & Stop Gross Dam Expansion	11/12/2020	35
O-H	Americas for Conservation + the Arts (AFC+A)	11/12/2020	38
O-I	Sierra Club	11/10/2020	39
O-J	Lazy Z Estates Homeowners' Association	10/15/2020	40
O-K	PLAN-Boulder County	11/9/2020	41

Table 2. Issues based on Individual Public Comments

Glossary of terms used by Denver Water in response to comments

AF	Acre-foot	FERC	Federal Energy Regulatory Commission
AF/yr	Acre-foot Per Year	GRE Project	Gross Reservoir Expansion Project, also known as the Moffat Project
CDPHE	Colorado Department of Public Health and Environment	IRP	Integrated Resource Plan
CEQ	Council on Environmental Quality	kW	Kilowatt
CO_2e	Carbon Dioxide Equivalent	NEPA	National Environmental Policy Act
Corps	U.S. Army Corps of Engineer	NWCCOG	Northwest Colorado Council of Governments
CPW	Colorado Parks & Wildlife	O&M	Operations and Maintenance
CR	County Road	PACSM	Platte & Colorado Simulation Model
CSFS	Colorado State Forest Service	P.E.	Professional Engineer
CWCB	Colorado Water Conservation Board	SEO	State Engineer's Office
EA	Environmental Assessment	SH	State Highway
EIS	Environmental Impact Statement	USFS	U.S. Forest Service

Table 3. Public Organization Comments and Responses

O-A	**Save the Colorado and The Environmental Group** **Date: 12-16-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-A-01	On behalf of The Environmental Group and Save the Colorado, attached please find a comment letter and 5 exhibits regarding the proposed Gross Reservoir and dam expansion. Exhibit-1_Woodling Aquatic Resources Assessment.PDF Exhibit-2-CoE-Letter-on-Moffat-GHG-Emissions-6-18-20151.pdf Exhibit-3-Final Firm Yield Calculation LRB 1 Oct 2015.pdf Exhibit-4-Udall and Overpeck - 2017 - The twenty-first century Colorado River hot drough.pdf Exhibit-5-Hydros Risk Phase III Final Report.pdf	Attachments	The Corps and FERC considered the issues addressed in these exhibits during the federal NEPA process.
O-A-02	**Comment #1, pertaining to: 8-507,D.7.b.iii (A)(B)(C) and 8-511-B.5.c.i, iv, vi, ix, x and 8-511,B.5.f. all subheadings**. The Woodling (2018, Exhibit #1) report on aquatic life refutes Denver Water claims that increased water volume in upper South Boulder Creek and prolonged colder temperatures of water below Gross Reservoir do not have any long-term impacts on fish populations. The 1041 permit is incomplete because aquatic resources in Boulder Creek both upstream and downstream of Gross Reservoir have not been fully defined, increases of upstream flows and reduced temperatures of stream flow downstream of the reservoirs would adversely impact trout populations in South Boulder Creek, and proffered mitigations are ineffective. In his report he states that: 1. **multi-staged release structures from the dam would mitigate aquatic life impacts on South Boulder Creek between Gross Reservoir and the South Boulder Diversion structure.** 2. Denver Water has failed to adequately describe aquatic resources in South Boulder Creek thus there is no basis for an impact analysis 3. higher flows in South Boulder Creek upstream of Gross Reservoir would reduce trout fry survival and increase erosion of banks - adding sediment to the stream. 4. downstream of Gross Reservoir water temperatures are already colder than would be expected on similar streams because releases are taken from the bottom of the reservoir which stratifies into October and that expansion of the reservoir would result in a 30 percent decrease in “degree days that are currently available for fish growth.” 5. the SEA does not provide any proof of their claim that fish populations in Gross Reservoir will benefit from a larger reservoir 6. monitoring and placement of signs warning of fish consumption do not decrease the likelihood of increased mercury in fish 7. the 5,000 AF environmental pool is not well thought out as further increasing the size of the reservoir it would exacerbate downstream water temperature issues	Fish/Aquatic Biology	The issues raised by Mr. Woodling were considered throughout the permitting process for the GRE Project. 1. Stream temperatures on South Boulder Creek – the Corps, FERC and the CDPHE each independently evaluated the impact analysis completed for the GRE Project by AECOM. Additionally, CPW reviewed the analysis and entered into a mitigation plan for the identified impacts. 2. The impact analysis included in the 1041 Permit Application was the same impact analysis completed by the Corps for the issuance of a 404 Permit, CDPHE for issuance of the 401 Certification and FERC for issuance of an Amended License. Additionally, CPW reviewed the impact analysis and agreed to the mitigation plan developed by Denver Water. 3. See response above. Also, a stream bank stability monitoring program will be developed by Denver Water to evaluate bank stability related to the increased transport of water through the Moffat Tunnel. As a reminder, the peak flow in South Boulder Creek will not be increased by the GRE Project. Rather the duration of high flows will increase. The increased duration of high flows is not anticipated to impact bank stability, but a monitoring program will be established. 4. Denver Water agrees, the existing condition of the stream below Gross Dam is cold. However, when looking at the overall impacts of the expanded Gross Dam on South Boulder Creek, the impact is positive per the analysis completed by the Corps. Additionally, the creation of the Environmental Pool will benefit the fishery below Eldorado Springs as presently low flow and no flow periods impact the fishery. 5. The statement that fish populations would benefit from an enlargement of Gross Reservoir is based on professional opinion that an increase in habitat availability will benefit fish present in a water body. The FERC Supplemental EA (section 5.1.4) includes detail on why FERC reached this conclusion. Considered in this decision was erosion, turbidity, sedimentation and reservoir habitat area (littoral and pelagic). Additionally, FERC acknowledged that several of the plans being prepared by Denver Water and approved by FERC would minimize negative impacts related to

O-A	**Save the Colorado and The Environmental Group** **Date: 12-16-2020**		
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	8 Of the 8 "mitigation" projects proffered by Denver Water, 6 entail monitoring only which do not qualify as mitigation. Two mitigations are the environmental pool (#7 above) and the tree removal program (which does not benefit aquatic resources).		construction activities (Tree Removal, Stormwater Management, Erosion and Reclamation, and Quarry Operation). 6. Currently Gross Reservoir has a consumption advisory for fish. This is not uncommon in Colorado as several waterbodies have consumption advisories. Mercury accumulation in fish tissue will be reduced by removing as much organic matter as practicable prior to inundation. The CDPHE 401 certification has a specific condition related to mercury that Denver Water must comply with. 7. The 5,000 AF Environmental Pool, which was sought by the City of Boulder and City of Lafayette and agreed to by Denver Water, will provide water for low flow periods on South Boulder Creek. These low flow periods currently limit habitat availability and fish survival. 8. The Environmental Pool will benefit aquatic resources during low flow periods. At times, sections of South Boulder Creek are dry or nearly dry. When this happens, fish habitat and survival is impacted. Adding water during these low flow or no flow periods will increase fish habitat and survival, and increase the amount of time minimum stream flows are meet. The Tree Removal Plan will decrease mercury bioaccumulation in fish tissue. The Woodling report does not list all the mitigation activities related to the GRE Project. For a complete description of mitigation, please see the following documents: Corps 404 Permit, CDPHE 401 Certification, USFS Settlement Agreement, FERC Articles, and Fish and Wildlife Mitigation Plan. All of these documents are in Exhibit 5 of the 1041 Permit Application.
O-A-03	**Comment #2, pertaining to: 8-507.D.7.v: Air quality analysis** in the 1041 application for the Moffat project is incomplete because it does not address greenhouse gas emissions (GHG) of the project reported and requested in the STC's July 18, 2015 letter (Exhibit #2). GHG emissions would be included under Section B of (v), "other adverse impacts on air quality anticipated from the proposal." Exhibit 14 of the 1041 application examines: 1. exhaust emissions associated with construction equipment 2. on-road vehicle engines 3. fugitive dust emissions associated with equipment and vehicle travel on unpaved roads, material handling, excavation activities and wind erosion. Air quality analyses reported in Exhibit 14 of the 1041 permit focus on estimates of carbon monoxide (CO), nitrous oxides (NOx), sulfur dioxide (SO2), and particulate matter (PM10 and PM2.5) emissions. Carbon dioxide emissions were evaluated in Appendix C of the Final Borrow Haul Study included in the FERC Final License Amended Application Volume III. This analysis included only direct GHG emissions - those owned and controlled by the reporting entity - of hauling materials to and from the site (page C-6). The Borrow Haul Study discusses the February	Air Quality	In Appendix B to its Record of Decision, the Corps specifically responded to Save the Colorado's June 18, 2015 comment letter. To summarize briefly, the Corps explained that it had performed detailed carbon emissions calculations for the GRE Project in section 5.13 and Appendix I of the Final EIS, including by estimating construction related emissions for activities such as equipment exhaust and concrete batching. Save the Colorado's comment letter did not specifically address or reference the Corps' analysis, and the comment letter did not explain how the proffered alternative numbers were derived, developed, analyzed and calculated, making it impossible for the Corps to respond any more specifically. The Corps considered the draft CEQ guidance in preparing its analyses. The Corps noted that Denver Water's agreement to convey more than 500 acres of property (the "Toll Property") to the USFS was appropriate mitigation for impacts to the forest resources on National Forest System lands. Additionally, in section 5.1.11.2 of the FERC Supplemental EA, the FERC responded to Save the Colorado's comments concerning carbon emissions from tree removal, stating that "the proposed removal of trees would reduce carbon uptake, and combustion would release carbon dioxide; however, we are not aware of any reliable models that would enable analysis of these effects on climate conditions. Based on the scale of the GRE Project in comparison to other sources of greenhouse gas in the atmosphere, we expect the effects of tree removal and disposal on global climate change would be minor."

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	18, 2010 Council on Environmental Quality (CEQ) Draft Guidance Memorandum requirements under NEPA (page C-7) for • "the treatment of GHG emissions that may directly or indirectly result from proposed federal action" and • "the analysis of potential climate change impacts upon the proposed federal action." • In addition, they note that "the threshold of 25,000 metric tons of CO2-equivalent GHG emissions annually is suggested as a "useful, presumptive, threshold for discussion and disclosure . . . ." All federal agency actions requiring NEPA review . . . . are covered by this guidance" (page C-7). Direct CO2 emissions noted in the Final Borrow Haul Study amount to 4,247 tons/year due to fuel consumption when hauling aggregate, cement, fly ash, timber and ash slash one-way to the site (Table C-3). It is anticipated that GHG emissions would approximately double if trucks were to drive both to and from the site. **The 1041 permit is incomplete because it fails to include indirect GHG emissions of the Moffat project - in particular, the large amount of GHG emissions from production of cement - and fails to include direct GHG emissions from construction and tree removal activities at the site.**		
O-A-04	**Comment #3, pertaining to: 8-511:B.3**: "**Adequate water supplies, as determined by the Colorado State Engineer, are available for the proposal if applicable."** <u>Full Use to Project Water Supply Not Sufficient to Provide 18,000 AF of Firm Yield</u> The 1041 application on page 5 states that "Water diverted under existing water rights and facilities from the Upper Williams Fork and Fraser Rivers and South Boulder Creek to the expanded Gross Reservoir will provide 18,000 acre feet per year of additional supply and improve Denver Water's system reliability." This statement is not consistent with the FEIS in which only additional diversions between their Full Use Baseline and the Project would be available to supply the additional 18,000 AF – thus limiting potential impacts of the project on both the east and west slope streams to this smaller portion of the additional diversions. In addition, system reliability also depends on how climate change will impact streamflow in the source basins – a factor that has not been addressed in the FEIS, the 401 certification, the SEA, or the 1041 application. Table H.7-1 of the FEIS provides PACSM model results of Gross Reservoir levels and resultant stream flow for both the east and west slope streams. In particular, the FEIS claims that an increase of 10,285 AF per year on average (the difference in Moffat Tunnel flows between their Full Use baseline and the project diversions) is all that is required to supply an expanded Gross Reservoir with 18,000 AF of additional water supply. This additional supply is needed to maintain flows of 30 mgd at the Moffat Water Treatment Plant (MWTP) during the winter months. Previously, the MWTP was shut down in the winter time. Table H.7-1 shows that, per their PACSM model, post-project Gross Reservoir storage in average years would decrease by 24,243 AF between November and April. This	Water Supply	The purpose of the GRE Project as stated in the Final EIS, FERC Application and 1041 Permit Application is to increase the yield of Denver Water's system by 18,000 AF by expanding Gross Reservoir by 72,000 AF. These numbers are consistent throughout the various permitting efforts. The total expansion of 77,000 AF includes the 5,000 AF Environmental Pool, which was included in all the impact analysis completed by regulatory agencies. The Corps did an evaluation of the impacts from Current Conditions to Project and Full Use of Existing System to Project. The first comparison shows the cumulative impacts as Denver Water grows into its existing collection system, Reasonably Foreseeable Future Projects, and the GRE Project. The latter shows just the impacts associated with the expansion of Gross Reservoir. Climate change was considered in the Corps' decision and other permits as a qualitative analysis. See response to comment I-6 of Exhibit 19 – Referral Agency Comment and Response Table for more information. One of the impacts evaluated was the change in operation of the Moffat Water Treatment Plant. Currently, there is a lack of storage on the North end of the system that prevents yearly operation of the Moffat Water Treatment Plant. As the demand on Denver Water's system increase in the future, having the ability to treat water at each of the treatment plants on a year-round basis is a must. Treatment plants must be taken offline from time to time to perform maintenance and upgrades. Building flexibility into a water collection system is needed to plan for these activities as well as unplanned

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	compares to a pre-project (Full Use) decrease of 6,111AF in these months; or a difference of 18,132 AF. An increase in supply of only 10,285 AF is not sufficient to supply this additional amount of water to the MWTP. A water balance estimate completed in 2014 (Buchanan, 2014 revised in 2015, Exhibit #3) showed that all additional water at diversion structures (between the existing measured baseline equal to the average Moffat Tunnel flows through 2012 and the Project) in both the Williams Fork and Fraser River basins is necessary to provide an additional 18,000 AF of firm yield to the expanded Gross Reservoir. However, the FEIS states that this additional firm yield will be attained only with the addition of water supply between the Full Use and Project amounts. If the latter is true, e.g. if the amount of water that can be diverted under Full Use is already allocated elsewhere, then additional water must be supplied by another source, one that must be available to Gross Reservoir and the Moffat Water Treatment Plant. Please explain where the additional water would come from and if it would increase flows in upper South Boulder Creek. **When finalizing the South Boulder Creek Stability and Monitoring Plan design criteria need to include the highest flows that are anticipated from western slope diversions. If an additional water source is to be used to supplement the 10,285 AF then additional flows through the Moffat Tunnel into South Boulder Creek need to be incorporated into that design.** <u>Additional withdrawals combined with climate change increases the risk of a compact call on the Colorado River</u> Temperature increases caused by climate change have been linked to reduced streamflow in the Colorado River basin (Udall and Overpeck, 2017, Exhibit #4). In particular, the drought that started in the early 2000s and continues into the present has resulted in very low levels in both Lake Powell and Lake Mead - 44% and 39 % of full capacity as of November 23, 2020 (Glen Canyon Institute, Vol 19, No 11, Nov 24, 2020 - Colorado River Lowdown). Climate change and additional trans-mountain diversions (TMD) from the upper Colorado to the eastern slope of Colorado raise two concerns. 1. Limiting the PACSM analysis to the 1947 to 1991 time frame does not reflect how climate change has impacted Denver Water's water supply in the upper Fraser and Williams Fork basins. It is unclear if this water supply will continue to provide the same yield as in the 1947 to 1991 historical hydrologic record. **The PACSM model period needs to be extended to 2020 to evaluate how drought would affect operation of the expanded Gross Reservoir.** 2. **Additional TMDs compound the effects of climate change on Upper Colorado River basins.** If Lake Powell levels decline to the point where the upper basin cannot provide the 7.5 MAF or 8.25 MAF (including our obligation to Mexico) per year (75 MAF or 82.5 MAF average over 10 years) allocation to the lower basin states the risk of a compact call increases. The Phase III Hydros report (2019, Exhibit #5) evaluated which water rights would be most at risk if a compact call were to occur by quantifying post-compact (post-1922) water right		outages. Operating the Moffat Water Treatment Plant in the winter will increase outflows in the winter but decrease outflows at other times of the year. In its response to comments on the Final EIS, the Corps specifically responded to Lisa Buchanan's analysis and explained in detail why it disagreed that there would be insufficient water to fill the expanded reservoir. See Attachment B to the Corps' Record of Decision, where the Corps responds to Save the Colorado's October 27, 2015 comment letter. There, the Corps explains how the additional storage space at Gross Reservoir will allow Denver Water to operate its entire system in a more flexible manner so that, in average to wet years, additional water can be stored in Gross Reservoir as a buffer against future drought. Please also see section 2.1.3 of Attachment B to the Corps' Record of Decision, where the Corps responds to Save the Colorado's comments regarding a possible compact call on the Colorado River. In short, planning for the future of the Colorado River Basin to avoid compact calls is being addressed through a U.S. Bureau of Reclamation process in coordination with the Basin states, water providers and stakeholders. As Save the Colorado notes in its comment here, it is still undecided how Colorado would administer a compact call on the Colorado River. Additionally, as the Corps explained in responding to comments on this issue in Appendix N of the Final EIS, it is not possible to determine the extent to which a compact call would be attributable to this individual project, independent from a multitude of other water uses and factors. This is particularly true for the GRE Project because the potential for a compact call exists when the Colorado River system is stressed and, in these dry periods, additional GRE Project diversions are not planned. The Corps did assess the cumulative impact of the GRE Project with other reasonably foreseeable future actions, such as the Windy Gap Firming Project. Please see section 4.3 of the Final EIS for more information. The Corps ultimately concluded that expanding the existing Gross Reservoir was the least environmentally damaging practicable alternative to meet the purposes and needs for the GRE Project.

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	depletions or usage in each Colorado basin. In-basin or western slope use was separated from Trans Mountain Diversions in the Upper Colorado River Basin. If a compact call were to require a full curtailment of all post-1922 water rights, the Upper Colorado TMDs would make up 57.1 percent or, on average, 531,952 AF of the total post-compact curtailment (931,969 AF) - Table 6 and Figure 12 of the Hydros report. Note that it is still undecided how Colorado would administer a compact call on the Colorado River. TMDs that transfer upper Colorado River water to the eastern slope include Colorado Big Thompson (CBT), Windy Gap, and Moffat projects. **Though Moffat project water via Gross Reservoir is used by customers in Denver, removal of additional water from the Upper Colorado River's western slope streams could contribute to risk of a compact call on CBT and Windy Gap water used by other Front Range communities within Boulder County. These include Boulder, Longmont, Louisville, Lafayette, Erie, Lyons, and Superior.** **At this time, Denver Water has not evaluated how the Moffat project would factor into the risk of a compact call on the Upper Basin of the Colorado River. Denver Water has also not evaluated how climate change would impact the Moffat Project. Its assessment of water supply is therefore, incomplete.**		
O-A-05	**Comment #4, pertaining to: 8-507:D.7.b.ii (D), 8-511:B.5.d.i, ii, iii: Groundwater quality and Water Levels** Earlier comments (Nov.13, 2020) submitted by John Barth for Save the Colorado and The Environmental Group discuss how Denver Water has omitted any analysis of impacts to residential groundwater wells per i, ii, and iii below. The following comment is in addition to earlier comments. i. Changes to aquifer recharge rates, groundwater levels, aquifer capacity including seepage losses ii. changes in capacity and function of wells within the impact area iii. Changes in quality of well water within impact area. The Moffat 1041 application does not address the impact of substantially higher reservoir levels - up to 142 feet - on water supply wells at nearby residences - particularly at the nearest residences on the north shore of Gross Reservoir. Per Appendices in the FEIS, Table H.7-1, the average change in reservoir elevations between the lowest level, typically seen in April, and the maximum level, typically seen in June or July, averages approximately 50 feet. **Reservoir levels, particularly as they vary each year, could have a substantial impact on the operation of residential wells. Denver Water needs to include annual April (minimum) and June (maximum) levels for each year of the model period.** Average reservoir levels do not provide enough information to determine how reservoir levels will vary each year – important information for residences that need to operate their residential groundwater wells. In addition, it is unclear if boat ramps extend far enough to be useable when reservoir levels are low, for instance under drought conditions. Annual minimum reservoir levels	Groundwater	Impacts to groundwater are discussed on page 115 to 117 of the 1041 Permit Application. This analysis was completed by the Corps for the Final EIS and concluded that seepage from the reservoir would likely increase, an increase in groundwater levels in the vicinity of Gross Reservoir, and groundwater discharge east of Gross Reservoir would likely rise slightly. Existing groundwater wells in the area would have an increase in available water due to the increased in storage at Gross Reservoir. The groundwater mounding effect would cause all eastward hydraulic gradients to decrease and thus decrease the eastward flow towards the reservoir. The Corps' Final EIS evaluated future reservoir fluctuations and concluded that they would be similar to existing conditions. Page 43 of the 1041 Permit Application discusses annual operations and the effect on reservoir levels. The length and lowest point of the boat ramp will be determined in the final FERC Recreation Management Plan. Denver Water is unsure of how future droughts may impact groundwater wells as the reservoir expansion will not increase or decrease the likelihood of drought. Additionally, the lowest elevation of the expanded reservoir will not change from today. Therefore, any impact lower water levels have on groundwater wells due to droughts is an existing condition and does change because of the GRE Project.

