

Office of the Governor

July 27, 2009



Ms. Rena Brand, Regulatory Specialist
U.S. Army Corps of Engineers, Omaha District
Denver Regulatory Office
9307 S. Wadsworth Blvd.
Littleton, CO 80128-6901

Re: **Scoping Comments, Regional Watershed Supply Project (RSWP)**

Dear Ms. Brand:

On behalf of the state of Wyoming, I want to take this opportunity to raise a number of significant concerns regarding the Regional Watershed Supply Project proposed by the Million Conservation Resource Group (MCRG).

The proposed project would divert 250,000 acre feet of water from the Green River and Flaming Gorge Reservoir at two separate diversion points and pump and pipe the water 560 miles to southeastern Wyoming and the Front Range of Colorado. The project would deliver 25,000 acre-feet to water users in the Platte River Basin and the remaining 225,000 acre-feet would be delivered annually to the South Platte and Arkansas River Basins in Colorado. In the context of the history of the Colorado River, we have witnessed profound changes. But even matched against such weighty events, the MCRG project is remarkable in terms its scope and the sheer amount of water involved.

To say the least, on a number of fronts, this project will impact Wyoming, and I therefore ask for your thoughtful consideration of the following comments:

- 1) The Regional Watershed Supply Project poses questions regarding Upper Colorado River Basin Compact allocations which should be addressed in this NEPA analysis**

Wyoming recognizes Colorado's right to develop its compact allocation pursuant to the Upper Colorado River Basin Compact, and that development in one state for use in another is allowed. However, that same Article IX of the Compact expressly conditions such development to be subject to the rights of users in the source state – Wyoming in this case. In accordance with the Compact, our priority system has assigned priority dates to the MCRG applications for points of diversion in this state. **However, and I mean to add emphasis by employing bold font, the Colorado uses served by this project cannot affect, in any way, or deny any future uses in Wyoming, which of course will have later priority dates.** As such, the NEPA analysis must consider that diversions for use in Colorado will be conditioned by Wyoming such that they will always be the most junior users on the lower river above Flaming Gorge.

Further, MCRG will have difficulty pursuing this project if the State of Colorado does not agree that a portion of her compact allocation should be assigned to the project. Project proponents must demonstrate to Colorado that they "can and will" pursue the project before a Colorado water right can be issued. MCRG's ability to meet this threshold borders on speculation if MCRG cannot identify its customers. So, while I do not purport to be either the Colorado Governor or her State Engineer, the process for appropriating water for use in that state, served by a diversion in ours, must be fully understood.

2) Designation of Purpose and Need

While the Colorado Statewide Water Supply Initiative (SWSI) indicates that Colorado's South Platte Basin will need approximately 409,700 acre-feet of new water by 2030 and the Arkansas Basin will need an additional 8,000 acre-feet, MCRG has not indicated any user group, water district, or municipality that has shown any interest in purchasing the water or participating with MCRG in developing this water. The Corps needs to explore this aspect when developing the purpose and need statement for an EIS. Quantities of water simply expressed in a statewide needs report are not sufficient to demonstrate that the customers are ready and willing to use the water. While it can be argued that the "purpose" of the MCRG is to close the gap on SWSI, the need is not demonstrable since no community has expressed an interest in purchasing any of the water which is to be provided. Such a level of specificity is necessary for a full NEPA analysis.

No sufficient NEPA analysis can proceed, especially alternatives analyses, without a greater defined need outlined by the MCRG. This defined need cannot be general as to the overall demand on Colorado's Front Range, but must focus on what the demand is, where the water will be directed, whether specific contracts are in place to purchase water from MCRG, what other proposed competing or complimentary projects are in place and what progress have those projects achieved. Additionally, the project cannot be so narrowly defined that it forecloses a reasonable consideration of alternatives. An analysis of the need for water along Colorado's Front Range must consider alternatives other than the diversion of 250,000 acre feet per year from the Green River Basin.

3) The Upper Colorado Endangered Fish Recovery Program is essential to the Upper Basin and must continue as the reasonable and prudent alternative to avoid jeopardy for the Basin's four endangered fish, despite annual depletions of up to 250,000 acre feet

In 1988, the State of Wyoming entered into a cooperative agreement with the Department of the Interior, the Western Area Power Administration, and the states of Colorado and Utah to conduct the Upper Colorado River Endangered Fish Recovery Program (Recovery Program). The objective of the program is to recover the four endangered species of fish (the humpback chub, Colorado pikeminnow, razorback sucker and the bonytail) while at the same time allowing the states to develop their compact entitlements to the waters of the Colorado River and its tributaries. It is vital to Wyoming that the Recovery Program remains viable and continues to provide reasonable and prudent alternatives to assure Endangered Species Act compliance for existing and future water development projects so that Wyoming can continue to develop its compact allocation.

Based on differing assumptions, Wyoming has as much or more water per year remaining to develop under its compact allocations than is proposed by MCRG. Obviously, the bulk of this development must occur upstream of Flaming Gorge Reservoir.

The MCRG proposes to increase the depletions at or above Flaming Gorge Reservoir by an additional 225,000 acre-feet per year chargeable to Colorado. Wyoming's future water development cannot be jeopardized by the superposition of the MCRG depletions on top of ours on the river if the Recovery Program cannot accommodate both sets of demands. Located as we are at the top of the river, Wyoming has nowhere else to go for our water. The impacts of the MCRG proposal on the Recovery Program must be fully defined, evaluated and disclosed, and must assume Wyoming's full apportionment is developed.

In sum, the NEPA analysis for the proposed pipeline project must carefully analyze the effects of the annual removal of 225,000 acre feet of water for Colorado from the Green River and Flaming Gorge Reservoir on the continued ability of the Recovery Program to provide endangered species compliance at the current time, but also as Wyoming continues to develop its compact-apportioned water supply. Furthermore, the EIS should consider the ramifications of potentially more stringent requirements by the Recovery Program on future development that may result from the implementation of MCRG proposal.

4) Dewatering the Upper Green River Basin will have impacts to the ecosystem and recreational opportunities

The Upper Green River Basin is a unique High Desert ecosystem supporting native trout species and serves as the fly-way for several migratory birds and raptors. Dewatering this system will have the effect of increasing water temperatures, putting fish populations at risk.

Much like the big river fish downstream, Flaming Gorge Reservoir has species which are sensitive to warming waters which could result from the decrease of water in the reservoir. Trout and Kokanee Salmon are affected, and the salmon spawn in the fall upstream on the Green River. Lowering water levels have a high likelihood to do harm to these species both due to lowering waters and warming waters.

Lowering the level of Flaming Gorge Reservoir, which is a haven for boaters and fishermen, will decrease the tourism business on which so many residents of the area depend. Reductions of flow in the River will discourage rafter use should the flow decrease below 1000 cfs.

Thus the EIS needs to identify and analyze all of these effects on the fisheries both on the Green River and in Flaming Gorge Reservoir, and review any impacts on all recreational values which may be affected.

Wyoming understands that the environmental effects of the development of our compact allocation will be considered when that development occurs. However, the MCRG proposal should not exacerbate the mitigation Wyoming may have to provide to develop its compact allocation. Therefore, the baseline for analyses of the environmental effects of the MCRG proposal should again assume that Wyoming has developed her entire compact allocation,

5) Diversion of 25,000 acre feet to the North Platte River drainage creates an entire series of issues which need analysis

Many of the points made in comment 1) above, are pertinent to the proposal to provide 25,000 acre feet of water per year to Wyoming. For example, as with the development of water for Colorado's Front Range, the MCRG needs to develop a clear purpose and need as it relates to the allocation of the 25,000 acre-feet in Wyoming.

6) Additional Endangered Species Concerns

The Wyoming Toad, whose habitat is adjacent to Lake Hattie, is a federally endangered species and could come under increased threats with new water coming into the Lake. The NEPA analysis should consider all aspects of threats or benefits which could impact the Toad.

7) Salinity

Withdrawal of such a significant volume of water from Flaming Gorge Reservoir will cause a concentrating effect on the total dissolved solid load in the Colorado River Basin. It is therefore important, in light of the salinity concerns in the Colorado River Basin that prompted passage of the Colorado River Basin Salinity Control Act (PL 93-320), as amended, that the NEPA analysis for this proposed project fully evaluate project-specific water quality impacts.

8) Existing Infrastructure

One of the MCRG alternatives proposes water diversion from the Green River instead of Flaming Gorge Reservoir. Several industries, as well as the Green River/Rock Springs/ Sweetwater County Water Supply Project, have diversions below Fontenelle Reservoir and above the City of Green River. This EIS must thoroughly examine all impacts on these existing diversions by the proposed MCRG project alternative to divert water directly from the Green River.