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	need to be used to design recreation facilities at the expanded reservoir. Extending the model period beyond 1947 to 1991 would provide valuable information on how the expanded Gross Reservoir would respond to more extensive droughts of the early 2000s. This information is important for residential wells as well as for design of recreation facilities.		
O-A-06	**Comment #5, pertaining to: Tree Removal Plan: (Appendix E-6 of the FERC Application) Land Stewardship LLC, February 2008). This plan needs to be completed.** A preliminary plan for tree removal was completed in 2008 by Land Stewardship LLC. In this report, the area that would be inundated by the expanded Gross Reservoir, that would be logged, is separated into Stand numbers based on types of trees, hillside slope (greater or less than 40 percent slope), access to existing roads, and anticipated methods of logging the trees. The acres, hillside slope compared to 40 % grade, number of "stems" or trees, and tonnage of material to be removed is noted in Table 2 of the report. This report compared various methods of slash/tree disposal including: • Air Curtain Destructors which entails burning slash in an efficient incinerator. One ton of slash would produce 48 to 80 pounds of ash for disposal in a landfill. • Grinding of whole trees which produces a large volume of chipped wood. A grinder can grind 22.5 tons per 20 minutes and would take 2,666 hours to grind slash from the project. They anticipate using several grinders but would then be limited by the ability to transport chipped wood from the site; anticipated to be 23 tons/truckload or a total of 2,174 loads. • Hauling timber which is less efficient than removing chipped wood and would require more truckloads. The western staging area would be located on Winiger Ridge at a helicopter pad site. Helicopters would be used to remove individual trees from hard to access areas and to remove logs from staging areas where ground based logging methods are employed. To reduce the number of temporary roads and volume of chipped wood, Land Stewardship also prepared an Alternative Tree Removal document that utilizes a slash bundler which wraps or bundles the upper "slash" portion of trees that would be placed in landings for transport to the helipad by helicopter. Here are some comments on the preliminary plan that need to be addressed in a final Tree Removal Plan: **1.** chipped wood should be delivered to a composting facility rather than placed in a landfill. Anaerobic degradation of wood in the landfill will produce methane. If composted, wood materials can be used as amendments to soils in the future. The report states, that as of 2008, a compost facility of sufficient size was not available to handle the volume of slash or chipped wood. Additional compost facilities may be currently available. **2.** It is assumed that logging roads will likely be installed to access trees for removal. Also, the report states that "portions of Forest Roads 359 and 68 would need to be	Tree Removal	Denver Water has worked with forestry experts since the 2008 report was completed and will be incorporating updated technologies into the final Tree Removal Plan. This plan will be provided to agency stakeholders in March 2021 for review. The following items will be included in that review: 1. Denver Water will investigate possible compost facilities for chipped wood material as well as other disposal methods. 2. The final Tree Removal Plan will include details on all road improvements necessary to perform the reservoir tree removal work. 3. The locations and quantity of helicopter pads and staging areas to be used for reservoir tree clearing operations will be identified in the final Tree Removal Plan. 4. The final Tree Removal Plan will include details and evaluations on all disposal methods to be used. 5. The final Tree Removal Plan will include a schedule of work for all reservoir tree removal and disposal activities. 6. The final Tree Removal Plan will include all necessary erosion control and revegetation methods to be used on site related to tree removal activities.

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	improved in order to haul the necessary equipment for logging, residue removal etc." The final Tree Removal Plan needs to provide details for improvement of FS 359 and 68 and for additional temporary roads. **3.** The preliminary Tree Removal plan fails to describe the number of helicopter trips that will be required both under the original and alternative plans to bring slash and logs to the helipad staging area. For instance, can helicopter deliveries keep up with removal/treatment activities. **4.** The final Tree Removal Plan needs to provide details of staging areas on both the east and west sides of Gross Reservoir including areas where tree debris are handled. **5.** The final Tree Removal Plan must finalize which slash/tree disposal techniques will be used. **6.** The final Tree Removal Plan must provide a schedule of operations over the entire tree removal period. **7.** The final Tree Removal Plan must also provide an erosion control plan for deforested and devegetated areas that lie below the full reservoir elevation that will be exposed when reservoir levels drop. Steep denuded slopes below the water line of the expanded Gross Reservoir would be more prone to erosion than prior to implementation of the project.		
O-A-07	**Comment #6, pertaining to: Traffic Impact Analysis (Stantec, September 17, 2020, Exhibit 4 of the Moffat 1041 Application): 8-511-J2. "The volume of traffic to be generated by the proposed development shall be compatible with the traffic handling characteristics of the interchange and the access road and existing, affected traffic roads." This plan needs to be finalized.** A total of 288 truckloads per week of cement and fly ash need to be delivered to the Gross Reservoir staging area on the east side of the dam via SH72 and Gross Dam Road. Deliveries will be made on four days per week (M, W, Th, S or F) over 8 hours a day; this means that 72 truckloads per day (9 per hour) with an interval between truckloads of 7 minutes. During peak construction times Stantec estimated that 15 truckloads of construction materials would be delivered each hour; this reduces the interval between truckloads to 4 minutes. Construction would take place over two years; 2025 and 2026. Tree removal would occur in 2026 and 2027 overlapping deliveries of construction materials in 2026. On the east side they estimate that 2 logging trucks would need to use the Gross Dam Road and SH72 per hour for a total of 17 trucks per hour on this road with an interval of every 3.5 minutes. Construction is expected to last from April through November. Trees would be removed from the west side of the reservoir via FS road 359, CR 68 to FS 359, to Lazy Z Road (CR97E), Magnolia Road (CR132) to SH119 (plugging into SH119 just south of Nederland) and exiting onto HWY 6 (in Clear Creek Canyon) and finally onto HWY 93 where trucks will travel either to the Republic Services landfill on HWY 93 or to Longmont with salvageable timber. Per the Stantec report, removal of trees and slash would take 36 truckloads per day for one week per month or 4 truckloads per hour during that time.	Traffic/Transportation	1. The final schedule and frequency of truck deliveries to site will be determined in the Traffic Management Plan. Please see response to comments B-3 and B-5 of Exhibit 19 – Referral Agency Comment and Response Table for more information. 2. There will be sufficient storage on site for all materials including enclosed storage for cement and fly ash. Thus, weather will not play a factor in storage and usage of fly ash or cement.

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	Some comments are: **1.** The Stantec report states that vehicles traveling behind trucks will be delayed 12 minutes on the Gross Dam Road (likely due to the difference in speed limits between trucks and passenger cars). With trucks arriving at the staging area every 3 to 4 minutes during the day, there is a high probability that vehicles will be delayed whenever they travel the Gross dam road whether they are traveling to or from the reservoir. Vehicles traveling behind trucks on the west side will be delayed by 25.5 minutes (for instance on Magnolia Road). Yet the traffic impact analysis states that construction traffic will not impact local traffic significantly. For people who live along these roads, this is a major imposition. **2.** Cement and fly ash need to be utilized shortly after delivery to the site. If it rains or snows, the materials will not be useable. Is there sufficient capacity in the concrete production plant and construction work on the dam to utilize the trucked in materials as they are delivered? Similarly, is there sufficient storage area at the staging areas to handle this many loads of cement and fly ash per day?		
O-A-08	**Comment #7, pertaining to: Noise; page 81 of EA**. The application states that "construction noise effects will be short-term - only 4.1 years of direct, moderate adverse effects. **Noise effects over 4 years will adversely affect local residents that do not live in the area to be part of a construction site.** "Denver water intends to use noise studies to work with community to develop measures that aim to monitor, minimize, and mitigate noise disturbance during construction to the extent reasonable and possible. DW is considering project noise goals and potential forms of restitution when construction activities exceed those goals at determined monitoring locations." **There are no details in this description. What are the project noise goals, what are the forms of restitution and where would the monitoring locations be installed?** Potentially all of the following could occur at the same time increasing noise levels: • the aggregate processing plant that will produce enough aggregate for the concrete production plant. • blasting at the quarry and during dam foundation excavation would occur once per day for over one year. • Burrow Haul trucks between the quarry and processing location • Tree Removal activities including noise from numerous helicopter trips, chainsaw, Grapple Skidder, Hydro-ax, cable yarding, grinding of slash and trees in one or more grinders, truck traffic to haul tree materials, and potentially incinerators for high efficiency burning of slash. • Truck trips to deliver cement and fly ash to east side of Gross Dam.	Noise	For the federal agencies' analyses of the GRE Project's effects on noise, please see section 5.14.1 of the Corps' Final EIS and section 5.1.10.2 of the FERC Supplemental EA for the GRE Project. Please also see section 3.1.4. of Attachment B to the Corps' Record of Decision, where the Corps responds in detail to comments regarding noise concerns from the GRE Project. As explained in those documents, engineering and administrative controls may include modifying the equipment or the work area to make it quieter, substituting existing equipment with quieter equipment, retrofitting existing equipment with mufflers, modifying backup alarm systems, shutting down noisy equipment when not needed, limiting work hours for certain construction activities and public outreach. For activities such as truck hauling, tree removal and quarry operations, measures to address noise will be incorporated into the appropriate plans required by FERC's Order. As noted, Denver Water will monitor noise levels throughout construction activities at various locations around the site. Denver Water will continue to update noise studies for onsite activities with an objective to lower site generated noise. The issues raised by the commenter will be considered when evaluating construction activities for noise generation. Denver Water will identify mitigation measures such as making equipment selections that reduce noise, using physical screening devices, banning truck engine brakes on transportation vehicles or requiring mufflers, minimizing the use of fueled generators on site, and using quieter backup alarms on equipment to reduce noise transmission to neighboring properties. Tree removal activities will be concentrated during the daylight hours for safety reasons. Some maintenance activities may occur during the night. As noted by the Corps, noise levels would be similar to other construction activities and are not expected to exceed relevant standards and guidelines.

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	Two reports are included in the 1041 application for the Moffat project, both authored by Behrens & Associates Inc. The 2014 report, included as Attachment E-9 to the Final FERC License Amendment Application Volume III, evaluates noise and vibration impacts at 6 locations caused by haul trucks along SH72 and Gross Dam Roads as well as vibration impacts of a test blast at a residence on the north shore and at the existing dam. The 2017 report evaluates noise impacts of blasting and construction activities at the dam site at 3 locations. Neither report evaluates noise issues associated with tree removal activities alone or in conjunction with other construction at the site. Table 4-1 of the Behrens & Associates In (2017) provides Non-Vehicular Boulder County noise standards for sources located in a residential area (Boulder County Noise Ordinance 1.01.050d): • 55 dBA from 7 am to 7 pm • 50 dBA from 7 pm to 7 am For construction sites this noise standard is raised to 80.0 dBA for continuous noise and 75 dBA for instantaneous noise levels such as for blasting (Tables 6-5 and 6-6). Additionally, the 2014 report, page 14, states that **the noise threshold would be exceeded if the "proposed project generates noise levels significantly greater than the existing ambient noise levels around the project site" - this threshold is set at 5 dBA**. The Behrens (2014) report measured ambient noise levels at six locations; two along SH72 and 4 locations along the Gross Dam Road - locations are shown on Figure 5-1 of the 2014 report. • Location 1: Highway 72 below turnoff to Gross Dam Road, 82 feet from road • Location 2: Highway 72 above turnoff to Gross Dam Road, 30 feet from road • Location 3: Lichen Lane off Gross Dam Road; 360 feet away • Location 4: On Gross Dam Road at Crescent park Drive, 15 feet away • Location 5: On Gross Dam Road at Chute Road, 82 feet away • Location 6: 18 Juniper Heights Road; 15 feet off of Gross Dam Road Ambient noise levels at these locations are compared to anticipated noise levels from haul trucks taking cement and fly ash to the staging area at the dam site. Table 1: Ambient Versus Haul Road Noise from Behrans (2014) | Location | Daytime Ambient Noise Level (dBA) | Haul Truck Noise Level (dBA) | Difference in Noise Levels (dBA) | | --- | --- | --- | --- | | 1 | 57.9 | 61.6 | 3.7 | | 2 | 65.4 | 68.8 | 3.4 | | 3 | 46.3 | 55.3 | 8.4 | | 4 | 62.3 | 67.4 | 5.1 |		

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5	56.0	64.4	8.4
6	56.6	63.1	6.5

At four of the six locations, the increase of 5 dBA threshold was exceeded in this analysis. Further modeling brought the average of all 6 locations to 5 dBA and it was stated that the average was good enough. This will not mitigate noise impacts at 4 of the 6 locations evaluated.

Denver Water's results show that haul trucks along the Gross Dam Road will raise noise levels to greater than the allowable threshold of 5 dBA above ambient conditions at several locations. Residents close enough to Gross Dam Road would routinely be affected by truck noise during the daytime.

The Behrens (2017) report evaluates how construction noise at the processing and blasting site will impact three locations: Receptor 1 at 370 Lakeshore Drive on the north shore and 0.65 miles away from the staging area at the dam, Receptor 2 at Miramonte Road 0.4 miles away from Osprey point, and Receptor 3, Coal Creek Canyon Road 1.18 miles from Osprey Point. Ambient noise data show that background noise ranged from 30 to 55 dBA in the February 22 to March 1 test period (Table 5-1).

Noises from several construction activities were combined in this assessment. The resultant construction noise level at each receptor was between 30 and 50 dBA all below construction standards of 80.0 dBA. Blasting noises ranged from 34 to 65 dBA, again below the instantaneous limit of 75 dBA. However, Receptor 2 in this study is located close to Osprey Point and to the haul route between Osprey point and the processing area for aggregate. Table 2 shows how this location would be impacted the most by construction activity at the blasting and dam site with the noise threshold routinely exceeded in all of the first three years of construction.

Table 2: Ambient Versus Construction Noise at Receptor 2 : Behrens (2017)				
Ambient Daytime Noise (dBA)	Osprey Quarry With Haul Trucks (dBA)	Change in Noise Levels (dBA)	Osprey Quarry With Conveyor (dBA)	Change in Noise Levels (dBA)
Year 1 and 2 of Construction Activities				
41.6	47.0	5.4	48.9	7.3
Year 3 of Construction Activities				
41.6	47.2	5.6	49.0	7.4
Blasting Alone				
41.6	Noise of Blast at Receptor 2 = 64.4 dBA		Change of 22.8 dBA	

Residents in areas surrounding the Gross Dam construction site are accustomed to natural outdoor noises. Additional noise caused by construction activity, even if those noises would potentially be below standards for construction activities, would deleteriously alter the environment for residents at Receptors 1 through 3 but

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	particularly and routinely for residents on Miramonte Road as this area is closest to the Osprey Point quarry area and the construction haul route. In both Behrens reports, noise from either delivery trucks on the Gross Dam road or construction/blasting noise were addressed. Combined noise levels for both of these activities were not addressed. In addition, noise from logging operations was not included in either report. Logging has the potential to affect residents on both the north and south sides of Gross Reservoir since trees and brush need to be removed from the entire shoreline of the new reservoir bringing these activities close to residences. Helicopter and grinder noises are certainly noticeable even if they do not exceed thresholds or noise standards. **How will these noises, that impact nearby neighbors, be addressed and mitigated.**		
O-A-09	**Comment #8, pertaining to: Cumulative Effects: page 87 of EA**; "Denver Water would monitor water quality and aquatic biota in compliance with WQC conditions, which would reduce effects of these resources." then they list all the plans they are going to produce which will reduce cumulative effects on resources. The plans are not done and there is no discussion of how success of the plans will be evaluated; i.e. what monitoring results will be a threshold for changing operations at the construction site. These need to be clearly defined. The following is a list of Plans that Denver Water needs to complete before Boulder County can issue a 1041 permit for the Moffat Project. Noted are Boulder County's Land Use Code associated with LUC 8-511. Also noted are the document, primarily the FERC Environmental Assessment (EA), where each required plan was listed. Most of the plans have not been included in the 1041 Application for the Moffat Project. Some such as the Traffic Management Plan, the Tree Removal Plan, and a Quarry Operation (or Noise) Plan are drafted but need to be finalized. These plans are discussed in more detail above. Many of these plans were included in a list provided by STC in their preliminary comments on the completeness of Denver Water's 1041 permit application for the Moffat project. 1. South Boulder Creek Channel Stability and Monitoring Plan - B.5.c.iv, ix, x. 2. DO and Temperature Monitoring Plan - B.5.c.i, ix. B.5.f.all subheadings: need tiered release structures 3. Stormwater Management Plan - B.5.c.i, iv, v, vii 4. Erosion Control and Reclamation Plan - B.5.c.i, iv, v, vii on FS lands 5. Quarry Reclamation Plan - B.5.c.i, iv, v, vii - for osprey point quarry 6. Reclamation and Revegetation Seed Mixes and Mulch Materials - B.5.c.iv, v, vii pg 20 EA 7. Erosion and Sediment Control Plan - B.5.c.iv, v,vii 8. Pit Development and Reclamation Plan - B.5.c.iv, v, vii for Final EIS quarry on FS lands 9. Bank Stability Monitoring Plan - B.5.c.iii,iv,v,vi, vii 10. Quarry Operation Plan - I.5. will not cause nuisance factors such as excessive noise or obnoxious odors at Osprey Point quarry - discussed further in STC comments.	Cumulative Effects	Please see response to comment G-6 of Exhibit 19 – Referral Agency Comment and Response Table for more information. Success monitoring will be detailed in specific plans as required by FERC and/or the regulation appropriate to the subject matter. Submittal of FERC-ordered plans will be in accordance with the FERC Order (issued July 16, 2020), and will be provided for review by agencies as directed in the Order. A schedule for Denver Water delivery of the FERC-ordered plans is provided in Exhibit 22. Other plans required by Boulder County Land Use Code will be prepared and submitted in coordination with Boulder County.

O-A	**Save the Colorado and The Environmental Group** **Date: 12-16-2020**		
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	11. Tree Removal Plan: I 1,2,4,5. by FERC order 423; one year after the order a draft to Boulder county of preliminary concept- will be expanded for a final plan. Discussed further in STC comments. 12. Aquatic Nuisance Invasive Species Monitoring Plan 13. Recreation Management Plan (Article 416) page 16 of the EA; May 14, 2004. 14. Invasive and noxious Weed species Management Plan - page 17 of EA 15. Winter Ridge Recreation Management Plan + Monitoring - page 17 & 20 of EA 16. Fire Management and Response Plan - page 21 of EA 17. Special Status Plants Relocation Plan - special status plants on FS land page 21 of EA; A list of special status plants for Boulder county has been compiled in Exhibit 18 but a relocation plan needs to be completed. 18. Visual Resources Management Plan - page 22 of EA 19. Traffic Management Plan - F1,2,3 per order 425; page 22 of EA - manage construction traffic; required road maintenance and improvements, road damage due to construction activities, ensuring community traffic patterns are not disrupted. Will provide traffic management plan to Boulder county for review and comment within 1 year of FERC order. Discussed further in STC comments. 20. Historic Properties Management Plan - manage and protect cultural resources. page 23 EA. 21. Road Maintenance Plan: EA page 77; requirements for road work on FS lands. 22. Fugitive Dust Control Plan: EA page 84 to include measures to reduce fugitive dust from construction activities. 23. Public Safety and Law Enforcement Plan: revise old plan as needed for after construction is completed for recreation at the new reservoir. Road Management Plan; page 91 EA.		

O-B	**The Environmental Group and Save the Colorado** **Date: 12-11-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-B-1	Back on Nov. 13, our attorney John Barth, sent the County a comment letter along with 27 exhibits (see below). We asked that we get a confirmed receipt, but we never got one.	Attachments	Denver Water acknowledges this comment, but response is under the responsibility of the County.

O-C	**Boulder Flycasters Chapter of Colorado Trout Unlimited** **Date: 12-09-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-C-1	Attached please find comments from Trout Unlimited in support of the Boulder County 1041 application review process for the Gross Reservoir Dam Expansion Proposal. TU_BFC_GrossDamExpan_1041Comments.pdf	Attachments	Thank you for your comments.
O-C-2	**RE: Gross Reservoir Dam Expansion Proposal 1041 Application Review Process** **TO: Boulder County Commissioners and Staff** This letter provides comments from Trout Unlimited in support of the Boulder County 1041 application review process for the Gross Reservoir Dam Expansion Proposal. Trout Unlimited participated in providing comments on previous federal and state permitting actions with several positive outcomes, as discussed below. The 1041 application review process will allow Boulder County to consider the potential project impacts on Boulder County, identify actions needed to mitigate damage and disruption, AND improve the South Boulder Creek watershed. Trout Unlimited's interest and expertise is related to cold water fisheries and watershed restoration. So, our 1041 application review comments are limited to actions that could positively impact the South Boulder Creek watershed if the application receives Boulder County approval.	General Support	Thank you for your comments.
O-C-3	Under the current federal and state permitting, and negotiated compacts between Denver Water and Grand County, as well as between Denver Water, Boulder and Lafayette, there are significant environmental benefits, including some benefits to Boulder County. The most important of which is the resulting 5,000 AF Environmental Pool to provide in-stream minimum flows for South Boulder Creek during our dry winter months. South Boulder Creek is desperately in need of more flow to support watershed health, preserve native species and support recreation. Denver Water has committed between $4m and $6m to this part of the project. This important component of the expansion should, we believe, be weighed as a positive in evaluating the 1041 application.	Environmental Benefits	Thank you for your comment and support of the 5,000 AF Environmental Pool.
O-C-4	Beyond the obvious needs to mitigate transportation, environmental and life style disruptions and damage, there is an opportunity to negotiate for more complete watershed mitigation and enhancement. The Environmental Pool is a critical element of this. Denver Water's other environmental commitments to date have focused primarily (and understandably) on addressing impacts in the basin of origin. The 1041 review process now will allow Boulder County to address the South Boulder Creek watershed as well. The environmental benefits negotiated with Denver Water by Trout Unlimited are critical to the future health of the basin of origin. Fraser Valley residents and Grand County visitors are, and will continue to, benefit from these negotiations. A large percent of Grand County visitors and second homeowners are Boulder County residents. Proper watershed mitigation through the 1041 process can benefit the residents of Boulder County and ensure hard-won environmental benefits continue to accrue in Grand County. Denver Water has helped and is continuing to support local restoration and mitigation for specific projects. This includes a Trout Unlimited project, led by the Boulder Flycasters Chapter of Trout Unlimited, to develop a State funded Stream Management Plan for lower South Boulder Creek, as well as contributing more than 50% of the cost of building the Environmental Pool storage capability into the expansion. As part of the Army Corps of	Environmental Mitigation	Thank you for your comments. Denver Water would be interested in discussing ideas to address South Boulder Creek watershed concerns and collaborating with other parties to identify and implement enhancement projects in the South Boulder Creek watershed.