These alternatives and associated analyses should include the economic impacts to other water users downstream of the diversion point(s). Furthermore, the EIS must consider a range of alternatives which include points of diversion other than those which interfere with the existing water supply operations of other water users.

9) Costs and Financing

While the MCRG concept is currently proposed as a privately-financed undertaking, it is incumbent on the Corps to analyze the project costs, technical feasibility and logistics of the project both as a privately and publicly financed enterprise. The water marketing plan of the MCRG, including costs and fees to potential customers, should be disclosed and compared against an alternative whereby the proposal is independently implemented by public entities. For example, removing the profit aspect of the project development, operation, and maintenance should the project be undertaken by public entities would reduce costs to the consumers. The NEPA analysis should consider this possible alternative.

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10) Pumping Infrastructure and Associated Costs

Full NEPA analyses require a complete understanding of the power generation, infrastructure and rights-of-way needed to pump the water from the Green River/Flaming Gorge to Lake Hattie and onto Colorado's Front Range and Wyoming's Platte River Basin.

I appreciate your consideration of my comments. However, I would strongly caution that you not confuse my calm expressions of issues with a change in position on this project. I remain opposed to this project. My restraint should only be read as respect for the state of Colorado's rights under the Colorado River Compact. In turn, I expect similar deference to Wyoming's right to develop its Compact allocation going forward – starting with a robust and thoughtful analysis of the potential impacts of the MCRG project on Wyoming.

Best regards,

A handwritten signature in blue ink, appearing to read "Dave Freudenthal", with a large, stylized flourish above the name.

Dave Freudenthal
Governor

DF:pjb

c: Senator Mike Enzi
Senator John Barrasso
Representative Cynthia Lummis
Pat Tyrrell, State Engineer
Mike Purcell, Director, Water Development Commission
Steve Ferrell, Director, Wyoming Game and Fish Department
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July 27, 2009

WER 11907

Department of the Army Corps of Engineers
Environmental Impact Statement
Proposed Regional Watershed Supply Project in
Wyoming and Colorado

Rena Brand, Project Manager
U. S. Army Corp of Engineers
Denver Regulatory Office
9307 S. Wadsworth Blvd.
Littleton, Co. 80128

Dear Ms. Brand:

The staff of the Wyoming Game and Fish Department has reviewed the Environmental Impact Statement for the Proposed Regional Watershed Supply Project in Wyoming and Colorado. We offer the following comments for your consideration.

Terrestrial Considerations:

The scoping notice does not provide adequate information for a thorough review of this proposed project. Overall, the project will likely have adverse impacts on wildlife and their habitats. When considering the impacts of the project at the state level, the project would potentially cause significant impacts.

General Comments

The project would potentially result in several cumulative effects such as:

- Loss and conversion of crucial habitats, wetlands, riparian areas and other sensitive sites along with development from other industries;
- Short term changes in livestock distribution and utilization as a result of habitat alteration along the pipeline;
- Short term barriers to movement along with adjacent highways, range fences, snow fences, pipelines, transmission lines, and railways;
- Increased potential for noxious weed expansion;

- Increased disturbance to wildlife during sensitive periods such as winter, nesting, strutting from construction, compressors and other features;
- Potential entrapment of wildlife in pipeline trenches during construction;
- Potential for increased poaching by individuals on construction crews or otherwise associated with the project; and
- Flooding of wetland habitats due to reservoir expansion.

General Recommendations

- We recommend removal of vegetation only where trenching will occur. This will reduce reclamation costs, make reclamation easier because less vegetation will be removed, and minimize habitat loss.
- All topsoil should be saved and spread over disturbed areas as soon as possible after disturbance to accelerate natural and artificial revegetation.
- Plants suitable for wildlife most dependent upon the disturbed site should be planted.
- Pipeline construction should be synchronized with seasonal wildlife needs to minimize disturbance. When appropriate, seasonal stipulations should be applied.
- Where pipeline construction entails a large work force, construction workers should be bused to the work location. Also, the project proponent should discourage "squatting" (tent and trailer camping) on public lands through the construction period.