O-C	**Boulder Flycasters Chapter of Colorado Trout Unlimited** **Date: 12-09-2020**		
Comment ID	**Comment**	**Category**	**Response**
	Engineers 404 permit mitigation requirements Denver Water funded $715,000 for mitigation on lower South Boulder Creek in City of Boulder Open Space. Denver Water will also be required to monitor and remediate associated environmental degradation resulting from the expansion. We see this as an important step forward in having more scientific data to support long term watershed improvement. Other than the Environmental Pool commitment, Denver Water's remaining mitigation commitments do not physically improve the South Boulder Creek watershed. Part of the requirements for approving the 1041 could include more collaborative investment and efforts to improve the watershed, consistent with Boulder County's overall goals and objectives.		
O-C-5	Examples of opportunities for collaborative improvement might include: • Stream and riparian habitat improvements, including native and listed species • Fish stocking programs, including native and listed species • Reservoir access improvements and on-going trail maintenance • Coordination with other water right holders on cooperative operations to benefit stream health Additionally, there are concerns that the dam expansion will negatively impact the existing downstream fishery due to potentially lower water temperatures at certain times of the year. The reaches known locally as "Kayak Run" and "Walker Ranch" are the only reasonable public fishing access in the canyon. In an effort to ensure longevity of, and potentially improve, the fishery we suggest Denver Water also commit to collaborative efforts with fisheries biologists and watershed improvement organizations to look at the potential for dam release and other operational changes to benefit the watershed. Potential objectives might be to help ensure necessary in-stream flows during low water periods and to identify other ways to ensure water conditions are suitable for sustainable trout habitat. Trout Unlimited, through our local Boulder Flycasters Trout Unlimited Chapter and Colorado Trout Unlimited, are ready to help develop a working list of potential improvement actions through our ongoing Stream Management Plan development. We would also enthusiastically help Boulder County understand and perhaps adopt a program similar to "Learning by Doing," a promising partnership among Denver Water, Grand County, Trout Unlimited, Colorado Parks & Wildlife and other watershed improvement organizations working to improve the Fraser River watershed.	Environmental Mitigation	Thank you for your comments. Denver Water is interested in discussing the idea of a South Boulder Creek Learning By Doing initiative with additional stakeholders such as Boulder County. Like the Learning By Doing collaborative group in Grand County, a Learning By Doing effort in Boulder County could bring multiple parties together to pool resources and identify projects that would benefit the aquatic environment in South Boulder Creek. Denver Water met with members of Boulder Flycasters on a virtual call on January 12, 2021, to discuss concepts for the development and implementation of a Learning By Doing approach on South Boulder Creek. Boulder Flycasters shared that they have been reaching out to partners to generate interest in the concept. Denver Water is willing to look at ways to manage water releases from Gross Reservoir to benefit the aquatic environment. This would likely fit into a Learning By Doing effort for South Boulder Creek in Boulder County and require multiple water users.
O-C-6	Learning by Doing is a collaborative, consensus-based effort for adaptive management of mitigation and enhancement efforts in Grand County. Denver Water, working with its partners, looks for opportunities to use its operational flexibility to benefit stream health, as well as pledging funds that can then be leveraged through cash and in-kind support from other partners. An active monitoring program helps track results and allow for adaptation of strategies to advance efforts that are working and adjust those that are not working.	Environmental Mitigation	Thank you for your comments. Denver Water would be interested in discussing the idea of a South Boulder Creek Learning By Doing initiative with additional stakeholders such as Boulder County.

O-C	**Boulder Flycasters Chapter of Colorado Trout Unlimited** **Date: 12-09-2020**		
Comment ID	**Comment**	**Category**	**Response**
	We are ready to work with Boulder County on a similar initiative. There are likely other local watershed improvement organizations also ready to help. In closing, we ask Boulder County to elevate watershed improvement as an important area for consideration in the review process. Trout Unlimited is offering to work collaboratively with Boulder County, and other stakeholders, to define an adaptive watershed improvement process and program components as part of the 1041 application approval review.		

O-D	**Coal Creek Canyon Parks and Recreation District** **Date: 12-08-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-D-1	My name is Jeremy King and I am the current President of the Coal Creek Canyon Parks and Recreation District. I am writing to inquire more information on the Gross Damn Reservoir Project and inquire about the possible benefits to our community and organization. Please give me a call at your earliest convenience.	Community Impacts	Thank you for your comment. Denver Water would be interested in discussing the possible benefits to your organization. We had previously met with your organization in June 2016. We will reach out to schedule a meeting to further this discussion.

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-E-1	Members of the local community groups will be significantly and adversely affected by the proposed construction and operation of the dam and reservoir expansion. These adverse impacts include noise, dust, heavy equipment operations, traffic, air pollution, loss of property, loss of enjoyment of property, seismic and/or vibrational disturbance to property and well being, as well as other impacts. The purpose of the County's 1041 regulations is to: • "protect the beauty of the landscape • regulate projects that would otherwise cause excessive noise, water, and/or air pollution, or which would otherwise degrade or threaten existing environmental quality within the County • avoid direct conflict with adopted County land use plans • protect the public health, safety, and welfare and the environment. Boulder County Land Use Code ("Code" or "LUC") § 8-202 (B). As will be discussed herein and in our potential future comments, the significant adverse impacts of Denver Water's expansion project cannot be mitigated. As such, Boulder County must ultimately deny Denver Water's 1041 application and prevent the construction and operation of the most destructive project ever proposed in Boulder County. Denver Water's September 21, 2020 cover letter to the 1041 application requests "expeditious review and consideration" of the application. Denver Water's request should be denied because the Code does not provide any provision authorizing such a request. Further, any delay in the 1041 process has been a direct result of Denver Water's own actions. More specifically, Denver Water filed an applicability petition with the County on October 12, 2018 arguing that it was not subject to the 1041 regulations. Boulder County disagreed finding that Denver Water must submit a 1041 application to the County. Denver Water then proceeded to litigate Boulder County's finding; first administratively, then in Boulder County District Court, and ultimately in the Colorado Court of Appeals. Denver Water failed to prevail in each stage of its litigation. Ultimately, Denver Water voluntarily dismissed its appeal on July 29, 2020. Denver Water's own litigious actions resulted in a 21-month delay in processing a 1041 permit application. Given its own history of litigation and delay, the County should not expedite a 1041 process for one of the largest and most destructive projects in the County's history. Instead, the County should undertake a careful, comprehensive, and cautious review of the application that ensures robust public input at every stage of the process. Moreover, for the reasons stated below, Denver Water's 1041 is significantly incomplete. Section 8-507 of the Code states, "[b]efore any request for County approval under these regulations may be processed, a complete application…must be filed with the and Use Department." Further, the County will not commence the public hearing process until a complete application is submitted. LUC § 8-509.B. Because Denver Water's 1041 application is incomplete, the Director must issue a written finding of incompleteness and hold the application in abeyance until all deficiencies have been remedied and made available for public review of a new completeness determination on the amended application.	Environmental Impacts	Denver Water disagrees that its 1041 Permit Application is incomplete and does not meet the approval criteria. Please see Denver Water's responses to Save the Colorado and The Environmental Group's specific assertions below, as well Denver Water's other comment responses. The delay in Boulder County's processing of Denver Water's 1041 Permit Application is not a "self-made" problem. Denver Water attempted to submit a 1041 Permit Application to Boulder County in July 2019, one full year before receipt of the FERC Order. The County refused to process the application pending the outcome of Denver Water's challenge to the County's exemption determination. Following receipt of the FERC Order authorizing the GRE Project, which contains specific deadlines for the start and completion of Project construction, Denver Water felt it had no choice but to withdraw its challenge so that Boulder County would begin to process the 1041 Permit Application. Expeditious review of the 1041 Permit Application is now necessary for Denver Water's compliance with the construction deadlines in the FERC Order.

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
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	Section 8-302 of the Code also states, "no person shall engage in any development in such area, and no activity shall be conducted, until…a permit has been issued…" For the reasons stated below, Denver Water is in violation of Section 8-302. As outlined in the attached affidavits, Denver Water has undertaken development and activities in furtherance of the project before a 1041 permit has been issued. We request that the Director make a written finding that Denver Water's has violated the moratorium provision of Section 8-302 of the Code. We also request that the Director issue a "stop work" order to Denver Water and decline to process any 1041 application until such time that Denver Water has restored to their original condition all development and activities it has undertaken without a 1041 permit. Our additional preliminary comments on Denver Water's current application, and its incompleteness, are provided below.		
O-E-2	**1. Denver Water is in violation of the moratorium provision of the Code.** Section 8-302 of the Code also states, "no person shall engage in any development in such area, and no activity shall be conducted, until…a permit has been issued…" As stated in the attached affidavit of Tim Guenthner, Denver Water has undertaken construction or activity activities related to the project. Exhibit 1 hereto. These construction activities include: • constructing a staging area on the south end of the dam. • Widening of the road from Osprey Point to the south end of the dam and on Gross Dam Road. • Tree removal • Installation of a satellite internet connection ground station. Denver Water's construction and/or activities have changed the basic character of the land. Denver Water did not possess a 1041 permit at the time it undertook this construction and/or activity. As such, Denver Water is in violation of the Section 8-302 moratorium in the Land Use Code. We request that the Director issue a "stop work" order to Denver Water and decline to process any 1041 application until such time that Denver Water has restored to their original condition all development and activities it has undertaken without a 1041 permit. **2. Denver Water's waiver request must be denied.** Claiming that the term "major facility of a public utility" does not apply to its facility, Denver Water is requesting a waiver from the following sections of the Code: §8-308.A.4.; 8-507.D.3.; and, 8-511.E. Each of these sections of the Code impose requirements for "major facilities of a public utility." The term "major facility of a public utility" is defined in the Code to include "transmission lines, power plants, and substations …" LUC § 8-210.AG. Exhibit 5e to Denver Water's 1041 application is the FERC Supplemental EA. In Exhibit 5e, Denver Water describes its facility as including: "…a powerhouse located 440 feet downstream of the valve	Compliance with Boulder County Requirements	1. Mr. Guenthner is entirely mistaken. Denver Water has not undertaken any unpermitted construction activities related to the GRE Project and no "stop work" order is warranted. Please see the attached declaration of Andy Skinner, Gross Dam Hydro Operations Supervisor, refuting Mr. Guenthner's allegations (Exhibit 32 to this response to comments submittal). 2. As explained in Denver Water's 1041 Permit Application, Boulder County staff instructed Denver Water to request a waiver of submission requirements for any provisions of the Boulder County Code Article 8 that Boulder County staff highlighted during the pre-application meeting but that Denver Water believes do not apply to the GRE Project. The code requirements applicable to "site selection and construction of major facilities of a public utility" do not apply to the GRE Project, which involves the expansion of an *existing* domestic water system under 8-308.A.2. Although the definition of "major facility of a public utility" includes transmission lines, power plants, and substations," 8-210.AG, the code goes on to explain that a permit is required only for new electric transmission lines or substations that are 115,000 volts or greater or power plants generating 50 megawatts or more, 8-403.C-E. The portions of the FERC Supplemental EA quoted by Save the Colorado show that the generators and transmission lines for the hydroelectric equipment involved in the GRE Project fall well below those thresholds. Additionally, those hydroelectric components of the GRE Project cannot serve as the basis for Boulder County's permitting authority because hydroelectric licensing and regulation is within FERC's exclusive jurisdiction under the Federal Power Act. With respect to Save the Colorado's request that Boulder County decline to process Denver Water's 1041 Permit Application, Denver Water notes that any further delay to the processing of its 1041 Permit Application would jeopardize Denver Water's ability to comply with the FERC Order, which requires construction to begin no later than July 16, 2022 and finish no later than July 16, 2027.

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	house containing two 3,799-kilowatt (kW) horizontal Francis turbines connected to two 4,050-kW synchronous generators for a total installed capacity of 7,598 kW; (5) a 580-foot-long, 60-inch-diameter buried penstock; (6) a concrete tailrace structure, integral with the powerhouse outlet works building; (7) a switchyard containing project transformers; (8) a 1-mile-long, 25-kilovolt project transmission line; and (9) appurtenant facilities…" 1041 Application, Exhibit 5e, p. 2. By Denver Water's own admission, its facility includes ""transmission lines, power plants, and substations …" as defined in LUC § 8-210.AG. Further, Denver Water is a "public utility" as defined by LUC § 8-210.AS. As such, Denver Water's waiver request must be denied. The local community groups request that the County issue a written finding denying Denver Water's waiver request. The County staff has correctly found that provisions of the Code apply to this proposed project. Given its litigious history, Denver Water may attempt to appeal the County's waiver determination under Section 8-501(F) of the Code. Therefore, we ask that the County decline to process Denver Water's 1041 application until the 30-day appeal period has expired. If Denver Water does appeal the Director's waiver determination, we likewise request that the County decline to process Denver Water's application until the appeals process is complete, including any interlocutory judicial review Denver Water may seek. If Denver Water's waiver request is ultimately denied as to any provision of the Code, we request that the County find that Denver Water's 1041 application is incomplete until such time as Denver Water complies with all 1041 application requirements associated with its denied waiver request and that the County decline to process the 1041 application until the application is determined complete by the County.		
O-E-3	**3. Denver Water's 1041 application is incomplete.** **a. Denver Water's "capacity" and "need" analyses are incomplete.** Boulder County's 1041 regulations impose additional standards on "major facilities of a public utility," which includes Denver Water's Gross Reservoir expansion. LUC §8-511. Among those additional standards is the requirement to show that "[e]xisting facilities and associated systems servicing the area must be at or near operational capacity." LUC §8-511.E.3. For purposes of its 1041 application, Denver Water must show that its entire water system is at or near operational capacity. As outlined in the expert report from Peter Mayer, P.E. of Water DM dated November 9, 2020 and submitted on behalf of PLAN-Boulder County, Denver Water's 1041 application is incomplete because it has completely failed to justify the need for the dam and reservoir expansion. Exhibit 2 hereto (Mayer Report).[2] As noted in Mr. Mayer's expert report, Denver Water's 1041 application relies on an Integrated Water Resource Plan from 2002 (updated in 2004 and 2012) to justify that its existing facilities and associated systems servicing the area are at or near operational capacity. As Mr. Mayer notes: • the water demands considered by the Corps and included in Denver's Water's analysis and projections have failed to materialize. p. 2.;	Incomplete Application	Please see Denver Water's response to comment O-E-2 concerning the inapplicability of the code standards for "site selection and construction of major facilities of a public utility." Additionally, even if those standards did apply to the GRE Project, the purpose and need analysis detailed in Chapter 1 and Appendix A of the Final EIS shows why the GRE Project meets the operational capacity requirements at section 8-511.E.3 of the code. Please see Denver Water's response to comment O-K-5 concerning Mr. Mayer's letter analyzing the water demand projections for the GRE Project.

<table>
<tr><td>O-E</td><td colspan="3">The Environmental Group and Save the Colorado
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<tr><td>Comment ID</td><td>Comment</td><td>Category</td><td>Response</td></tr>
<tr><td></td><td>• Denver Water’s analysis is an outdated and highly inaccurate demand forecast. p. 2;
• Denver Water’s analysis significantly overstates future demand and is no longer a reasonable representation of likely future demand. P. 2;
• The need for expanding the Gross Reservoir no longer exists. p.2;
• The existing Gross Reservoir and capacity and reliability it already provides along Denver Water’s large integrated system appears sufficient to meet future build-out demand. p. 2;
Exhibit 2 hereto (Mayer Report).
In summary, Denver Water’s 1041 application is incomplete because it fails to present current and accurate information that the “[e]xisting facilities and associated systems servicing the area must be at or near operational capacity” as required by LUC §8-511.E.3.</td><td></td><td></td></tr>
<tr><td>O-E-4</td><td>In addition Denver Water’s application does not comply with LUC §, 8-507.D.7.a. because it includes conflicting information on the “need” for the project. 3 The need for the Moffat project is substantially over-estimated in the 1041 permit application as shown in the IRP, Exhibit 2 of the 1041 permit Figure III-4. The IRP demand forecast was produced in 2002. The Corps updated the forecast in 2010 for the Moffat FEIS.4 Per page 44 of the IRP, “Staff plans a routine review of demand forecast, making necessary adjustments at least every 5 years in the future.”
If the above statement is correct then there should be forecast revisions in 2007, 2012, and 2017. Water use by Denver Water has declined since 2002, not increased yet the demand forecast has not been revised to reflect these declines.5 Current trends in Denver Water’s actual water use show that Denver Water does not need the additional firm yield to adequately serve its customer base. Below are graphic representations of Denver Water’s inaccurate projections of water “need” compared to the actual reductions of water demand over time:
Specifically, water use in 2017, 2018, and 2019 are included in this update (See Table 1).
Table 1: Update of Actual Water Use by Denver Water Customers
<table><tr><th>Year</th><th>Treated Water (AF)</th><th>Non-Potable Water (AF)</th><th>Total Water (AF)</th><th>Non-Revenue Water (%)</th><th>Gallons Per Capita Per Day</th></tr><tr><td>2017</td><td>195,822</td><td>34,341</td><td>230,162</td><td>2.18</td><td>137</td></tr><tr><td>2018</td><td>206,074</td><td>33,215</td><td>239,289</td><td>2.18</td><td>141</td></tr><tr><td>2019</td><td>198,826</td><td>31,222</td><td>230,048</td><td>4.25</td><td>137</td></tr></table>Sources: Comprehensive Annual Financial Reports for Denver Water, 2017, 2018, and 2019. Non Potable water amounts found on pages III---21 for 2018 and 2019 and on page III---20 in the 2019 annual report.
These data are portrayed graphically in Figures 1 and 2 below.</td><td>Purpose and Need</td><td>Please see Denver Water’s responses to comments G-14 of Exhibit 19 – Referral Agency Comment and Response Table, O-K-5, and Public Individual Issue #20 (at the end of this table) for responses concerning the purpose and need statement and water demand projections for the GRE Project. As explained in more detail there, the demand projections were updated in 2012 with the most recently available demographic and socioeconomic information, and the Corps confirmed in its 2017 Record of Decision that the analyses remained accurate and reliable. The reductions in water use noted by Save the Colorado are consistent with the accelerated water conservation goals that Denver Water committed to implement as part of the GRE Project and that the Corps incorporated into its demand projections. The Corps’ analysis showed that, despite the reductions in water use resulting from Denver Water’s accelerated conservation plan, Denver Water still needs an additional 18,000 AF/yr of new firm yield.
Save the Colorado’s comment quotes Denver Water’s 2002 IRP regarding the lack of reliable water supply to the Moffat Water Treatment Plant. This quote does not undercut but rather supports the need for the GRE Project. Chapter 1 of the Final EIS for the GRE Project specifically identifies and explains that need, which has always been a central purpose for pursuing the GRE Project. See Denver Water’s response to comment O-K-5 for additional details.
Save the Colorado suggests that a “simple solution” to the system imbalance problem would be for Denver Water to “bring raw water supplies from the south to the north system for treatment at the Moffat Water Treatment Facility.” As part of the NEPA process, the Corps, together with the FERC as a cooperating agency, evaluated numerous alternatives that involved bringing water from the South System to the North System for use at the Moffat Water Treatment Plant. All such alternatives were eliminated because they would not address the reliability, vulnerability, and flexibility components of the purpose and need statement for the GRE Project.
If Gross Reservoir empties, an interconnect requires the unimpeded operation of Denver Water’s South System. Loss of operation of a portion of the South System could exacerbate the water supply reliability problem and possibly cause an interruption of</td></tr>
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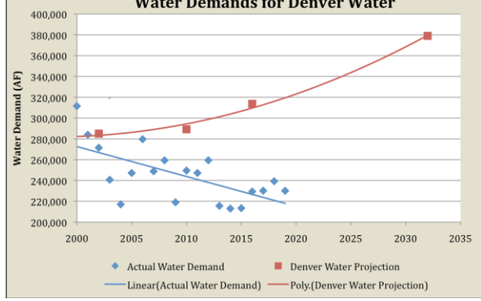
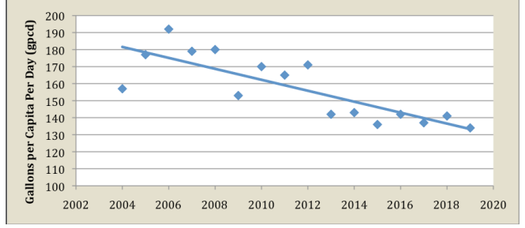
	Figure 1: Comparison of Actual With FEIS Projected Water Demands for Denver Water  **Figure 2: Gallons Per Capita Per Day Water Demand: Denver Water Treated Water Customers**  Note that the total water use is well below that projected for 2016 with conservation – 313,690 AF (shown in Table 3 of the earlier report). Also, gallons per capita per day (gpcd) for treated water use remains low at 134 in 2019. GPCD is combined with estimates of population growth to determine projected water demands. The following quote from the IRP page 52 also undercuts Denver Water's statement of "need" for the reservoir and dam expansion: "Denver Water will not be able to reliably meet demands in the north system during some dry periods due to water availability problems at the Moffat Water Treatment Plant. The cause of this problem is not lack of overall water supply available to Denver Water's system during dry periods but an unequal distribution of available water. That is, Denver Water currently has adequate water in its supply system but not enough is available for treatment at the Moffat plant." This statement in the IRP relates to the 1041 permit requirement under LUC §§ 8-507.D.b.ix.A and B. The Moffat project is certainly not the Least Environmentally Damaging Project Alternative (LEDPA) since a simple solution to the north/south imbalance would be to bring raw water supplies from the south to the north system for treatment at the Moffat Water Treatment Facility.		service to customers if water cannot be delivered via the interconnect. The lower in the South Platte River system the interconnect is located, the more vulnerable and potentially less reliable the Denver Water system is due to unplanned outages, including natural and manmade disasters. If an interconnect was located downstream of several of Denver Water's critical South System facilities, including Roberts Tunnel, Dillon Reservoir, Eleven Mile Reservoir, Cheesman Reservoir, Antero Reservoir, and Strontia Springs Reservoir, Denver Water's system would remain vulnerable to unplanned outages. Loss of operation to these South Platte River facilities could affect the ability to deliver water to a downstream interconnect. Additionally, the Corps and FERC considered various alternatives (Alternatives 2, 3, 4, 5, 10c, 10d, 10e, and 11) that used the South Platte Basin as a component of the solution. These alternatives were screened out due to the high cost of delivery to the Moffat Collection System (Screen 1C) or due to environmental impacts (Screen 2). See Chapter 2 and Appendix B of the Corps' Final EIS and the 2007 Alternatives Screening Report (Exhibit 25 to this response to comments submittal) for more information.

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O-E-5	**b. Denver Water has not submitted a CIP or master plan.** The Land Use Code requires a 1041 applicant to submit a "capital improvements plan, facilities master plan, or other acceptable master planning document." LUC §§ 8- 501.D. and 8-507.D.7. The purpose of this requirement is to "avoid piecemeal analysis of applications, and to allow for a comprehensive consideration of the cumulative impacts of development under these Regulations." LUC § 8-501.D. The undersigned have been unable to locate Denver Water's CIP or master plan for the Moffat Dam, Gross Reservoir, and related facilities. The County should find that Denver Water's 1041 application is incomplete for failure to submit the necessary future planning documents. Such documents are important for the County and the public to understand whether Denver Water has any future plans for development of the site. We request that you require Denver Water to submit all current CIPs and/or master plans through the entire life of the dam and reservoir to understand whether Denver Water has any future undisclosed development plans for the facilities and whether it is proceeding in a piecemeal fashion.	Incomplete Application	Denver Water attached all available plans for the expansion of Gross Dam and Reservoir to its 1041 Permit Application. See, particularly, Exhibits 2 and 5. Denver Water does not have a Gross Reservoir specific Capital Improvement Plan and has no further undisclosed plans for the expansion of Gross Dam or Reservoir.
O-E-6	**c. Denver Water has not analyzed impacts to all surface waters affected.** Sections 8-507.D.7.b.ii.B and C of the Land Use Code requires Denver water to map and describe "all surface waters, including applicable state water quality standards, to be affected by the project." Save the Colorado previously submitted comments identifying deficiencies with assessment of aquatic resources impacted by the project. Exhibit 10 hereto (Woodling Aquatic Resource Assessment). Save the Colorado has also submitted comments on the draft 401 Certification identifying deficiencies in both the South Boulder Creek and West Slope watersheds. Exhibit 11 hereto. The deficiencies identified in both the Woodling Report and 401 Certification comment letter are incorporated herein by reference. Further, the 1041 application does not discuss in detail source waters on the western slope in the Fraser and Williams Fork basins. It does not adequately describe immediate and long-term impact and net effects on these source water streams. Except for providing a map of the western slope watersheds that lie above the Moffat Collection System, discussions in the 1041 permit focus primarily on anticipated impacts or benefits to South Boulder Creek on the eastern slope. The 1041 application is also deficient in its failure to analyze impacts to wetlands and related resources in Grand County. Save the Colorado previously submitted comments identifying deficiencies with Denver Water's aquatic species assessment. *See*, Exhibit 12 hereto (Elliot aquatic resource report). The deficiencies identified in the Elliot report are included herein by reference. The Moffat project would increase storage capacity of Gross Reservoir by 3 times. Source waters in the Fraser and Williams Fork have already been depleted from pre-Moffat flows by between 65 and 80 percent in the irrigation season between May and July, the primary period of additional diversions for the expanded reservoir. The impact of this additional storage on source streams would be substantial. Withdrawing additional water from the western slope also increases the risk of a "compact call" in the Colorado River Basin. Storage	Colorado River Impacts	Denver Water concurs – Save the Colorado has submitted comments in previous permitting efforts and comments were addressed in those efforts. The Corps (404 Permit) and CDPHE (401 Certification) evaluated impacts to streams and wetlands on the west slope. For purposes of this 1041 Permit Application, Denver Water concentrated on impacts in Boulder County and to South Boulder Creek. On the compact call issue, please see response to comment O-A-04. As described in the 401 Certification from the CDPHE and the Corps Final EIS, impacts to water temperature were evaluated and mitigated as needed. These analyses included streams on the east and west slopes of Colorado. Lastly, flushing flows were proposed by Denver Water for several locations as mitigation and accepted by the Corps and included in the 404 Permit as conditions. Additionally, Denver Water agreed to provide flushing flows on other west slope streams in the Settlement Agreement with the USFS. All of these agreements can be found in Exhibit 5 of the 1041 Permit Application.

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	levels in both Lake Powell and Lake Mead and inflow to Lake Powell have declined during the 2000s drought period, so much so, that the risk of a compact call has increased - a development that would affect trans-mountain diversions including those through the Moffat Tunnel. Save the Colorado submitted a letter on September 8, 2016 concerning the "Joint West Slope Risk Study" describing the risk associated with a compact call on trans-mountain diversion, which is incorporated herein by reference. Exhibit 13 hereto. Denver Water must submit an antidegradation analysis for temperature and other water quality standards and requirements for these west slope streams to inform the Board of impacts. Denver Water must also provide an analysis of whether the statewide narrative sediment water quality standard (Colorado Water Quality Control Commission Regulation 31.11(1)(a)(i), 5 CCR 1002-31.11(1)(a)(i)) will be violated in both west slope streams as well as South Boulder Creek and streams on the east slope. Removing water from streams reduces the "flushing flows" needed to remove sedimentation from the stream bed. 8 Buildup of sediment in a streambed can adversely affect spawning of fish and survival of macrobenthic organisms.		
O-E-7	**d. Denver Water fails to analyze impacts from climate change.** The accuracy of Denver Water's assessment of impacts to water resources (flow, volume, temperature, etc.) over the life of the project (in perpetuity) is dependent on factoring in the effects of climate change on the proposed actions. Denver Water's 1041 application is incomplete because it does not address climate change impacts. The PACSM model used by Denver Water to assess the yield of its water system utilizes the 1953 to 1957 critical drought within the 1947 to 1991 period of record. Since then temperatures have steadily increased and the state has been in an extended drought in the 2000s. Denver Water models its water supply system under an outdated assumption that the "hydrologic and climatological cycle similar to that of water years 1947 to 1991" (page 14 of 2002 IRP, Exhibit 2 to the permit application) would repeat into the future. By 2014, when the FEIS was submitted, it was clear that climate change was changing hydrologic conditions from those between 1947 and 1991. Yet all impact analyses reported in the Moffat Project FEIS, particularly in the western streams, relied on this outdated model. In the FEIS, page ES-12 it states: "Climate change and global warming may be considered reasonably foreseeable, but currently there is no accepted scientific method for taking the general concepts associated with climate change and transforming them into incremental changes in stream flow or reservoir levels." To the contrary, there are a number of recent studies employing various methodologies to predict the future impacts of climate change on hydrology. The science of climate change has expanded exponentially in recent years with several water supply vulnerability studies completed using results of downscaled Global Climate Models. At a minimum, the hydrologic and temperature records from the mid-1980s through 2020 provide a record of how climate change has impacted streams in Colorado up to the present. The FEIS and this	Climate Change	The Corps performed analyses of GRE Project-related carbon emissions in sections 4.4, 4.6.13, 5.13, and Appendix I of the Final EIS. The Corps also responded to multiple climate change related comments, including those from Boulder County, in Appendix B to its Record of Decision. As explained in those comment responses, there is not a generally accepted scientific method by which current climate change information is translated into predictable stream flow changes and assimilated into water supply decision-making. Consequently, the Corps provided a qualitative assessment of how climate change may impact Denver Water's water supply, explaining that scientific studies have projected that since the stream flow may peak earlier, evapotranspiration may be higher and droughts may be longer and more severe, it is also likely that water demands would increase in correlation with rising air temperatures. Annual variability will increase in both directions, with wet years continuing to take place and even potentially intensifying due to a warming climate. This situation may require water managers to address greater extremes in water systems in the foreseeable future. By addressing the reliability, vulnerability and flexibility needs detailed in Chapter 1 of the Corps' Final EIS, the GRE Project would help Denver Water to manage these climate-related risks and secure the water supply for more than one quarter of Colorado's population.

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	1041 permit application ignore impacts of climate change on stream health, particularly in the western slope, and the efficacy of the expanded Gross Reservoir. In addition, on June 18, 2015 a coalition of conservation groups also submitted comments to the Army Corps of Engineers during the NEPA process highlighting the importance of consideration of climate change. Exhibit 21 hereto. The June 18, 2015 comments are incorporated herein by reference and highlight the failure of the NEPA process to consider impacts from climate change. In summary, Denver Water's 1041 application is incomplete for failure to analyze impacts from climate change.		
O-E-8	**e. Denver Water fails to analyze impacts to water wells.** Section 8-507.D.7.b.ii.D of the LUC requires Denver Water to analyze "the impacts and net effect of the activity on groundwater" including "seasonal water levels…artesian pressure…groundwater flows directions and levels…[and existing groundwater quality and classification." The 1041 permit application identified 50 wells located within 0.3 miles to the north of and others that are 1.5 miles south of Gross Reservoir. Figure 16 in Exhibit 1 of the permit application provides a map with locations of these domestic wells. Not included are required maps of seasonal water levels (1), artesian pressure in aquifers (2), groundwater flow directions and levels (3), and existing groundwater quality and classification (7). The application identified the number of wells that draw domestic water from this fractured bedrock aquifer; 3 wells with water level below ground surface of 20 to 40 feet 42 wells with water levels below ground surface of 7 to 280 feet 8 wells with water levels below ground surface of 15 to 100 feet 1 well with water levels below ground surface of 79 feet 2 wells with water levels below ground surface of 80 feet. This does not begin to evaluate how these domestic water wells may be impacted by an increase in water level in Gross Reservoir of 142 feet. One cannot discern from this information the "impact and net effect of the activity on groundwater." Since the ground surface varies for each well, both current and anticipated future water elevations are, at a minimum, required to assess these impacts. In addition, there is no discussion on how seepage losses would change due to increased head in the expanded Gross Reservoir. The only statement in the 1041 application is that "the Project would not impact water wells." This is not substantiated by data included in the permit application.	Groundwater	Please see Denver Water's response to comment O-A-05. Impacts to groundwater are discussed on page 115 to 117 of the 1041 Permit Application. This analysis was completed by the Corps for the Final EIS and concluded that seepage from the reservoir would likely increase, as would groundwater levels in the vicinity of Gross Reservoir, and groundwater discharge east of Gross Reservoir would likely rise slightly. Existing groundwater wells in the area would have an increase in available water due to the increased in storage at Gross Reservoir. The groundwater mounding effect would cause all eastward hydraulic gradients to decrease and thus decrease the eastward flow towards the reservoir.
O-E-9	**f. Denver Water's tree removal plan is deficient.** Save the Colorado previously submitted comments on deficiencies with Denver Water's vegetation removal plan. See, Exhibit 22 hereto (Smith vegetation removal report). The deficiencies noted in the Smith report are incorporated herein by reference.	Tree Removal	Denver Water will develop a final Tree Removal Plan with consultation by necessary agencies such as Boulder County and USFS. Consultation with Boulder County was not able to occur prior to the 1041 Permit Application submission. Please see response to comment F-4 of Exhibit 19 – Referral Agency Comment and Response Table for details on the schedule for the final Tree Removal Plan.

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-E-10	**g. Important documents are missing from the application.** Important documents are missing from Denver Water's 1041 application. Instead, Denver Water has inserted "placeholders" that simply state "This page is intentionally left blank." For example, the following FEIS Appendices are missing from application Exhibit 5d2 and have been replaced with "placeholders": Appendices A-2; A-3; A-5; B-3 through B-32; Appendix C (Figures C-1 through C-5); Appendix J (all documents); Appendix L. This is not intended to be an exhaustive list of documents missing from the FEIS Appendices found at Exhibit 5d2. In addition, we were unable to find a list of all Appendices to the FEIS. If Denver Water intends to rely on the FEIS and its Appendices for purposes of the 1041 application, it must submit all such documents into the record or explain why documents are missing. **h. Numerous "plans" are missing from the application.** Several plans are promised but not included in the 1041 application. In all cases, these plans would be finalized per requirements in the FERC approval process and approved by agencies other than Boulder County, including the Forest Service, the Federal Energy Commission (FERC), and the Water Quality Control Division. These outstanding and un-submitted plans identified in the FERC approval of the project include: • Revision to South Boulder Creek Channel Stability Monitoring Plan Upstream of Gross Reservoir: Forest Service • Storm Water Management Plan • Erosion Control and Reclamation Plan; filed with the Commission's San • Francisco Regional Office for approval. • Quarry Operation Plan • Quarry Reclamation Plan • Pit Development and Reclamation Plan • Reclamation and Revegetation Seed Mixes and Mulch Materials • Dissolved Oxygen and Temperature Monitoring Plan • Tree Removal Plan • Invasive Plant and Noxious Weed Species Management Plan • Fire Management and Response Plan • Special Status Plants Relocation Plan • Aquatic Invasive Species Monitoring Plan • Traffic Management Plan • Fugitive Dust Control Plan • Road Maintenance Plan	Incomplete Application	In response to your sub-comment G: Denver Water reviewed the 1041 Permit Application materials and we acknowledge the issues with the appendices you have identified. We are attaching the complete Appendices from the Final EIS to these comment responses (see Exhibit 33). Please also note that the Final EIS and all its appendices have been publicly available on the Corps' website since April 2014: https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Colorado/EIS-Moffat/ Additionally, we are attaching a table listing each of the exhibits to our original 1041 Permit Application to assist the reader with finding specific documents in the exhibits. In response to your sub-comment H: Please see the response to comment G-6 of Exhibit 19 – Referral Agency Comment and Response Table for more information.

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
	• Recreation Management Plan • Visual Resources Protection Plan • Historic Properties Management Plan • South Boulder Creek Channel Stability and Monitoring Plan • Road Management Plan (USFS) • Restoration and Revegetation Plans • Emergency Action Plan • Recreation Adaptive Management Plan for Winiger Ridge The FERC review stated that because of these plans, water quality impacts would be minimized and/or controlled. However, since these plans have not been finalized prior to Boulder County review of the 1041 permit application, the Boulder county commissioners cannot be assured that the promised plans will be adequate to protect streams in the South Boulder Creek drainage during and after construction. Without the plans, the application does not comply with the requirement to submit a complete 1041 application.		

O-E-11	**i. The FEIS is deficient and cannot be relied upon.**
	Throughout the 1041 application, Denver Water defers to analysis and conclusions in the Army Corps' Environmental Impact Statement process including the Final EIS and Record of Decision. These documents have significant legal and technical deficiencies and are being challenged in litigation in federal district court in Denver. For example:
	• The Corps Record of Decision violates the National Environmental Policy Act:
	  ○ The "Purpose and Need" in the EIS is not accurate and must be redone.
	  ○ The "Alternatives" analysis in the EIS is not accurate and must be redone.
	  ○ The EIS did not analyze cumulative impacts, climate change, or a Compact Call on the Colorado River associated with, or caused by, the project.
	• The Corps Record of Decision violated the Clean Water Act:
	  ○ The Corps failed to choose the "Least Environmentally Damaging Practicable Alternative" (LEDPA).
	  ○ The full cost of the project was not considered in choosing the LEDPA.
	• The Corps Record of Decision violated the Endangered Species Act by failing to adequately consider and analyze the impacts on the green lineage cutthroat trout.
	Attached hereto are EIS comment letters substantiating these legal and technical deficiencies with the FEIS.11 We request that Boulder County refuse to rely on the FEIS and ROD until all litigation challenging these documents is completed.
		NEPA Process	Both the FERC and the Corps engaged in a robust, years-long environmental analysis of the GRE Project. Denver Water disagrees with the commenters' claims that the analyses were legally insufficient and notes that federal agency decision making is entitled to a presumption of regularity. FERC also found these analyses provided "a complete record of analysis of the environmental effects of Denver Water's proposal to amend the license for the Gross Reservoir Project." No party to the FERC process, including Boulder County, sought rehearing of FERC's Order, which is now final. Additional delay would jeopardize the schedule for the GRE Project set by the FERC Order.

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-E-12	**j. The FERC Supplemental EA analysis is inadequate.** Denver Water's 1041 application also relies on the FERC Environmental Assessment. 1041 permit application Exhibit 5e. Save the Colorado submitted comments on the FERC EA identifying significant deficiencies with the analysis. See, Exhibit 26 hereto (April 9, 2018 FERC comment letter). The deficiencies with the FERC EA are incorporated herein by reference.	FERC Process	See response to comment O-E-11.
O-E-13	**k. There are less environmentally damaging alternatives.** In a June 14, 2016 report entitled, "The Colorado River Protection Alternative," Save the Colorado identified an array of less damaging alternatives to the Gross Reservoir and dam expansion. These alternatives include: • Improving raw water connection between Denver Water's North and • South Systems. • A bypass of Strontia Springs Reservoir. • Aquifer or gravel pit storage. • Shared operations with other water providers. • Construction of additional water treatment. • Buyback or restructure of raw water contracts. Boulder County has the legal authority to require Denver Water to analyze and present these alternatives for consideration in the 1041 permitting process. See, LUC § 8- 507.D.b.ix. The Director should find that Denver Water's 1041 application is incomplete for failure to present information on these and other alternatives to the environmentally harmful Gross Reservoir and dam expansion. The Director should order Denver Water to submit a full range of alternatives that could be employed to avoid the harmful affects of the project.	Environmental Impacts	See response to comment G-2 of Exhibit 19 – Referral Agency Comment and Response Table for more information.
O-E-14	1. Affidavit of Tim Guenthner. 2. Mayer Report 11/9/2020. 3. 10/9/15 comment letter to Corps. 4. McCurry Report. 5. 12/3/18 NEPA comment letter. 6. 12/20/16 NEPA comment letter. 7. 8/31/16 NEPA comment letter. 8. LRB 4/3/18 demand analysis. 9. 3/1/16 NEPA comment letter. 10. Woodling Report.	Attachments	Denver Water acknowledges these attachments in relation to the comments provided. See the response to comment O-E-2 as related to attachment 1. See responses to comments O-E-4 and O-K-5 as related to attachment 2. See responses to comments O-A-02 and O-E-6 as related to attachment 10. See response to comment O-E-6 as related to attachments 11-13. See response to comment O-E-7 as related to attachment 21. See response to comment O-E-9 as related to attachment 22. See response to comment O-E-12 as related to attachment 26. In relation to all remaining attachments, the Corps and FERC considered the issues raised in these attachments during the federal NEPA process. The agencies undertook a robust NEPA process over many years, including a detailed analysis of the purpose and need for the GRE Project. In addition, the Corps screened more than 300 potential water supply sources and infrastructure components and then evaluated 34 potential project alternatives in fulfillment of the NEPA and Clean Water Act requirements. As part of the process, the Corps and FERC through their federal permitting processes considered

O-E	**The Environmental Group and Save the Colorado** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
	11. 401 Certification comment letter. 12. Elliot aquatic report. 13. 9/18/16 Joint West Slope Risk Study. 14. Bestgen. 15. Bestgen & Poff. 16. Poff. 17. Udall & Overpeck. 18. CWCB climate report. 19. DiNatale. 20. Joint Front Range Climate Report. 21. 6/18/15 NEPA comment letter. 22. Smith vegetation study. 23. 8/27/15 NEPA comment letter. 24. 6/9/14 DEIS NEPA comment letter. 25. 8/24/19 NEPA comment letter. 26. 4/9/18 FERC comment letter. 27. Colorado River Protective Alternative.		numerous comments from a broad range of stakeholders and interested groups and individuals. Denver Water stands by the process and its conclusions.

O-F	**Boulder County Audubon Society** **Date: 11-13-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-F-1	The Boulder County Audubon Society thanks you for having asserted and successfully defended your 1041 authority over this project. We now urge you to reject Denver Water's application.	General Opposition	Thank you for your comments.
O-F-2	This massive project would result in severe deleterious effects on the environment and on the quality of life of residents of Boulder County. It would further dewater the Colorado River.	Environmental Impacts	The impact of additional water removed from the Colorado River Basin was included in the Corps' Final EIS and Record of Decision. Denver Water proposed mitigation for these impacts and those measures were approved by the Corps, CDPHE, and CPW. Additionally, Denver Water entered into agreements with the USFS, Grand County, and other entities to provide protections now and in the future for the Colorado River Basin.
O-F-3	Denver Water's assertions of need for this project are based on outdated demand estimates. It has demonstrated no need for additional transmountain diversions, nor a legitimate need for resiliency in its northern supply network.	Purpose and Need	Please see response to comment G-14 of Exhibit 19 – Referral Agency Comment and Response Table and Issue #20 (re: Purpose and Need) at the end of this table. The Corps' analysis confirmed that there is a present-day risk that Denver Water could run out of water on the northern supply network in a single dry year. Approximately 90% of Denver Water's reservoir storage sits above Strontia Springs Reservoir, and about 80% of our water supply travels through Strontia Springs Reservoir. Two of our three water treatment plants rely on water deliveries from Strontia Springs Reservoir. Any interruption to water delivery at Strontia Springs Reservoir puts our entire treatment system at risk. The Corps' analysis also showed that, even with more conservation, Denver Water has a need for the additional 18,000 AF/yr of firm yield to be developed through the GRE Project.

O-G	**The Environmental Group and Stop Gross Dam Expansion** **Date: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-G-1	The 354 page application references nearly 16,000 pages of reference material. Essentially it regurgitates the same copious amount of data that Denver Water has used time and time again. This data is completely out of date (some of it nearly 30 years old) and lacks any detail that would allow Boulder County to make an informed decision as to whether or not the project would conform to Boulder County's 1041 Regulations. Our assertion is that there is no way it would be possible for a construction project of this size, which provides absolutely no benefit to the citizens of Boulder county, to be able to meet our strict regulations and conform to the Boulder County Comprehensive Plan. At this point though, it is clearly impossible for Boulder County to adequately determine if that is the case given the severe deficiencies in the application itself. Our team of legal and environmental experts has identified a number of specific issues with the application that are listed below. We urge you to reject the current application as incomplete and that you require Denver Water to resubmit a complete application that addresses all deficiencies, providing comprehensive data and justifications for all aspects of the project so that the county can make an informed decision.	Incomplete Application	Denver Water disagrees that the information considered during the federal permitting process is out of date. The Corps issued its Record of Decision in 2017 and the FERC issued its order in 2020. Both these agencies concluded that the analyses and information in the record, which was developed over a decade with multiple opportunities for public review and comment, was reliable and accurate to support their decisions. Denver Water believes the information is correct and accurately describes the operations of Denver Water's collection system. Thus, the impact analysis completed by the federal regulators accurately depicts impacts to resources and the mitigation proposed by Denver Water is sufficient to offset those impacts that are unavoidable. Denver Water believes that the information provided to Boulder County is sufficient to make a permitting decision. The same information has been used by multiple state and local parties to make permitting decisions and enter into binding agreements regarding impacts of the GRE Project.
P-J-aaaaa (Campaign Letter)	**First:** The 1041 application requests a "waiver" in **Section 8-503** stating that it doesn't have to comply with **Section 8-308.A.4** of the Boulder County Land Use Code. Denver Water claims that the application is not a "site selection and construction of major facilities of a public utility." Denver Water is incorrect, and therefore must comply with this section of the Land Use Code. **Second:** Denver Water's 1041 application completely fails to provide numerous "plans" about how they will construct the expansion and operate the expanded facility. In fact, the vast majority of the application simply refers to "plans" that don't yet exist which are required to exist and to be complete to comply with the Boulder County Land Use Code, including: • Tree Removal Plan • Quarry Operation Plan • Pit Development and Reclamation Plan • Stormwater Management Plan • Erosion Control Reclamation Plan • Invasive Plant and Noxious Weed Species Management Plan • Fire Management and Response Plan • Special Status Plants Relocation Plan • Aquatic Invasive Species Monitoring Plan • Traffic Management Plan • Fugitive Dust Control Plan • Recreation Management Plan	Campaign 1	[Response on waiver issue] See Denver Water's response to comment O-E-2. [Response on FERC plan issue] See Denver Water's responses to comments G-6 of Exhibit 19 – Referral Agency Comment and Response Table, and O-A-09. [Response on federal environmental analysis] Both FERC and the Corps engaged in a robust, years-long environmental analysis of the GRE Project. Denver Water disagrees with the commenters' claims that the analyses were legally insufficient and notes that federal agency decision making is entitled to a presumption of regularity. FERC also found these analyses provided "a complete record of analysis of the environmental effects of Denver Water's proposal to amend the license for the Gross Reservoir Project." No party to the FERC process, including Boulder County, sought rehearing of FERC's Order, which is now final. Additional environmental analysis of Denver Water's proposal at this stage is not necessary, would be duplicative of analyses already performed by the Corps and FERC, and would jeopardize the schedule for the GRE Project dictated by the FERC Order. [Response to compliance with Boulder Valley Plan] Denver Water would note at the outset that the commenter did not explain how the application deviates from the Boulder Valley Comprehensive Plan. Nonetheless, Section 10(a)(2)(A) of the Federal Power Act requires FERC to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving waterways affected by the GRE Project. Denver Water reviewed 12 federal and state comprehensive plans relevant to the expansion, including the Boulder Valley Comprehensive Plan, in developing its FERC application and identified no inconsistencies with any of the plans. FERC also reviewed the comprehensive plans and found no inconsistencies. [Response to compliance with Boulder County code requirements] These comments do not specify why the commenters believe that the GRE Project fails to meet the code requirements. For the reasons stated in Denver Water's application and these comment

O-G	**The Environmental Group and Stop Gross Dam Expansion** **Date: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
	• Visual Resources Protection Plan • Historic Properties Management Plan • South Boulder Creek Channel Stability and Monitoring Plan • Road Management Plan (USFS) • Road Maintenance Plan • Restoration and Revegetation Plans • Reclamation and Revegetation Seed Mixes and Mulch Materials Plan • Emergency Action Plan • Recreation Adaptive Management Plan for Winiger Ridge Boulder County cannot consider this application when these plans have not been completed. Without the plans, the application does not comply with **Section 8-511 Standards for Approval of a Permit Application** of the Land Use Code. **Third:** Throughout the application, Denver Water defers to analysis and conclusions in the Army Corps' Environmental Impact Statement process including the Final EIS and Record of Decision, which have numerous errors and are under dispute and litigation in federal district court in Denver. For example: • The Corps Record of Decision violates the National Environmental Policy Act: o The "Purpose and Need" in the EIS is not accurate and must be redone. o The "Alternatives" analysis in the EIS is not accurate and must be redone. The EIS did not analyze cumulative impacts, climate change, or a Compact Call on the Colorado River associated with, or caused by, the project. • The Corps Record of Decision violated the Clean Water Act: o The Corps failed to choose the "Least Environmentally Damaging Practicable Alternative" (LEDPA). o The full cost of the project was not considered in choosing the LEDPA. • The Corps Record of Decision violated the Endangered Species Act by failing to adequately consider and analyze the impacts on the green lineage cutthroat trout. **Fourth**: Throughout the application Denver Water defers to analysis and conclusions in the Federal Energy Regulatory Commission's license amendment process that has numerous errors including: • Failed to use an adequate alternatives analysis. • Failed to adequately consider impacts to aquatic biology and water quality in Gross Reservoir and downstream in South Boulder Creek. **Fifth:** The application fails to comply with the Boulder Valley Comprehensive Plan.		responses, Denver Water believes that it has demonstrated compliance with all approval criteria in the code. If Boulder County planning staff believe that not to be the case, Denver Water respectfully requests an opportunity to discuss the reasons for that determination.

O-G	**The Environmental Group and Stop Gross Dam Expansion** **Date: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
	Sixth: The application violates **Boulder County Land Use Code Section 511.C.2.a**, which requires the conservation and the full utilization of existing municipal water supplies. **Seventh:** The application violates **Boulder County Land Use Code 8-511.I.2** because it is not compatible with resource preservation and does not minimize resource damage. **Eighth:** The application violates **Boulder County Land Use Code Section 8-511.J.1** because the project is a danger to public health or safety or to property. **Ninth:** The application violates **Boulder County Land Use Code Section 8-511.J.2**, which requires compatibility with existing traffic volumes. Until such time as an application is submitted that complies with the Boulder County Land Use Code and addresses all deficiencies, Boulder County must not consider this application or deem it complete, and must return it to Denver Water for clarification and completion.		

O-H	**Americas for Conservation + the Arts (AFC+A)** **Date: 11-12-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-H-1	BUT I also want to pint out the following: I am one of a handful of residents living directly on the Gross Reservoir shore and as a Latina mother of two young girls I respectfully ask to consider the environmental justice issue related to the Boulder residents directly impacted by this expansion if approved and our #latino families in #Denver —38% of the pop.—who will bear a disproportionate burden and will pay the bill of this $400 million dam construction project that will devastate the #grossreservoir valley and watershed to the detriment of the health, safety, and environment of its residents so that Denver can have more lawns. Our Latino children will be paying most of the bill for the biggest construction project in the history of Boulder county and the tallest #dam in the state of Colorado. The construction will dynamite the valley, utterly disrupting the peace and security and health of so many and collapsing fisheries and freshwater ecosystems in the West Slope. Please lead the way in assuring that Boulder is where Our Health, Colorado & Conservation Meets a Viable and Just Future and that this build on our environmental stewardship legacy.	Environmental Justice	Environmental Justice was considered by the Corps in the Final EIS (page 5-501 Final EIS). "*Impacts to environmental justice populations were considered as part of the environmental analyses to ensure that these populations do not receive a disproportionately high number of adverse environmental or human health impacts from the Proposed Action. Extensive socioeconomic and demographic data were studied to determine if the Proposed Action would adversely affect a disproportionate number of specially designated communities. No specific ethnic or otherwise classified groups of PIA* [Primary Impact Area] *or Denver Metropolitan area, residents would be disproportionately impacted by construction or operational activities in the Proposed Action. No environmental justice issues would arise as a result of this alternative* [Gross Reservoir Expansion]." The cost of the GRE Project will be spread across all of Denver Water's customers – not just the citizens of Denver. Because of Denver Water's tiered rate structure, this increase in the water rates will be felt more by customers who use the most water. Another rate that will increase is the System Development Charge. This is paid by customers who request a new water tap from Denver Water. Thus, the new homes and businesses who need the new water supply will pay a higher portion of the GRE Project cost. Lastly, the financial impact to Denver Water customers was analyzed in the Corps' Final EIS and the Corps concluded that the GRE Project would result in a minor impact to water rates and that rate increases would occur even if the no-action alternative were selected. Please see response to comments C-4 and C-5 in Exhibit 19 – Referral Agency Comment and Response Table, for more information. The need for the GRE Project does not result from the desire to irrigate lawns. The water supply created by the GRE Project would address present-day risks created by the imbalance in Denver Water's supply system and meet future projected water demands that are driven by population, economic, demographic, and climactic changes that are out of Denver Water's control. See response to Public Issue #20 (re: Purpose & Need) at the end of this document for more information. Increased trees, landscaping and green infrastructure also are becoming even more important in Denver, which has one of the worst heat-island effects in the nation. By securing the water supply for 1.5 million people (over one quarter of Colorado's entire population), the GRE Project will help support appropriate green spaces in the city, where access to the outdoors is more limited than on the Gross Reservoir shore. Please see responses to I-9 and I-10 in Exhibit 19 – Referral Agency Comment and Response Table, for more information on Denver Water's conservation, reuse and sustainability efforts, which have won Denver Water broad recognition over the past decade.

O-I	**Sierra Club** **Date: 11-10-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-I-1	Please consider carefully what is at stake in regard to the Gross Reservoir expansion. The Sierra Club has looked carefully into Denver Water's plans and we find the environmental damage that the expansion would cause to be utterly unacceptable. A131-foot increase in dam height is massive and to do it, many trees would have to be cut down, animal habitats destroyed, Western Slope waterways disrupted, and more. Thus we have long opposed the Gross expansion.	Environmental Impacts	Please see response to Issue #20 (re: Purpose and Need) at the end of this table.
P-J-yyyyyyyyyy (Campaign Letter)	Now that Denver Water has submitted their 1041 application, we still oppose the plans to expand the reservoir. Denver Water does not seem to comprehend the environmental damage that their project will cause because their 1041 application fails to address many key concerns. Below is a list that our partners at The Environmental Group have put together that outlines the deficiencies of Denver Water's submission. We also are concerned that Denver Water's plan is so incomplete. We ask that you delay consideration of Denver Water's plan until you see clear discussion of the following. Tree Removal Plan Quarry Operation Plan Pit Development and Reclamation Plan Stormwater Management Plan Erosion Control Reclamation Plan Invasive Plant and Noxious Weed Species Management Plan Fire Management and Response Plan Special Status Plants Relocation Plan Aquatic Invasive Species Monitoring Plan Traffic Management Plan Fugitive Dust Control Plan Road Maintenance Plan Recreation Management Plan Failure to address the above concerns is reason enough to ask that Denver Water work on their 1041 application again. They need to demonstrate to residents of Boulder County that they understand the enormity of their own project and its environmental consequences. So far, they have not done that.	Campaign 1	Please see response to comment G-6 of Exhibit 19 – Referral Agency Comment and Response Table.

O-J	**Lazy Z Estates Homeowners' Association** **Date: 10-15-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-J-1	This letter serves as our strong objection to the Gross Reservoir and Dam Expansion. Our Homeowners' Association is located directly off of Lazy Z Road, and our membership would be significantly impacted by this expansion. Gross Reservoir and Dam Expansion 10 14 20.pdf	Attachments	Thank you for your comments.
O-J-2	We understand that construction trucks would be accessing the reservoir from County Road 97E, Magnolia Road and Lazy Z Road. These roads are all gravel roads and not safe for large construction vehicles. Additionally, County Road 97E is very narrow and rutted, and was not at all designed for the large construction vehicles proposed as part of the expansion. These roads are typically not well maintained by Boulder County, and we are concerned (especially now due to the financial impacts to Covid-19) about the increased vehicle traffic, and corresponding increased maintenance cost for these roads. We are further concerned that Boulder County will increase property taxes to pay for road maintenance for a project that the majority of our mountain community is adamantly opposed to.	Traffic/Transportation	Denver Water will identify road maintenance activities and schedule for that work within the final Traffic Management Plan. During construction activities, Denver Water will maintain impacted roads. As noted in comment B-29 of Exhibit 19 – Referral Agency Comment and Response Table, one of the 1041 Permit conditions will be evaluating the current condition of the road (prior to construction activities) and then revaluating the road condition after construction activities. Denver Water will then be responsible for any damage to the roads. This will prevent the cost of road damage from being the responsibility of Boulder County.
O-J-3	In addition, there will be a tremendous amount of dust, dirt and noise stirred up from the construction trucks. Our members moved to our community for the peace, solitude and beauty. We enjoy seeing the trees, flowers, and wildlife. This expansion would destroy our reasons for living here. Early estimates were that there could be 2-4 trucks per hour every hour driving up our roads, which is a substantial increase to the normal residential traffic these roads were designed and built for.	Construction Impacts	Denver Water will identify traffic volume and schedule as well as road maintenance activities and schedule to reduce dust within the final Traffic Management Plan.
O-J-4	The environmental impact on the area surrounding the existing reservoir and dam will be enormous. We have heard that the existing dam is built on a fault line, and if that is correct, a larger reservoir and dam would put additional stress on the fault line and could cause major flooding downstream if the dam were to break. We are certain the county is aware of these impacts so we will not go into additional details here. We value Boulder County's long history and commitment to championing open space, ensuring the County's natural beauty remains undisturbed, and the importance its leaders place on maintaining the quality of life for its residents. Please continue this legacy by continuing to oppose the expansion of Gross Dam Reservoir.	Environmental Impacts	Faults are common in the mountain areas and a robust Geological and Geotechnical Engineering Investigation program has been completed to ensure the design of the dam is compatible with site conditions. The design plan proposed by Denver Water will be reviewed by FERC and the SEO for safety and compliance with dam safety standards and regulations. Denver Water values the quality of open space and that was one of the factors considered when choosing to expand an existing reservoir rather than building a new reservoir. Preserving land and open space was considered when Denver Water purchased the Toll Property and entered into an agreement to transfer ownership to the USFS.

O-K	**PLAN-Boulder County** **Date: 12-08-2020**		
Comment ID	**Comment**	**Category**	**Response**
O-K-1	Please find attached a letter and report regarding the Gross Reservoir & Dam Expansion from PLAN-Boulder County. This information has also been sent to the Commissioners regular email.	Attachments	Thank you for your comments.
O-K-2	1) The dam raising would be the largest construction project in the history of Boulder County and will be hugely disruptive to the environment and region;	Construction Impacts	Thank you for your comment. Construction impacts are discussed in the response to Issue #8 (re: Construction Impacts) at the end of this table.
O-K-3	There is a crisis on the Colorado River and it is irresponsible for the East slope to divert additional water at this time;	Colorado River Impacts	The water supply created by this project is not solely from the west slope. Denver Water utilizes its west slope water supplies to supplement its east slope supplies. West slope water is only diverted to the east slope when water supplies are not adequate to meet demand.
O-K-4	**Denver doesn't need the water.** Denver has a robust water system already, without expanding Gross Reservoir. Water use in Denver, and across the region has declined. Water conservation and efficiency have been tremendously successful over the past 20 years. Additional per capita reductions are anticipated into the future.	Purpose and Need	Denver Water has implemented many conservation measures to reduce per capita use. However, population growth is expected to outpace the declines in per capita use. Over the last decade, Colorado's population growth was the eighth highest in the country by people moving into the state and fourth highest by percentage (The Center Square, Dec 30, 2019). Looking forward, Colorado's population is expected to grow by almost 50% by 2040. Please see response to Issue #20 (re: Purpose and Need) at the end of this table.
O-K-5	To specifically address Denver Water's statement of need, please find the attached expert report prepared by Peter Mayer, P.E., Principal of Water Demand Management. Mr. Mayer is a national expert in urban water systems, municipal water demands, and demand forecasting. In 2016 he testified as an Expert Witness at the U.S. Supreme Court in FL v. GA, 142 Original of behalf of the State of Georgia. Over his 25-year engineering career he has worked with hundreds of water utilities in Colorado and across the US. Mr. Mayer is also the co-chair of PLAN-Boulder County and we feel fortunate to be able to offer his expertise on this matter. Mr. Mayer's report addresses the fact that Denver Water's actual water use has declined substantially and the application for the Gross Reservoir Expansion is based on an outdated demand forecast. When an appropriate demand forecast based on current demand is employed, Denver Water's four stated reasons for why it needs the Gross Reservoir expansion become highly questionable. PLAN-Boulder urges you to review Mr. Mayer's analysis, and based on his findings to request that Denver Water resubmit their statement of need for this project with an analysis based on current water use and which takes into consideration the impacts of climate change. We also request that Mr. Mayer's report be made part of the formal record of Boulder County's 1041 review of Denver Water's proposal. It would be wrong for the Boulder County Commissioners to approve the Gross Reservoir & Dam Expansion project based on the statement of need presented by Denver Water. The attached analysis clearly shows that Denver Water is in a very different situation than it was when this project was proposed more than 20 years ago. A revised and re-analyzed statement of need is required.	Purpose and Need	Mr. Mayer's letter raises no substantially new information or concerns that the Corps and the FERC did not address through the federal NEPA process. The Corps and FERC appropriately identified the purpose and need for the GRE Project, they evaluated alternatives against that purpose and need, and they ultimately decided that Denver Water should proceed with the GRE Project. Under FERC's order, Denver Water must begin construction of the GRE Project by July 16, 2022 and complete construction by July 16, 2027, and Denver Water cannot choose to pursue an alternative not selected by the Corps and FERC. Accordingly, no further analysis of Denver Water's projected future water demands or the other needs identified in the Final EIS is warranted. Mr. Mayer's letter is not an impartial expert report, but rather is the opinion of a co-chair of PLAN-Boulder County's Board of Directors. Mr. Mayer's assertion that Denver Water has offered "shifting justification" for the GRE Project is false. Please see the attached January 2003 letter from Denver Water explaining that a central purpose of the GRE Project is to increase water-supply reliability to the Moffat Water Treatment Plant and reduce the collection system's vulnerability to a disaster (see Exhibit 34 attached to this response to comments submittal). Chapter 1 of the Corps' Final EIS ultimately identified several interconnected needs for the GRE Project, only one of which was the firm yield need. The Corps' demand analysis is not outdated. In 2012, the Corps independently verified and updated the demand analysis underlying the firm yield need using the most recently available demographic and socioeconomic information. The Corps released the updated demand analysis for public comment when it published the Final EIS in 2014 (Final EIS Chapter 1 and Appendix A), and the Corps responded to comments on the analysis when it published its Record of Decision in 2017 (Record of Decision Attachment B), ultimately finding that the demand analysis was reliable and accurate.

O-K	**PLAN-Boulder County** **Date: 12-08-2020**		
Comment ID	**Comment**	**Category**	**Response**
			The Corps' analysis already accounts for the reductions in water use that have occurred since 2010 due to Denver Water's acceleration of its conservation goals. Mr. Mayer's alternative calculations of "excess in-hand" supplies are inaccurate and misleading because he does not base his calculations on Denver Water's total water demands and his calculations do not account for periods of drought. See Chapter 1 of the Final EIS for more information on why Denver Water plans around "firm yield," which is a measure of a system's ability to reliably supply water to meet demand during drought periods. The Corps independently reviewed and accepted the analyses underlying the reliability, vulnerability and flexibility needs described in Chapter 1 of the Final EIS, and it appropriately responded to comments in Attachment B to its Record of Decision. See, for example, the Corps' response to Save the Colorado's March 2, 2016 letter, which raised arguments similar to Mr. Mayer's. No additional evaluation of these issues is warranted.

Table 4 – Issues and Comments from the Public

Commenter(s)	Comment ID No.	Summary of Issue	Response
Anita Carrick; Ann Getches; Clark R. Chapman and Y (LMC) Chapman; Frank Landis; GE Morgan; John and Carol Belcher; Kimberly Beck; Richard Reynolds; Stephen Paul; Tim Hagaman; Tom Moore; Campaign Letter 2	P-AAAAA-1; P-BBB-5; P-FFF-2; P-GGG-4; P-JJJ-4; P-MM-3; P-PPPPPPPP-2; P-Q-5; P-RRRRRR-1; P-UUUUUU-5; P-Y-2; P-ZZ-14	*Issue #1: Air Quality* Commenters asserted the GRE Project would release dust, CO_2, and other pollutants into the atmosphere during construction, contributing to declining local air quality and climate change.	An air quality analysis was completed for all emissions resulting from construction activities and a "de minimums" rating was concluded in the Corps Final EIS. Mitigation measures to address air pollution from construction activities, including truck traffic and dust suppression, will be developed as required through the CDPHE Air Pollution Control Division permit process. This issue was addressed in the FERC's responses to Issue #15 of the FERC Supplemental EA. Climate change was addressed in the FERC's responses to Issues #2 and #18 contained in the FERC Supplemental EA and is addressed below in this table under Issue #3 (re: Climate Change). Denver Water proposes multiple measures to minimize air pollution from these sources and control effects of construction on air quality. Air quality permit applications, including mitigation measures, will be prepared for construction activities and submitted to the CDPHE Air Pollution Control Division following dam design completion. A Fugitive Dust Control Plan that will include specific measures to minimize the generation of fugitive dust during construction will be prepared.
Bill Hogrewe; Clark R. Chapman and Y (LMC) Chapman; Diane Merline; Gerard Kelly; Jim Horvath; Mike Fetyko; Paul McCarthy	P-EEEEEEE-2; P-HHHH-7; P-IIIIII-10; P-KKKKKK-2; P-NNN-1; P-UU-4; P-WW-1; P-ZZ19	*Issue #2: Alternatives* Commenters expressed concerns that the application relies on the Corps ' Final EIS and Record of Decision which they assert did not adequately consider alternatives.	As part of the federal permitting process, the Corps as the lead agency, together with FERC as a cooperating agency, completed a robust alternatives analysis, screening a broad range of over 300 potential water supply sources and infrastructure components and evaluating 34 potential project alternatives, in fulfillment of the NEPA and Clean Water Act requirements. Denver Water stands by the analysis undertaken by the Corps. Please see response to comment G-2 of Exhibit 19 – Referral Agency Comment and Response Table for additional information on the alternatives analysis performed.
Anita Wilks; Art Hirsch; Bill Hogrewe; Chris Hoffman; David Bahr; John & Vicki Lemmon; Kathy Gritz; Kimberly Beck; Laurie Dameron; Mary Marsden; Patti Hirsch; Paul McCarthy; Steve Pomerance	P-HHHHHH-6; P-IIIIII-1; P-JJ-3; P-LLLLLL-3; P-NNNNN-2; P-OOOOOO-1; P-Q-6; P-QQ-2; P-QQQQQ-1; P-RRRR-1; P-UU-6; P-VVVVVVV-1; P-ZZZZZZZZZZ-2	*Issue #3: Climate Change* Commenters expressed concerns that the Final EIS did not consider climate change. Commenters assert that the GRE Project does not adequately incorporate climate change.	Please see Denver Water's responses to comments G-17 and I-9 of Exhibit 19 – Referral Agency Comment and Response Table, and O-A-3 above. This issue was addressed in the FERC's responses to Issues #2 and #18 of the FERC Supplemental EA. The removal of trees in the proposed inundation area would reduce carbon uptake, and burning the removed trees would release carbon dioxide, which is a greenhouse gas. The Corps' Final EIS on the GRE Project included detailed analysis of greenhouse gas emissions, and that analysis included contributions associated with construction. Additional information on these issues can be found in Final EIS sections 5.1.5 Terrestrial Resources, and 5.1.11, Air Quality. Further, Denver Water is not aware of any reliable models that would enable analysis of these effects on global climate conditions. In addition, the Corps addresses climate change in section 4.4 of the Final EIS, stating in part: While climate change and global warming may be considered reasonably foreseeable, currently there is no generally accepted scientific method to correlate air temperature changes with incremental changes in stream flow or reservoir levels. A qualitative evaluation of climate changes as part of the cumulative effects analysis are also presented in section 4.4 of the Final EIS. Lastly, although there is valid concern in the scientific community that global climate change may affect future water supplies in Colorado, there is little quantitative or even

Commenter(s)	Comment ID No.	Summary of Issue	Response
			qualitative data with which to accurately predict or portray these changes, and consequently with which to integrate reasonably predictable cumulative effects of the proposed actions. The absence of quantified climate-induced decreases in flows related to the proposed actions makes it impossible to evaluate the changes with more than a speculative quality.
Clark R. Chapman and Y (LMC) Chapman; Dan Feldkhun; Diane Merline; Dr. William J. Merline; Elizabeth Lamanna; Frank Landis; Katie Knapp; Kimberly Beck; Lindy Lewis; Mara Kuczun; Mary Hughes; Mary Marsden; Steve Lewis	P-A-1; P-BBBB-1; P-C-3; P-JJJ-3; P-KK-4; P-LL-4; P-LLLLLL-4; P-Q-2; P-SSS-2; P-VV-2; P-WW-5; P-Y-3; P-ZZ-7	*Issue #4: Colorado River Impacts* Commenters expressed concerns that the reservoir expansion would use water from the Colorado River.	Denver Water will adhere to Colorado Water Law regarding water rights and water supplies. Denver Water also participates in programs to recover fish species and develop and implement water saving measures to reduce the chance of a compact call in the Colorado River Basin. Additionally, impacts identified on the west slope were identified and mitigation measures proposed by Denver Water were accepted by multiple agencies and organizations including the Corps, USFS, CPW, CDPHE, and Grand County.
Arpita Kishen; Kari Manteuffel; Mary Krayer; Neil Rosenthal	P-EEE-3; P-QQQQQQQQQ-1; P-XXXXXXXXX-2; P-YYYYYYYYYY-3	*Issue #5: Community Impacts* Commenters expressed concerns that the GRE Project will negatively impact the surrounding community.	Denver Water is committed to reducing the disruptions to the local community. We have and continue to listen to the concerns from community members and organizations and consider options to reduce and mitigate impacts. As an example, because of comments made during the Corps and FERC permitting processes, the on-site quarry was relocated, and all aggregate will be made on site. This will substantially reduce the number of material hauling trucks traveling to the construction site. Denver Water will also schedule deliveries of materials to avoid busy traffic times and school buses on SH 72. Denver Water has addressed traffic and socioeconomic effects in the FERC Supplemental EA sections 5.1.9 and 5.1.8, respectively. In addition, Denver Water developed a stakeholder input-based plan to identify options for minimizing impacts analyzed in the Corps' Final EIS during the removal and disposal of trees in ways that are least disruptive to the daily lives of the local community. The Tree Removal Plan will be reviewed by agency stakeholders, including Boulder County, and will be submitted and approved by FERC.
Anita Wilks; Art Hirsch; Betsy Armstrong; Betsy R. Armstrong; Bill Ikler; Clark R. Chapman and Y (LMC) Chapman; Dan Feldkhun; Jared and Dawn Minkoff; John Lodenkamper; Kathleen Coddington; Kathy Gritz; Lindy Lewis; Mary Hughes; Maureen Lawry; Megan Wilder; Paul McCarthy; Richard OBrien; Stephen Paul; Steve Lewis; Tim Hogan; Timothy Guenthner; Tom Moore; Virginia Winter; Campaign Letter 1	P-BBB-3; P-C-1; P-CCCCC-1; P-DDDDD-1; P-GGG-1; P-HHHHHH-2; P-IIIIII-6; P-IIIIII-9; P-J-2; P-J-5; P-JJJJJJ-2; P-KK-2; P-LL-2; P-M-1; P-NNNN-5; P-NNNNNNN-2; P-OOOO-3; P-OOOOOO-6; P-OOOOOO-8; P-QQQQQ-5; P-U-1; P-WWW-2; P-WWW-8; P-WWWWW-2; P-XXX-5; P-XXXX-1; P-XXXX-2; P-XXXX-5; P-YY-1; P-YY-4; P-ZZ-3	*Issue #6: Compliance with Boulder County Requirements* Commenters listed concerns that the GRE Project would not comply with the Boulder County Comprehensive Plan or sections of the Boulder County Land Use Code. Commenters asserted zoning issues with the GRE Project and disputed the waivers requested in Denver Water's 1041 Permit Application.	The area surrounding Gross Reservoir is zoned as "Forestry" and one of the many allowed uses are water reservoirs. The Corps' Final EIS concluded that the GRE Project is not inconsistent with Boulder County's Comprehensive Plan. In fact, expansion of Gross Reservoir is not an industrial activity but is an expansion of a water supply reservoir, which is a permitted use within the Forestry zoning of Boulder County's Land Use Code Article 4, Zoning, and Land Use Code Article 8, Areas and Activities of State Interest (1041). In addition, Denver Water will obtain necessary County building, access, stormwater, transportation and other permits for construction of the GRE Project. Denver Water is complying with Boulder County requirements.
Clark R. Chapman and Y (LMC) Chapman	P-ZZ-4	*Issue #7: Compliance with USFS National Forest Plan* One commenter asserted that the reservoir expansion would be incompatible with the USFS Arapaho Roosevelt National Forest plans.	Gross Reservoir and Dam are within a federal hydropower reserve. As a result, the reserve is under the jurisdiction of FERC. Denver Water is permitted to operate the dam and reservoir under a FERC-issued license. The USFS Arapaho Roosevelt National Forest Plan identifies that Denver Water's Gross Reservoir and Dam are permitted by FERC. The USFS has jurisdiction of activities on National Forest System lands and therefore the

Commenter(s)	Comment ID No.	Summary of Issue	Response
			USFS has imposed conditions on Denver Water's FERC license for those National Forest System lands of the Arapaho Roosevelt National Forest occurring within the FERC boundary.
Al Evans; Allen Gordon; Anita Wilks; Arpita Kishen; Chris Rigatuso; Claudia VanWie; Dr. William J. Merline; George and Deb Craft; Lori Thorne-Smith; Victoria Capron	P-EE-1; P-EE-3; P-EEEE-1; P-HHHHHHHH-3; P-HHHHHHHHH-1; P-MMMMMMM-3; P-OOOOOO-2; P-RRRRRRRR-3; P-SSSSS-2; P-VV-8; P-YYYYYYYYY-1	*Issue #8: Construction Impacts* Commenters expressed concerns regarding the construction timeline, traffic, noise, dust, and lights.	Denver Water is working to identify and minimize project disruptions including traffic, noise, dust and light. Many of these mitigation measures will be included in the final plan development after consulting with various agencies as needed. Denver Water has sought public input on the timing of deliveries and other activities to minimize impacts to residents to incorporate into the final Traffic Management Plan and other relevant plans.
Kathleen Chippi	P-VVV-1	*Issue #9: Cultural Resources* A commenter expressed concern that the GRE Project would impact culturally modified trees (living artifacts left by the Ute and Arapahoe).	A cultural resource review was performed as part of the Corps' Final EIS process. Denver Water will follow the terms of the executed Programmatic Agreements with the State Historic Preservation Officer issued for the GRE Project. As such, Denver Water will have an on-site inspector to ensure compliance with many environmental requirements including cultural resources.
Adam Klagsbrun; Alfred McLaren; Alicia Grayson; Allen Gordon; Bill Ikler; Cara Anderson; Charley Haggans; Dan Feldkhun; Dave Perkins; Diane Bergstrom; Dr. Bea Knight-Johnson; Eliza Zimmerman; Gerard Kelly; Gordon McCurry; Heather Tsai; Isak Bromley; James Morin; Janet Robinson; Jim Drevescraft; Jim Horvath; Joe and Shelly Ceurvorst; John Malenich; John Welsch; Julie Naster; Justin Groom; Karen Gerrity; Kari Manteuffel; Kathleen Saunders; Kathy Gritz; Laurie Dameron; Lindy Lewis; Lueb Popoff and Annie Forester; M Adaline Jyurovat; Marta Lindrose; Mary Krayer; Mary Maxwell; Michelle Clopton; Ovidio Bermudez; Patricia Heaviland; Paul Delong; Paul McCarthy; Peter Leuenberger; Ray Clopton; Rhett Mitchell; Robert Dannenberg; Ronald Viviano; Sarah Hallowell; Starteya Pais; Steve Lewis; Susie Gallaudet; Suzanne Watson; Tania Corvalan; Tim Hogan; Tom Moore; Zachary Coles	P-AAA-1; P-BBBBBBBBB-1; P-C-2; P-CCCCCCC-1; P-DDD-1; P-DDDDDD-1; P-DDDDDDD-1; P-EEE-2; P-EEEEEEEEE-1; P-FFFFFF-1; P-FFFFFFF-1; P-FFFFFFF-3; P-GGG-2; P-H-1; P-HH-1; P-HHHH-2; P-HHHH-3; P-HHHH-6; P-IIIII-1; P-IIIIII-4; P-IIIIIII-1; P-IIIIIIII-1; P-IIIIIIIII-2; P-KK-3; P-KKKK-1; P-LL-3; P-MMMMMM-3; P-MMMMMMM-1; P-NNN-7; P-NNNN-6; P-OO-1; P-OOOOO-1; P-OOOOOOO-1; P-OOOOOOOO-1; P-OOOOOOOOO-1; P-PPPPP-1; P-QQQQQ-2; P-QQQQQQ-1; P-SSSSSS-1; P-SSSSSSSS-1; P-TT-3; P-TTTTTTT-1; P-UUUUUUU-1; P-UUUUUUUUUU-1; P-VVVV-1; P-VVVVVVVV-1; P-WWWWW-4; P-WWWWWWW-1; P-WWWWWWWWW-1; P-WWWWWWWWWW-1; P-XX-1; P-XXXXX-1; P-XXXXXXX-1; P-XXXXXXXX-1; P-XXXXXXXXX-1; P-XXXXXXXXXX-1; P-ZZZZZ-1; P-ZZZZZZZ-1; P-ZZZZZZZZ-3	*Issue #10: Environmental Impacts* Commenters expressed concerns that the GRE Project would be environmentally unsound or unsustainable. They cited tree removal, disruption of wildlife, road impacts, noise, decreased air quality, visual impacts, and flooding as concerns. Several commenters proposed noise mitigation.	Impacts associated with the GRE Project were identified by the Corps and mitigated through multiple agreements with several parties. Denver Water is willing to continue discussions with Boulder County to describe all the mitigation and enhancement measures associated with the GRE Project. Please see response to comment I-15 for a summary of mitigation agreed to by Denver Water. Please also see Exhibit 23, Meeting Record, containing summary notes and presentation slides from meetings with several Boulder County Departments and other referral agencies where mitigation measures on various topics were discussed. Denver Water is currently coordinating on floodplain requirements with the Boulder County Floodplain Program. Please see responses to comments contained in agency comment letter "L" of Exhibit 19 – Referral Agency Comment and Response Table, for additional details. This issue was addressed in FERC's responses to Issue # 3–5, 7–8, 12, 13, 20, and 22 of the FERC Supplemental EA. The environmental impacts of Denver Water's proposal to expand Gross Reservoir and amend its project license have been adequately evaluated through the Corps' NEPA process, which included a Draft EIS and Final EIS and FERC's Supplemental EA. Denver Water proposes multiple measures to address construction noise levels. As discussed in section 5.1.10, Aesthetics, of the FERC Supplemental EA, the effects of blasting and other construction-related noise would be addressed and minimized through measures in a series of plans that would need to be approved by FERC before any blasting or other noise-producing actions occurred. These plans will be reviewed by agency stakeholders including Boulder County. Please also see response to comment O-A-08 above regarding noise.
Art Hirsch; Jared and Dawn Minkoff; Maureen Lawry; Richard OBrien; Tim	P-HHH-1; P-HHHHHH-5; P-J-4; P-JJJJJJ-3; P-NNNN-4; P-WWW-9; P-XXX-3; P-XXXX-4; P-YY-3	*Issue #11: FERC Process* Commenters expressed concerns related to the analysis and conclusions sections in the FERC's license amendment process.	Both FERC and the Corps engaged in a robust environmental analysis of the GRE Project that lasted well over a decade and included multiple opportunities for public review and comment. FERC found these analyses provided "a complete record of analysis of the environmental effects of Denver Water's proposal to amend the license for the Gross

Commenter(s)	Comment ID No.	Summary of Issue	Response
Hogan; Timothy Guenthner; Virginia Winter; Campaign Letters 1 and 3			Reservoir Project." No party to the FERC process, including Boulder County, sought rehearing of FERC's Order, which is now final. Additional environmental analysis of Denver Water's proposal at this stage is not necessary, would be duplicative of analyses already performed by the Corps and FERC, and would jeopardize the schedule for the GRE Project dictated by the FERC Order. To be clear, regarding FERC's role in the GRE Project, FERC has had exclusive jurisdiction over Gross Dam and Reservoir since it first issued a license for the Project in 1951. FERC authorization is required for the reservoir expansion because FERC has comprehensive regulatory authority over GRE Project operations, including Gross Reservoir operations, under the Federal Power Act.
Adam Klagsbrun; Art Hirsch; Diane Merline; Kate Thompson; Patti Hirsch; Spencer Uniss	P-CCC-4; P-HHHHHH-7; P-MMMMMM-1; P-NNNNN-3; P-QQQ-1; P-WW-2	*Issue #12: Fish/Aquatic Biology* Commenters noted recreational fishing concerns and asserted the application did not adequately consider potential impacts to fish and aquatic biology and water quality in Gross Reservoir and downstream in South Boulder Creek.	This issue was addressed in the FERC's response to Issue #4 (re: Colorado River Impacts) of the FERC Supplemental EA. The possibility of reservoir expansion causing colder water releases to South Boulder Creek and affecting aquatic resources is discussed in Chapter 4.6.11 of the Corps' Final EIS, and in section 5.1.3.2, Water Quality, Environmental Effects, of the FERC Supplemental EA. General effects to fishing and aquatic biology are addressed in section 5.1.4, Fisheries and Aquatic Resources, of the FERC Supplemental EA. This issue was also addressed in the 401 Certification – see Rationale for CDPHE's 2016 Conditional 401 Certification "Rationales and Conditions," "Temperature" (page 10) and Appendix A. CDPHE also imposed Condition 6 on Denver Water, which requires stream temperature monitoring at four locations on South Boulder Creek.
Richard Reynolds	P-UUUUUU-3; P-UUUUUU-4	*Issue #13: Geology* A commenter expressed concern related to potential slope failure from increasing the lake level in an area of weathered soil and rock.	See sections 5.1.1, Geology and Soils, of the FERC Supplemental EA and sections 3.4, Geology, and 3.5, Soils, of the FERC Supplemental EA for additional information regarding geologic concerns. Geologic information and analysis for the 1041 Permit Application was gathered from Denver Water's License Amendment Application to the FERC (section 3.3.5). The 1041 Permit Application acknowledges the potential for slope failure. Reservoir rim instability associated with shallow slope failures could occur. However, because highly weathered granite is relatively free draining, if slope instability does occur at Gross Reservoir, they are expected to be relatively small, local features. Therefore, it is not anticipated that a landslide would involve sufficient volume to create a wave that could overtop the dam or would significantly reduce the storage volume of the reservoir. The Geotechnical Data Report, Geotechnical Design Report and Rockfall Mitigation Plan, all provided in Exhibit 12 of the 1041 Permit Application and completed in 2018, include more recent information, investigations, evaluation of effects and recommendations with regard to geologic hazards.
Anita Carrick; Anita Wilks; Bill Hogrewe; Katie Knapp; Mary Maxwell; Paul McCarthy; Campaign Letter 1	P-IIIIII-7; P-J-8; P-OOOOOO-5; P-PPPPPPPP-3; P-PPPPPPPP-6; P-SSS-1; P-UU-2; P-UUUUUUUUUU-2	*Issue #14: Health and Safety* Several commenters stated the GRE Project would affect public health and safety.	Safety of our community and employees is a top priority to Denver Water. We are designing this project with health and safety front of mind and identifying areas to reduce risk. This issue was addressed in FERC's responses to Issues #1, #7, and #10 of the FERC Supplemental EA.

Commenter(s)	Comment ID No.	Summary of Issue	Response
			Denver Water will mitigate project effects on traffic and public safety through implementation of its Traffic Management Plan, Fugitive Dust Control Plan, Road Maintenance Plan and Public Safety and Law Enforcement Plan. As described in the FERC Supplemental EA, these plans will be finalized in consultation with federal and state agencies and other specified entities and filed for FERC approval. See section 5.1.9, Transportation, Traffic, and Public Safety, of the FERC Supplemental EA. Denver Water is required to consult and coordinate with FERC's Division of Dam Safety and Inspections throughout the design and construction process, which only authorizes work after all pre-construction requirements are satisfied, and will conduct regular inspections of the dam during and after construction. During the design process, Denver Water has convened an Independent Board of Consultants to provide review and comment on the design. Denver Water was also required to perform a thorough and comprehensive Potential Failure Modes Analysis to fully assess any potential dam safety issues that could arise following construction. Construction will not be allowed to begin until all potential dam safety issues have been identified, evaluated, and adequately addressed.
Beverly Kurtz; Bill Ikler; Christine Jensen; Clark R. Chapman and Y (LMC) Chapman; Daniel Sokolov; David Hallock; Eliza Zimmerman; Frank Landis; Jan Burton; Jane Bunin; Janet Justice-Waddington; Jared and Dawn Minkoff; Jodi Crow; John Stevens; Joy Barrett; Karen Hollweg; Kate Thompson; Kathleen Coddington; Liz Morgan; Lyn Lowry; Mary DiGennaro; Mary Marsden; Nick Lenssen; Richard Ley Armstrong; Richard Reynolds; Silvine Farnell; Stephen Paul; Susan Merwin; Teagen Blakey; Tim Hogan; Timothy Guenthner; Virginia Winter; Campaign Letter 1	P-AAAA-1; P-AAAAAA-1; P-BBB-1; P-BBBBBB-1; P-CCC-6; P-CCC-7; P-CCC-8; P-EEEEE-1; P-EEEEEE-1; P-FFFF-1; P-FFFFFF-1; P-IIII-1; P-J-1; P-JJJ-1; P-JJJJ-1; P-JJJJJ-2; P-JJJJJJ-1; P-LLLLLL-1; P-MMM-1; P-MMMM-1; P-NNNN-2; P-OOOO-4; P-RRR-1; P-SSSS-1; P-TTTT-1; P-UUU-1; P-UUUUUU-1; P-WWW-1; P-WWW-3; P-WWW-5; P-WWW-7; P-WWWWW-1; P-XXX-4; P-XXXXXXXX-2; P-YYY-1; P-ZZ-2; P-ZZ-21; P-ZZZ-3; P-ZZZZ-1	*Issue #15: Incomplete Application* Many commenters asserted that the application was incomplete or lacked detailed plans.	Denver Water addressed all applicable criteria in the Land Use Code in its 1041 Permit Application. Denver Water is responding herein to specific requests for additional information and detail to the extent such information is available. Within the time available, we remain willing to address follow-up questions and provide additional information that would help the County in conducting its analysis of the application. For information regarding the plans required by FERC's order, please see response to comment G-6 of Exhibit 19 – Referral Agency Comment and Response Table. This issue is addressed in the FERC's response to Issue #7 of the FERC Supplemental EA. The FERC concluded that the environmental impacts of Denver Water's proposal to expand Gross Reservoir and amend its project license have been adequately evaluated through the Corps' NEPA process, which included a Draft EIS and Final EIS, in which the FERC was a cooperating agency, and in the FERC Supplemental EA. Also refer to Issue #6 (re: Compliance with Boulder County Requirements) of this table for additional details regarding the Boulder County Land Use code and the 1041 Permit Application process.
Clark R. Chapman and Y (LMC) Chapman	P-ZZ-13; P-ZZ-17	*Issue #16: Meteorology* Two commenters asserted that high winds characteristic of the corridor from Caribou and Nederland and continuing through the Reservoir and onto the Rocky Flats plains could affect the GRE Project.	As discussed in FERC Supplemental EA section 5.1.11, Air Quality, plans addressing dust control are proposed by Denver Water and are also required by USFS 4(e) Condition 19. These plans would require approval by FERC and will incorporate important local conditions such as high winds.
Art Hirsch; Betsy Armstrong; Betsy R. Armstrong; Bill Hogrewe; Christine Jensen; Clark R. Chapman and Y (LMC) Chapman; David Hallock; Gordon McCurry; Joy Barrett; Kathy Gritz; Mary Marsden; Maureen	P-BBB-2; P-DDDD-3; P-EEEEEE-3; P-FFFF-2; P-HHHHHH-4; P-J-3; P-LLLLLL-2; P-LLLLLL-6; P-M-2; P-NNNN-3; P-QQQQQ-6; P-RRR-2; P-SSSS-2; P-TT-2; P-UU-5; P-XXX-2; P-XXXX-3; P-YY-2; P-ZZ-20	*Issue #17: NEPA Process* A number of commenters asserted that the Corps' Final EIS Record of Decision violates NEPA by not establishing purpose and need or accurately analyzing alternatives.	The federal agencies undertook a robust NEPA process over more than a decade, including a detailed analysis of the purpose and need for the GRE Project. In addition, they screened more than 300 potential water supply sources and infrastructure components and then evaluated 34 potential project alternatives in fulfillment of NEPA and Clean Water Act requirements. As part of the process, the federal agencies offered numerous opportunities for public review and responded to comments received from a

Commenter(s)	Comment ID No.	Summary of Issue	Response
Lawry; Richard Ley Armstrong; Richard OBrien; Stephen Paul; Tim Hogan; Timothy Guenthner; Campaign Letter 1		Commenters asserted that the expansion is not necessary to provide water to downslope users, and that the Corps' Final EIS does not consider cumulative impacts, climate change, or the influences on the Colorado River.	broad range of stakeholders and interested groups and individuals. Denver Water stands by the process and its conclusions. FERC prepared its Supplemental EA specifically to review environmental effects associated with expansion of Gross Reservoir and amending the GRE Project license. The FERC found that approval of Denver Water's proposal before the Commission would not cause effects to resources in the GRE Project area exceeding those identified in the Corps' 2014 Final EIS and would, in fact, reduce the level of effects in the area.
Ann Getches; Clark R. Chapman and Y (LMC) Chapman; GE Morgan; Jared and Dawn Minkoff; Kathleen Chippi; Laurie Dameron; Stephen Paul; Tim Hagaman	P-BBB-4; P-FFF-3; P-JJ-4; P-MM-2; P-RRRRRR-4; P-VVV-2; P-WWW-4; P-ZZ-10	*Issue #18: Noise* Commenters expressed concerns regarding noise from construction activities and requested noise mitigation.	Denver Water proposes multiple measures to address construction noise levels. As discussed in section 5.1.10, Aesthetics, of the FERC Supplemental EA, the effects of blasting and other construction-related noise will be addressed and minimized through measures in a series of plans that will be approved by FERC before any blasting or other noise producing actions occur. The noise effects that will occur will not be substantially different from those identified in section 5.14.1 of the Corps' Final EIS. Please also see response to comment O-A-08.
Anita Carrick; Arpita Kishen; Brian Whitney; Inge Senglemann; Kari Manteuffel	P-AAAAAAAAAA-1; P-PPPPPPPP-4; P-SSSSSSS-2; P-XXXXXXXXX-3; P-YYYYYYYYY-4	*Issue #19: Property Values* Commenters expressed concern that the GRE Project would affect property values of nearby residents.	This issue was addressed in the response to Issue #8 of the FERC Supplemental EA. The Corps' Final EIS included review of effects to socioeconomics, including home values. A summary of that material was added to section 5.1.8 of the FERC Supplemental EA. As indicated in that section, the FERC does not believe Denver Water's proposal would result in effects to socioeconomics outside those already identified in the Corps' Final EIS.
Adam Klagsbrun; Betsy Armstrong; Clark R. Chapman and Y (LMC) Chapman; George and Deb Craft; Gerard Kelly; Gordon McCurry; Karen Tourian; Kimberly Beck; Lindy Lewis; Liz Morgan; Mark Shader; Mary Maxwell; Phil Armstrong; Phylleri Ball; Steve Lewis; Susan Merwin; Tim Hagaman; Timothy Guenthner	P-BBBBBBBBBB-3; P-DDDD-1; P-DDDDD-2; P-EEEEEEE-1; P-HHHH-1; P-HHHH-8; P-HHHHHHHH-4; P-JJJJJ-1; P-JJJJJJJJJ-1; P-KK-1; P-LL-1; P-LLLLLLL-3; P-MMMMMM-2; P-P-1; P-Q-7; P-R-1; P-SS-1; P-TT-1; P-UUUUUUUUUU-4; P-XXX-1; P-ZZ-18	*Issue #20: Purpose and Need* Commenters assert that the "Purpose and Need" section in the Final EIS is incomplete and outdated. Commenters feel Denver Water needs to make a stronger case for the GRE Project to justify the GRE Project impacts. Several commenters believe the expansion will serve additional prospective customers.	During the federal NEPA process, after offering several opportunities for public review and comment, the Corps and the FERC independently evaluated and accepted the purpose-and-need statement for the GRE Project (Final EIS Chapter 2 and Appendix A). Although most commenters on Denver Water's 1041 Permit Application focus on the issue of future water demand in isolation, the Corps and FERC agreed that Denver Water has multiple interconnected needs for the 18,000 AF/yr of annual firm yield to be supplied by the GRE Project. Not only will this water meet the projected future water demands of Denver Water's customers, the additional water supply and reservoir storage to be developed at Gross Reservoir will help to address a current imbalance between Denver Water's North and South Systems that pose a water security risk to over one quarter of Colorado's population. This imbalance is causing system-wide vulnerability issues, limits Denver Water's operational flexibility to respond to water collection system outages, and threatens Denver Water's ability to meet its present-day water needs. The Corps, together with FERC as a cooperating agency, evaluated multiple alternatives and ultimately selected the proposed expansion of Gross Dam and Reservoir to meet those needs and increase the hydroelectric power generating capacity of the dam. Denver Water cannot choose to implement an alternative not selected by the Corps and FERC, and FERC has ordered Denver Water to begin construction on the GRE Project by July 16, 2022 and to complete construction by July 16, 2027. There is no reason or opportunity to revisit the GRE Project's purpose and need or alternatives to the GRE Project at this stage of the process.

Commenter(s)	Comment ID No.	Summary of Issue	Response
			Denver Water has committed, under the Colorado River Cooperative Agreement (see Exhibit 5j to Denver Water's 1041 Permit Application), not to increase its service area. Denver Water nevertheless faces current risks caused by the imbalance in its supply system and projected increased water demands that are driven by population, economic, demographic and climactic changes that are out of Denver Water's control. The GRE Project, in combination with Denver Water's water conservation and recycling efforts, is designed to address these independent issues, not to drive growth in Denver Water's customer base. The Corps' and FERC's analyses showed that expansion of Gross Reservoir is the most effective and least environmentally impactful approach to meeting the purpose and need for the GRE Project. Please see Final EIS Chapters 2 and 5 for additional information.
Adam Klagsbrun; Clark R. Chapman and Y (LMC) Chapman; Dr. William J. Merline; George and Deb Craft; Harry Jacobson; Jim Horvath; Rob MacCurdy; Stephen Paul	P-BBB-8; P-HHHHHHHH-1; P-MMMMMM-4; P-NNN-5; P-QQQQQQQ-1; P-TTTTT-1; P-VV-5; P-WWWWWWWWW-2; P-ZZ-5	*Issue #21: Recreation* Commenters expressed concerns related to recreational amenities including fishing, camping, and swimming. Commenters asserted the GRE Project would cause a loss of overall recreation land area.	Recreation at Gross Reservoir will remain at the same level in both quantity and quality of amenities upon project completion. Denver Water is replacing any impacted recreation amenities one for one and relocating many of those amenities to new locations above the new high-water line. This issue was addressed in the response to Issue #3 of the FERC Supplemental EA. Effects to recreation at Gross Reservoir will be mitigated through implementation of an amended Recreation Management Plan and compliance with USFS 4(e) Condition 24. Under the amended plan, recreation facilities in the inundation area will be relocated, and effects to recreation will be addressed through monitoring and reporting, with reports filed for FERC approval every 3 years for 12 years after completion of construction. Denver Water will work to reduce effects to recreation during construction by keeping recreation sites open as much as possible without compromising public safety or construction progress, and Denver Water will post notices about temporary restrictions and closures. While recreation opportunities during construction activities will be reduced, post construction all existing opportunities will be replaced in kind.
Campaign Letter 1	P-J-7	*Issue #22: Resource Conservation* Commenters assert the GRE Project is not compatible with resource preservation and does not minimize resource damage, as required by Boulder County.	Denver Water believes the GRE Project is compatible with Boulder County's resource preservation and will minimize resource damage. To offset impacts to forested acreage that will be inundated at Gross Reservoir, Denver Water has worked with the USFS to dedicate forested parcels containing unique wetland habitat and other important conservation values for preservation as National Forest System land located near the East Portal of the Moffat Tunnel (i.e., the Toll Property parcels). This will preserve additional lands in the South Boulder Creek watershed under USFS ownership for open space and wildlife uses. Wildlife will still utilize the expanded Gross Reservoir. The increase in shoreline will create additional habitat for the aquatic and terrestrial species at Gross Reservoir. Additional information on this Toll Property ecological value can be found in Exhibit 31 of this response to comments submittal. Additionally, the Clean Water Act requires the Corps to select and permit the Least Environmentally Damaging Practicable Alternative. The Corps issued its 404 Permit identifying the GRE Project as the Least Environmentally Damaging Practicable Alternative. Denver Water and the Corps both believe the expansion of Gross Reservoir, when compared to other practicable alternatives, is the least environmentally

Commenter(s)	Comment ID No.	Summary of Issue	Response
			damaging practicable alternative available to fulfill the purpose and need for the GRE Project.
Caron Trout; Kate Thompson; Marca Hagenstad	P-BBBBBBBB-1; P-CCC-2; P-Z-1	*Issue #23: Sustainability* Commenters asserted that the GRE Project is not sustainable and does not comply with Boulder County's sustainability philosophy and mission statement.	Denver Water believes the GRE Project is sustainable as it will increase hydropower production at Gross Dam, generating a clean, emissions-free form of power that will eliminate the need for an equivalent amount of fossil-fuel produced energy, which helps conserve nonrenewable resources and decreases atmospheric pollution. Additionally, the federal and state permitting process resulted in mitigation and enhancement measures for the GRE Project, many of which have specific performance standards that Denver Water must meet.
Andrew Schelling; Anita Carrick; Anita Wilks; Ann Getches; Arpita Kishen; Art Hirsch; Avery Russell; Bill Hogrewe; Bob Bartusiak; Brian Whitney; Brooke Carrick; Chris Passarelli; Chris Rigatuso; Clark R. Chapman and Y (LMC) Chapman; David Fitchette; Dr. William J. Merline; Frank Landis; GE Morgan; Gerard Kelly; James Curfman; James M. Ausberger; James Morin; Jill Judd; Jim Drevescraft; Jim Horvath; Joe and Shelly Ceurvorst; John & Vicki Lemmon; John MacKay; John Shortridge; Justin Groom; Karen Tourian; Kari Manteuffel; Kate Thompson; Kathy Prentice; Kimberly Beck; Patti Hirsch; Paul McCarthy; Peter Leuenberger; Spencer Uniss; Stephen Paul; Steve Pomerance; Tim Hagaman; Tom Moore; Campaign Letter 1	P-AAAAAAAA-2; P-BBB-6; P-BBBBBBBBBBB-2; P-CCC-5; P-CCCCCCCC-1; P-D-1; P-DDDDDDDDD-1; P-EE-2; P-F-1; P-FFFFFFF-2; P-G-3; P-GGG-3; P-GGGG-1; P-GGGGG-1; P-GGGGG-3; P-HHHH-4; P-HHHHHH-8; P-II-1; P-IIIIII-3; P-IIIIIIIII-1; P-J-9; P-JJJ-2; P-JJJJJJJ-2; P-JJJJJJJJ-2; P-LLLLLLL-2; P-MM-1; P-NNN-4; P-NNNNN-4; P-OOOOOO-3; P-OOOOOO-7; P-PP-1; P-PPP-1; P-PPPPPPPP-1; P-Q-1; P-QQ-3; P-QQQ-2; P-QQQQ-1; P-RRRRRR-3; P-SSSSSSS-1; P-UU-3; P-VV-1; P-VVVVVVVV-2; P-WWWWWW-1; P-XXXXX-2; P-XXXXXXXXX-4; P-YYYYYYYYY-5; P-ZZ-12; P-ZZ-16; P-ZZ-8; P-ZZZZZZZZ-2; P-ZZZZZZZZZZ-3	*Issue #24: Traffic/Transportation* Commenters expressed concerns that the GRE Project would generate additional traffic. Residents and commuters in the vicinity would be impacted over the multi-year construction period.	A preliminary Traffic Management Plan will be provided to Boulder County in May 2021 and a final version in July 2021, in accordance with FERC submittal requirements. This plan will detail the volume and frequency of traffic related to the GRE Project as well as planned mitigation methods to reduce impacts to the community. This issue was addressed in the response to Issue #1 of the FERC Supplemental EA. Denver Water has addressed traffic effects in the FERC Supplemental EA section 5.1.9. In addition, Denver Water developed a stakeholder input-based plan to identify options for minimizing impacts analyzed in the Corps' Final EIS during the removal and disposal of trees in ways that are least disruptive to the daily lives of the local community. The Tree Removal Plan will be reviewed by agency stakeholders, including Boulder County, and will be submitted and approved by FERC. Community impacts were also addressed in the response to Issue #5 (re: Community Impacts) in this table.
Ann Getches; Charles Little; Dr. William J. Merline; George and Deb Craft; Jim Disinge; John Malenich; John and Carol Belcher; Kathy Gritz; Laurie Dameron; Lori Thorne-Smith; Paul Katz; Sheila Ranegar	P-AAAAAAAAA-1; P-BBBBB-1; P-H-2; P-HHHHHHHH-2; P-JJ-2; P-N-1; P-PPPPPPPPP-1; P-QQQQQ-3; P-RRRRRR-2; P-SSSSS-1; P-VV-6; P-VVVVVVVVV-2	*Issue #25: Tree Removal* Commenters expressed concerns regarding tree removal. They assert that removing more than 200,000 trees would impact wildlife habitat and remove a natural carbon sink.	The GRE Project will allow the production of additional emissions-free hydropower and Denver Water is in the process of transferring 539 acres of land (the Toll Property parcels) to the USFS for management. This issue was addressed in the response to Issue #22 of the FERC Supplemental EA. The removal of trees in the proposed inundation area will reduce carbon uptake and burning the removed trees will release carbon dioxide, which is a greenhouse gas. However, the Corps' Final EIS included detailed analysis of greenhouse gas emissions, and that analysis included contributions associated with construction. Pursuant to FERC's Order Article 423, within 1 year of the date of FERC's Order and after conferring with certain governmental stakeholders, including Boulder County, Denver Water must submit a Tree Removal Plan for FERC's review and approval. Denver Water will provide the draft Tree Removal Plan to Boulder County for review and comment in accordance with the terms of FERC's Order. The GRE Project Tree Removal

Commenter(s)	Comment ID No.	Summary of Issue	Response
			Plan will encompass approximately 486 acres. The land that will be cleared is between the elevations of 7,282 feet and 7,406 feet. Project impacts and mitigation related to vegetation and wildlife habitat are addressed in section 5.1.5.2 of the FERC Supplemental EA. The FERC Supplemental EA examines the applicable mitigation plans Denver Water would implement, once they have been finalized in consultation with the USFS, CSFS, Boulder and Jefferson counties, and the local community, and approved by the FERC. Additional information on this issue can be found in FERC Supplemental EA sections 5.1.1, Geology and Soils; 5.1.3, Water Quality; 5.1.4, Fisheries and Aquatic Resources; 5.1.5, Terrestrial Resources; 5.1.7, Recreational Resources; 5.1.8 Land Use and Socioeconomics; 5.1.9 Transportation, Traffic, and Public Safety; 5.1.10, Aesthetics; and 5.1.11, Air Quality.
Adam Klagsbrun; Al Evans; Alicia Grayson; Andrew D. Melick; Anita Wilks; Ann Getches; April Lew; Arpita Kishen; Art Hirsch; Avery Russell; Bill Hogrewe; Bill Ikler; Brian Whitney; Carol Pittman; Caron Trout; Charles Little; Charley Haggans; Clark R. Chapman and Y (LMC) Chapman; David Fitchette; Deborah Greenfeld; Diane Merline; Dr. William J. Merline; Ed and Sheila Ranegar; Eliza Zimmerman; Fred Peck; Harvey Nyberg; James Curfman; Jan Burton; Janet Justice-Waddington; Jared and Dawn Minkoff; Jim Horvath; John Bradin; John Malenich; Karen Gerrity; Kari Manteuffel; Kate Thompson; Kathleen Coddington; Kathy Peck; Kimberly Beck; Larry Utter; Laurie Dameron; Marilyn Whittaker; Mark Shader; Mark and Lynn Shader; Marta; Marta Lindrose; Mary Hughes; Mary Kramer; Mary Krayer; Mary Marsden; Patricia Eaton; Patti Hirsch; Paul McCarthy; Paula Hendricks & Norman Lederman; Pete Durkin; Richard Ley Armstrong; Starteya Pais; Tim Hagaman; Timothy Guenthner; Campaign Letters 1 and 2	P-AAAAAAAAA-2; P-B-1; P-BB-1; P-BBBBBBB-1; P-CCC-3; P-CCCC-1; P-CCCCCCCC-2; P-DDD-2; P-DDDDDDDD-1; P-EEE-1; P-FFF-1; P-FFF-4; P-FFFFFF-2; P-GGGGG-2; P-GGGGGGGGGG-1; P-H-3; P-HHHHHH-3; P-IIIIII-2; P-J-6; P-JJ-5; P-KKK-2; P-KKKKKKK-1; P-L-1; P-LLL-1; P-LLLLLL-5; P-NNN-2; P-NNNNN-1; P-NNNNNN-1; P-NNNNNNNN-3; P-O-1; P-OO-3; P-OOO-1; P-OOOO-1; P-OOOOOO-9; P-PPP-3; P-PPPPPPP-1; P-Q-4; P-RRRRRR-5; P-RRRRRRRR-1; P-RRRRRRRR-2; P-SSSS-3; P-SSSSSSS-3; P-T-1; P-U-2; P-UU-1; P-UUUU-1; P-VV-3; P-VVVV-2; P-VVVVVV-1; P-VVVVVVVVV-1; P-WW-4; P-WWW-6; P-WWWWW-3; P-WWWWWWW-2; P-WWWWWWWW-1; P-WWWWWWWWW-3; P-XXX-6; P-XXXXXXX-3; P-XXXXXXXX-X5; P-Y-1; P-YYY-2; P-YYYYYYYYY-2; P-Z-2; P-ZZ-9	*Issue #26: Water Conservation* Commenters state that Denver should implement water use restrictions and other conservation measures to meet water demand.	Please see response to comment I-9 of Exhibit 19 – Referral Agency Comment and Response Table.
P-AAA-4; P-BBB-7; P-HHHH-5; P-QQQQQ-4; P-WW-3	Diane Bergstrom; Diane Merline; Gerard Kelly; Kathy Gritz; Stephen Paul	*Issue #27: Water Quality*	This issue was addressed in the response to Issue #4 of the FERC Supplemental EA. The possibility of reservoir expansion affecting aquatic resources and water quality is discussed in Chapter 4.6.11 of the Corps' Final EIS, and in section 5.1.3.2, Water Quality,

Commenter(s)	Comment ID No.	Summary of Issue	Response
		Commenters asserted the GRE Project would degrade water quality including the water quality of the Fraser and Colorado rivers.	Environmental Effects, of the FERC Supplemental EA. As explained in section 5.1.3.2, flow releases under the off-license Intergovernmental Agreement would increase low winter flows and thereby reduce the potential for freezing. This issue was also addressed in the 401 Certification – see Rationale for CDPHE's 2016 Conditional 401 Certification (Exhibit 5 of the 1041 Permit Application). CDPHE also imposed Conditions 1, 2, 3, 4, 5, 7, 8, 9, 14, and 15 on Denver Water, which require stream water quality monitoring at multiple locations primarily in the Fraser River Basin. Additionally, Denver Water is also required to monitor aquatic life at four locations (Conditions 10 and 11).
P-ZZZZZZZZZZ-1	Steve Pomerance	*Issue #28: Water Rights* A commenter expressed concerns that the GRE Project would compromise junior water rights for other Front Range communities.	Denver Water will adhere to Colorado Water Law regarding water rights and water supplies. As stated in section 4.4.7 of the FERC Supplemental EA, Denver Water owns water rights that may be stored and released from Gross Reservoir in accordance with state law. Water delivered to Gross Reservoir comes from two different sources: West slope diversions via the Moffat Tunnel and native flows in South Boulder Creek. Denver Water currently holds all necessary water rights to fill the expanded reservoir.
P-AAAAAAAA-1; P-NNNNNNNN-2; P-QQ-1; P-QQ-5; P-VV-4	Chris Passarelli; Dr. William J. Merline; John & Vicki Lemmon; Pete Durkin	*Issue #29: Water Supply* Commenters asserted that insufficient water is available to fill the expanded reservoir.	See response to comment O-A-04 for additional information. Water supply was addressed in sections 1.4.4.1 through 1.4.4.4 of the Corps' Final EIS in regard to the purpose and need for the GRE Project. Water delivered to Gross Reservoir comes from two different sources: West slope diversions via the Moffat Tunnel and native flows in South Boulder Creek. The alternative selection process included in section 2 of the Corps' Final EIS evaluated the GRE Project in relation to its ability to meet the additional water supply purpose; specific components of the GRE Project are discussed in section 2.3.2.
Christine Jensen; Clark R. Chapman and Y (LMC) Chapman; Claudia VanWie; Diane Bergstrom; Jim Horvath; John and Carol Belcher; John and Carol Blecher	P-AAA-3; P-EEEE-2; P-EEEEEE-2; P-NNN-6; P-PPPP-1; P-PPPP-2; P-ZZ-15	*Issue #30: Wildfires* Commenters expressed concerns about the GRE Project increasing wildfire risks and asked about Denver Water's Fire Management and Response Plan. One commenter expressed concerns that the GRE Project would affect wildlife already affected by wildfires.	This issue is addressed in the response to Issue #21 of the FERC Supplemental EA. Fire risk and mitigation are discussed in section 5.1.5 of the FERC Supplemental EA, Terrestrial Resources. Fire preparedness and prevention will be incorporated throughout Denver Water's construction plans. Denver Water is required by FERC to develop a Fire Management and Response Plan (Condition 20) within 2 years of the issuance of the FERC Order (July 2022). Denver Water will follow fire bans and takes measures to enforce fire bans. In 2019 Denver Water installed locking mechanism on all grills in picnic areas at Gross Reservoir to prevent use during fire bans. Additionally, Denver Water hires four Boulder County Rangers to patrol Gross Reservoir during the recreation season.
Alex Mendoza; Allen Gordon; Anita Carrick; Anita Wilks; Annie Seidman; Avery Russell; Clark R. Chapman and Y (LMC) Chapman; Diane Bergstrom; Dr. William J. Merline; GE Morgan; James Curfman; Jennifer Stewart; Jill Judd; Jim Horvath; John & Vicki	P-AAA-2; P-BBBBBBBBBBB-1; P-CCCCCCCC-3; P-HHHHHHH-1; P-IIIIII-5; P-JJJJJJJ-1; P-LLLLLLL-1; P-MM-4; P-MMMMMMM-2; P-NN-1; P-NNN-3; P-OO-2; P-OOOO-2; P-OOOOOO-4; P-PPP-2; P-PPPPPPPP-5; P-QQ-4; P-S-1;	*Issue #31: Wildlife/Habitat* Commenters asserted the GRE Project would affect wildlife through construction activities and loss of wildlife habitat.	This issue was addressed in the response to Issue #20 of the FERC Supplemental EA. Additional information and analysis were included in section 5.1.5 of the FERC Supplemental EA, Terrestrial Resources to address effects of noise, lighting, habitat fragmentation, and the timing of mitigation measures on wildlife and wildlife habitat. Refer to responses to Issue #s 12 (re: Fish/Aquatic Biology), 21 (re: Recreation), and 25 (re: Tree Removal) in this table for additional detail.

Commenter(s)	Comment ID No.	Summary of Issue	Response
Lemmon; Jose Garcia; Judy Bohn; Kathleen Coddington; Marta Lindrose; Mary Maxwell; Paul McCarthy; Tim Hagaman	P-TTTTTT-1; P-UUUUUUUUUU-3; P-VV-7; P-VVVVV-2; P-ZZ-11; P-ZZ-6		Other data used was the best information at the time the analysis was completed, and Denver Water believes it is still an accurate representation of the conditions. The loss of National Forest Service lands is being more than offset in acreage and environmental resources by the transfer of the Toll Property parcels from Denver Water to the USFS.
Adam Auerbach; Allen Brow; Ann; Anna and Tony Zubricky; Annie Gaddy; Barbara Comstock; Beverly Kurtz; Bob Story; Brent Warren; Brian Whitney; Brice and Brigitte Johnson; Diane (Merline) Miller; Jane Cohen; Janice Walker; Jennifer Stewart; Jim Drevescraft; John Bradin; John MacKay; John Ryan; Kimberly Beck; Laura Downing; Mario Casilio; Michelle Courtney; Mike Fetyko; Nina Judd; Paul McCarthy; Ric Rawlins; Robert Frey; Ruth Carol and Glen Cushman; Sarah Koniewicz; Scott Fincher; Sharon Rouse; Steve Spry; Tim Hagaman; Tim Hogan; William Thomas; William Welch; Zach Pesch	P-AA-1; P-AAAAAAA-1; P-AAAAAAAAAAAA-1; P-CCCCCC-1; P-CCCCCCCCCCC-1; P-E-1; P-FF-1; P-FFF-1; P-G-1; P-G-2; P-G-4; P-GG-1; P-HHHHH-1; P-I-1; P-III-1; P-IIIIII-8; P-JJJJJJJ-1; P-K-1; P-KKKKK-1; P-KKKKKK-1; P-KKKKKKKK-1; P-LLLL-1; P-LLLLL-1; P-MMMMM-1; P-NNNN-1; P-PPPPPP-1; P-Q-3; P-QQQQQQQQ-1; P-RRRRR-1; P-TTT-1; P-V-1; P-VVVVV-1; P-W-1; P-X-1; P-XXXXX-3; P-XXXXXX-1; P-YYYYY-1; P-YYYYYY-1; P-YYYYYYYY-1; P-ZZZ-1; P-ZZZZZZ-1	*Issue #32: General Opposition* Commenters expressed general opposition to the GRE Project. Many commenters sent campaign letters indicating opposition to the GRE Project and citing issues summarized in this table.	Thank you for your comments. Responses to your comments are included in this table.
Chris Hansen; Pete Durkin	P-NNNNNNNN-1; P-UUUUUUUU-1	*Issue #33: General Support* One commenter stated their support for the GRE Project. Another noted that the GRE Project was the compromise reached during the Two Forks cancellation and that people who purchased property in the past 30 years were aware of the planned reservoir expansion.	Thank you for your comment. The commentor is correct, a portion of the yield from the Two Forks Project is being met by the expansion of Gross Reservoir.
Jim Cowart	P-YYYYYYY-1	*Issue #34: Application Files* One commenter requested that application files be provided via zip drive.	Denver Water acknowledges this request; responding to this request is within the responsibility of Boulder County Community Planning & Permitting Department to grant.
Al Evans; Alex Markevich; Alison Harris Ludlow; Andrew Currie; Anna McDermott; Cary Paul; Charles Little; Dana Edwards; David Lucas; David William Maclennan; Eileen Kintsch; Elizabeth Garfield; Gerard Kelly; Giles Goodwin; Ginger Ikeda; Hope Prinkey; John Lodenkamper; Lucien and Anne Heart; Mikaela Ruland; Naomi Rachel; Neil Rosenthal; Paul Delong; Peter Leuenberger; Randall Philipsborn; Sarah Hallowell; Stephen	P-AAAAAAAAA-3; P-BBBBBBBBBB-1; P-CCCCCCCCC-1; P-DDDDDDD-2; P-EEEEEEEE-1; P-FFFFFFFF-1; P-FFFFFFFFF-1; P-GGGGGGG-1; P-GGGGGGGGG-1; P-GGGGGGGGG-1; P-IIIIIIIII-1; P-JJJJJJJJJ-1; P-KKKKKKKKK-1; P-LLLLLLLL-1; P-LLLLLLLLL-1; P-LLLLLLLLL-1; P-MMMMMMMM-1; P-MMMMMMMMM-1; P-MMMMMMMMM-1; P-NNNNNNN-1; P-NNNNNNNNN-1; P-OOOOOOOO-2; P-OOOOOOOOO-	*Issue #35: Comment Period Extension* Commenters requested an extension to the comment review period due to the large volume of application materials to review.	Denver Water notes that the Boulder County Community Planning & Permitting Department extended the referral agency review period two times during the 1041 Permit Application review process. First, on October 7, 2020, the Department granted an extension to referral agency review period until November 13, 2020; and second, on November 13, 2020, the Department granted an extension to referral agency review period until December 17, 2020.

Commenter(s)	Comment ID No.	Summary of Issue	Response
Robinson; Susie Gallaudet; Tania Corvalan; Tonya Williamson; U Kyaw Win; Uriah Beauchamp; Campaign Letter 4	1; P-QQQQQQQQQ-2; P-RRRRRRRR-1; P-TTTTTTT-2; P-TTTTTTTT-1; P-TTTTTTTTT-1; P-XXXXXXX-2; P-YYYYYYYYY-1; P-ZZZZZZZZ-1; P-ZZZZZZZZZ-1		
Anna and Tony Zubricky; Art Hirsch; Beverly Kurtz; Clark R. Chapman and Y (LMC) Chapman; Clark and Y Chapman; Kate Thompson; Laurie Dameron; Richard Reynolds	P-CCC-1; P-HHHHHH-1; P-JJ-1; P-MMMMM-2; P-RR-1; P-RR-2; P-UUUUUU-2; P-ZZ-1	*Issue #36: Attachments* Commenters attached documents to their letters to provide additional information.	These letter attachments have been broken out in the comments for individual responses. The attachment for comment P-RR-1 is included in P-ZZ-1.
See table that follows.	See table that follows.	*Issue #37: Campaign Letters* Commenters sent the same campaign letters that included the issues addressed in this table.	Denver Water has responded to comments provided in campaign letters under the issues included in this table, which documents responses to comments from organizations, and under the specific issue summaries in this table.

Table 5 – Campaign Letters

Campaign Letter Number	Number of Letters Received	Commenter(s)	Comment ID No.
Campaign 1	314	Adrienne Bielak; Al Burk; Al Gale; Alberta & Don Montgomery; Alexandra Vollmer; Allan Lazrus; Amanda Kneer; Amy Fortunato; Andre Mallinger; Andrew D. Melick; Andrew Schelling; Andrey Weinstein; Anita Nebel; Anna Poisson; Anne Pfeffer; Annie Forester; Annie Seidman; Annika Heumann; Arden Buck; Aron Ralston; Art Hirsch; Arthur J Altree; Ashleigh Shader; Ask Eloise; August Schultz; Barbara Fahey; Barbara Hofmann; Barbara Howard; Ben Lann; Ben Weber; Bernard Filla; Beryl Beauchamp; Bill Butler; Bill Jenkins; Brendt Savid; Brent Warren; Brett Curry; Brice Johnson; Brittany Olson; Brook Stableford; Brooke Watson; Bruce Doenecke; Carmi Gazit; Caroline Zug; Carolyn Elliott; Carolyn Meyer; Carolyn Stansfield; Cassandra Gobrecht; Catherine Ebeling; Catherine Grace; Charlene Kerchevall; Charlene Rush; Charles Akins; Cheryl Dzubak; Chris Rigatuso; Christopher Beers; Christopher Kahl; Cindy Patterson; Claudia Parker; Cliff Long; Clifton Bain; Cook Rodgers; Crystal Gray; Cynthia Berginc; Dakota Soifer; Dan Perez; Dana Edwards; Daniel Friend; Daniel Jacobs; Dara Rotunno; Dave Troutman; David Fulton-Beale; David Papuga; David Rodgers; David William Maclennan; Dawn Ferro; Dawn Minkoff; Deanne Grover; Dennis Manning; Devin Detwiler; Diana Leonard; Diana Maxwell; Diane Ludlow; Dianne Fleming; Diego Olaya; Don Van Wie; Donald Scott; Doug Benson; Duncan Brown; Dylan Mitchell; Eileen Kintsch; Elena Klaver; Elisa Townshend; Elizabeth Ellis; Elizabeth Lamanna; Elizabeth Mahon; Elizabeth Milford; Elizabeth Parker; Elizabeth Waldner; Ellen Gutfleisch; Ellen Middleditch; Emma Sargent; Fred Peck; GInger IKeda; Gail Storey; Gary; Gordon Reese; Greg Heiden; Greg Thomas; Gregory Pais; Gregory Riddael; Gretchen Bach; Gwendy Haas; Hans Rohner; Harry Smolker; Harvey Nyberg; Heather Lazrus; Henriette Hagg; I. Engle; Ilene Flax; JL Angell; James Morris; Jane Enterline; Janis Kelly; Jason Alexander; Jean Whitman-Shelby; Jeff Greene; Jeffry Scroggins; Jennie Hammers; Jill Ascher; Jill Powers; Jill Willson; Jim McComas; Jim and Kathy Polizzi; Jodi Connelly; Jodie Simon; Joe Greenman; John Andrews; John Campagnoli; John Reed; John Steele; John Stevens; John Wagner; Jolene Kindig; Joseph Ponisciak; Josh Harrod; Joyce Frohn; Judd Johnson; Judith Strahota; Judy Marsh; Julia Chase; Julie Shaffer; Juniper Jane Manchon; Justin Shaffer; KC Waters Guarascio; Karen Burroughs; Karen Dike; Karen Sandburg; Karen Tourian; Karin S.; Karina Black; Kate Thompson; Kate Warner; Katherine Gale; Kathleen Chippi; Kathleen Coddington; Kathleen Cravy; Kathleen Spear; Kathy Prentice; Keith Harper; Ken Bonetti; Kenneth Fisher; Kevan Krasnoff; Kim Cameron; LAURIE HALEE; Larry Barfield; Larry Utter; Laurelyn Baker; Laurence Nolan; Lawrence Crowley; Layna Melvin; Leah Johansen; Leslie Faurot; Liesl Jensen; Linda Duffy; Lindsay Alexander; Liz Morgan; Liz Vaillancourt; Loree Wilcox; Lorri Fay; Lou Vincent; Louise Murphy; Lucien and Anne Heart; Lueb Popoff; Lynn Staskal Wilson; Lyra Mayfield; Lysa Wegman-French; Maggie Boyer; Mai Lowantel-Beare; Maj Russell; Margaret Hostetter; Margaret LeCompte; Margaret McKune; Margie Robinson; Maria Michael; Marilyn Hoff; Mario Casilio; Mark Glenn; Marta; Mary Krayer; Mary Maxwell; Mary Pettigrew; Mary Russell; Matt Reynolds;	P-J-a; P-J-a1; P-J-aa; P-J-aaa; P-J-aaaa; P-J-aaaaa; P-J-aaaaaa; P-J-aaaaaaa; P-J-aaaaaaaa; P-J-aaaaaaaaa; P-J-aaaaaaaaaa; P-J-aaaaaaaaaaa; P-J-aaaaaaaaaaaa; P-J-b; P-J-bb; P-J-bbb; P-J-bbbb; P-J-bbbbb; P-J-bbbbbb; P-J-bbbbbbbb; P-J-bbbbbbbbb; P-J-bbbbbbbbbb; P-J-bbbbbbbbbbb; P-J-bbbbbbbbbbbb; P-J-c; P-J-cc; P-J-ccc; P-J-cccc; P-J-ccccc; P-J-cccccc; P-J-ccccccc; P-J-cccccccc; P-J-ccccccccc; P-J-cccccccccc; P-J-ccccccccccc; P-J-cccccccccccc; P-J-d; P-J-dd; P-J-ddd; P-J-dddd; P-J-ddddd; P-J-dddddd; P-J-ddddddd; P-J-dddddddd; P-J-ddddddddd; P-J-dddddddddd; P-J-ddddddddddd; P-J-e; P-J-eee; P-J-eeee; P-J-eeeee; P-J-eeeeee; P-J-eeeeeee; P-J-eeeeeeee; P-J-eeeeeeeee; P-J-eeeeeeeeee; P-J-eeeeeeeeeee; P-J-f; P-J-ff; P-J-fff; P-J-ffff; P-J-fffff; P-J-ffffff; P-J-fffffff; P-J-ffffffff; P-J-fffffffff; P-J-ffffffffff; P-J-fffffffffff; P-J-g; P-J-gg; P-J-ggg; P-J-gggg; P-J-ggggg; P-J-gggggg; P-J-ggggggg; P-J-gggggggg; P-J-ggggggggg; P-J-gggggggggg; P-J-ggggggggggg; P-J-h; P-J-hh; P-J-hhh; P-J-hhhh; P-J-hhhhh; P-J-hhhhhh; P-J-hhhhhhh; P-J-hhhhhhhh; P-J-hhhhhhhhh; P-J-hhhhhhhhhh; P-J-hhhhhhhhhhh; P-J-i; P-J-ii; P-J-iii; P-J-iiii; P-J-iiiii; P-J-iiiiii; P-J-iiiiiii; P-J-iiiiiiii; P-J-iiiiiiiii; P-J-iiiiiiiiii; P-J-iiiiiiiiiii; P-J-j; P-J-jj; P-J-jjj; P-J-jjjj; P-J-jjjjj; P-J-jjjjjj; P-J-jjjjjjj; P-J-jjjjjjjj; P-J-jjjjjjjjj; P-J-jjjjjjjjjj; P-J-k; P-J-kk; P-J-kkk; P-J-kkkk; P-J-kkkkk; P-J-kkkkkk; P-J-kkkkkkk; P-J-kkkkkkkk; P-J-kkkkkkkkk; P-J-kkkkkkkkkk; P-J-kkkkkkkkkkk; P-J-l; P-J-ll; P-J-lll; P-J-llll; P-J-lllll; P-J-llllll; P-J-lllllll; P-J-llllllll; P-J-lllllllll; P-J-llllllllll; P-J-lllllllllll; P-J-m; P-J-mm; P-J-mmm; P-J-mmmm; P-J-mmmmm; P-J-mmmmmm; P-J-mmmmmmm; P-J-mmmmmmmm; P-J-mmmmmmmmm; P-J-mmmmmmmmmm; P-J-mmmmmmmmmmm; P-J-n; P-J-nn; P-J-nnn; P-J-nnnn; P-J-nnnnn; P-J-nnnnnn; P-J-nnnnnnn; P-J-nnnnnnnn; P-J-nnnnnnnnn; P-J-nnnnnnnnnn; P-J-nnnnnnnnnnn; P-J-o; P-J-oo; P-J-ooo; P-J-oooo; P-J-ooooo; P-J-oooooo; P-J-ooooooo; P-J-oooooooo; P-J-ooooooooo; P-J-oooooooooo; P-J-ooooooooooo; P-J-p; P-J-pp; P-J-ppp; P-J-ppppp; P-J-pppppp; P-J-ppppppp; P-J-pppppppp; P-J-ppppppppp; P-J-pppppppppp; P-J-ppppppppppp; P-J-q; P-J-qq; P-J-qqq; P-J-qqqq; P-J-qqqqq; P-J-qqqqqq; P-J-qqqqqqq; P-J-qqqqqqqq; P-J-qqqqqqqqq; P-J-qqqqqqqqqq; P-J-qqqqqqqqqqq; P-J-r; P-J-rr; P-J-rrr; P-J-rrrr; P-J-rrrrr; P-J-rrrrrr; P-J-rrrrrrr; P-J-rrrrrrrr; P-J-rrrrrrrrr; P-J-rrrrrrrrrr; P-J-rrrrrrrrrrr; P-J-s; P-J-ss; P-J-sss; P-J-ssss; P-J-sssss; P-J-ssssss; P-J-sssssss; P-J-ssssssss; P-J-sssssssss; P-J-ssssssssss; P-J-sssssssssss; P-J-t; P-J-tt; P-J-ttt; P-J-tttt; P-J-ttttt; P-J-tttttt; P-J-ttttttt; P-J-tttttttt; P-J-ttttttttt; P-J-tttttttttt; P-J-ttttttttttt; P-J-u; P-J-uu; P-J-uuu; P-J-uuuu; P-J-uuuuu; P-J-uuuuuu; P-J-uuuuuuu; P-J-uuuuuuuu; P-J-uuuuuuuuu; P-J-uuuuuuuuuu; P-J-uuuuuuuuuuu; P-J-v; P-J-vv; P-J-vvv; P-J-vvvv; P-J-vvvvv; P-J-vvvvvv; P-J-vvvvvvv; P-J-vvvvvvvv; P-J-vvvvvvvvv; P-J-vvvvvvvvvv; P-J-vvvvvvvvvvv; P-J-w; P-J-ww; P-J-www; P-J-wwww; P-J-wwwww; P-J-wwwwww; P-J-wwwwwww; P-J-wwwwwwwww; P-J-wwwwwwwwww; P-J-wwwwwwwwwww; P-J-wwwwwwwwwwww; P-J-x; P-J-xxx; P-J-xxxx; P-J-xxxxx; P-J-xxxxxx; P-J-xxxxxxx; P-J-xxxxxxxx; P-J-xxxxxxxxx; P-J-xxxxxxxxxx; P-J-xxxxxxxxxxx; P-J-xxxxxxxxxxxx; P-J-y; P-J-yyy; P-J-yyyy; P-J-yyyyy; P-J-yyyyyy; P-J-yyyyyyy; P-J-yyyyyyyy; P-J-yyyyyyyyy; P-J-yyyyyyyyyy; P-J-yyyyyyyyyyy; P-J-z; P-J-zz; P-J-zzz; P-J-zzzz; P-J-zzzzz; P-J-zzzzzz; P-J-zzzzzzz; P-J-zzzzzzzz; P-J-zzzzzzzzz; P-J-zzzzzzzzzz; P-J-zzzzzzzzzzz; P-J-zzzzzzzzzzzz; P-j-ee; P-j-pppp

Campaign Letter Number	Number of Letters Received	Commenter(s)	Comment ID No.
		Megan Eggers Zubaedi; Megan Ottinger; Melissa Meyers; Michael Carr; Michael Dye; Michelle Faurot; Mona Fansher; Nancy Hediger; Nancy Stocker; Nick Lenssen; Nicole Faurot; Nohn Eckert; Norval Olson; Oliver Smith; Omar Farouk Zubaedi; P Scoville; Pam Evans; Pataricia Foss; Patricia McDonald; Patrick Mullin; Peter Curia; Peter DeLong; Peter Leuenberger; Peter Rodgers; Phyllis Feigenbaum; Randy Willig; Rax Green; Rhett Mitchell; Richard Harm; Robert Ratliff; Robert Wilkinson; Roberta Koeppe; Robyn Smith; Rodney Merrill; Ronald Brown; Ronald Silver; Russ Bonny; Ryo Murraygreen; SUE FALLS; Samantha Bush; Sandra Garcia; Sandra Zinghini; Sandy Zelasko; Sarah Hamilton; Scott Peyton; Shara Johnson; Shelley Majsterek; Shivani Pechtl; Simon Trevena; Stacie Goffin; Stephanie Greenman; Stephanie Moore; Stephanie Smith; Stephanie Trasoff; Stephen La Serra; Steve Juedes Jr; Steve Sanzari-Hall; Steven Floyd; Steven Wallace; Sue Thompson; Susan Babbitt; Susan MacAulay; Susan Stephens; Suzanne Watson; Teagen Blakey; Ted Baker; Terry Tedesco; Theron Hreno; Thomas Cerny; Timothy Guenthner; Timothy Tipton; Todd Adelman; Tom Mulvany; Tracy Smith; Troy Capron; U Kyaw Win; Ursula Treves; Vicki Quarles; Victoria Miller; Virginia Schick; Wayne Hutchinson; Wayne Wathen; Wendy Frado; Wendy Kramer; Will Schaleben; William Kuepper; Wynn Waggoner; andy dieringer; john Ainsworth; thomas moore	
Campaign 2	3	Mara Kuczun; Steve Spry; Will S.	P-Y-a; P-Y-a1; P-Y-b
Campaign 3	2	Anita Wilks; Jeff Thompson	P-HHH-a; P-HHH-a1
Campaign 4	17	Art Hirsch; David Laswell; Deb Rodgers; Diane Scott; Emel Gomulka; Erin Witter; Fred Peck; Inge Sengelmann; Jill Iwaskow; Julie and Jason Faerman; Karl Freund; Kathy and Al Gale; Keith Harper; Kelley McDonald; Kim Huffman; Liz Morgan; Tom Klosowski and Ann McCampbell	P-KKKKKKKKK-a; P-KKKKKKKKK-a1; P-KKKKKKKKK-b; P-KKKKKKKKK-c; P-KKKKKKKKK-d; P-KKKKKKKKK-e; P-KKKKKKKKK-f; P-KKKKKKKKK-g; P-KKKKKKKKK-h; P-KKKKKKKKK-i; P-KKKKKKKKK-j; P-KKKKKKKKK-k; P-KKKKKKKKK-l; P-KKKKKKKKK-m; P-KKKKKKKKK-n; P-KKKKKKKKK-o; P-KKKKKKKKK-p