Lander Region

- Having the pipeline route follow a major highway and existing hydrocarbon and telecommunications rights-of-way may increase the likelihood of noxious weeds becoming introduced on this pipeline right-of-way, and may require more intensive reclamation and maintenance to prevent weed establishment. Seed mixes should include local species, including forbs and shrubs. The right-of-way should be inspected for invasion by weeds periodically throughout project life and reclamation efforts initiated when outbreaks occur.
- The proposed pipeline would pass within or near crucial winter range for the Red Desert pronghorn herd west and east of Wamsutter. We recommend no construction occur within crucial winter ranges from November 15 through April 30.
- The proposed pipeline would pass through crucial winter range for the North Platte mule deer herd east of Rawlins. We recommend no construction activities occur within these crucial winter ranges from November 15 through April 30.
- All segments of open pipeline trench should remain as short as possible and closed as quickly as possible to prevent entrapment of wildlife. If large animals are entrapped a plan for allowing the animals to escape needs to be in place.
- No significant lengths (>1 mile) of any portion of the pipeline trench should remain open during the fall migration periods (September 15 through November 15) to prevent blockage or entrapment of migrating big game.

- The proposed pipeline route would pass within two miles of several greater sage-grouse strutting grounds. To prevent disturbance of breeding grouse, we recommend no construction or surface disturbing activities occur within two miles of those strutting grounds from March 1 through May 15. It may be possible to allow some limited activities during this period without disturbing grouse, provided human activity and noise does not occur between 6 PM and 8 AM.
- The proposed pipeline route, while within an existing corridor, would bisect the NE Baggs core area for greater sage-grouse. Seasonal protection for breeding, nesting, and early brood-rearing should apply for this segment of the project (March 1 through June 30).
- The proposed pipeline would cross the North Platte River at Fort Steele within the two-mile buffer of riparian foraging habitat of at least one active bald eagle nest. Activity should not occur along this segment from February 1 through July 31.
- A segment of the pipeline would cross the WGFD Red Rim/Daley Wildlife Habitat Management Area (WHMA). While the right-of-way does not appear to specifically cross crucial winter range for pronghorn associated with this WHMA, construction activities should not occur on the WHMA during the winter period (November 15 through April 30), unless they are north of the Union Pacific railroad, to prevent displacement of pronghorn and other big game off this crucial winter habitat. Additionally, WGFD personnel should be contacted in order to discuss acquiring ROW on Wyoming Game & Fish Commission owned lands.
- Burrowing owls are known to nest in prairie dog towns straddling this utility corridor south of Sinclair. Prairie dog towns along right-of-way should be surveyed for active burrowing owl nests. Construction activity should not occur within 1/4 mile of nest burrows or from February 1 through July 31 within 1/4 mile of a nest burrow.
- Pumping stations may generate loud, continuous noise, which can be disruptive of breeding activities of many species, specifically sage grouse. All pumping stations for this pipeline should be placed at least 1/4-mile from sage grouse leks, and 0.6- mile from leks in core areas. Siting pumping stations near existing oil and gas compressor stations should minimize impacts from this project.

Laramie Region

The following important wildlife habitats and corridors are present within the WGFD Laramie Region:

- Crucial winter/yearlong ranges for pronghorn, mule deer, and elk
- Migration routes for mule deer and pronghorn
- Greater sage-grouse leks, nesting and brood-rearing habitats, and Sage-Grouse Core Areas
- Close proximity to several raptor nests including at least one active bald eagle nest
- Numerous wetlands, riparian crossings, and other important habitats for associated wildlife
- White-tailed prairie dog colonies
- Swift fox habitat

Our recommendations for the part of the project within the Laramie District if the project is approved are as follows:

- That the construction activities take place outside of crucial periods, especially between November 15 and April 30 in crucial big game winter ranges and between March 1 and June 30 during sage grouse breeding, nesting, and brood-rearing periods;
- That sage-grouse habitat, especially within Core Areas, be protected;
- That the project minimize disturbance to crucial winter ranges, wetlands, and riparian areas and mitigate said impacts in-kind;
- That revegetation of disturbed sites use native, locally adapted plant species and best available soil conservation practices; and
- That noxious weeds do not become established and spread to adjacent habitats from clearing the right-of-way.

Green River Region

- Dewatering the Green River will likely result in reduced riparian vegetation and riparian health that would have negative impacts on numerous species including big game. The Green River corridor in Wyoming represents very important habitat for mule deer, elk, pronghorn, and moose.
- Removal of water will likely negatively impact waterfowl species such as ducks, geese and swans, as well as pelicans, grebes, mergansers, cormorants and other species that depend on the river and adjacent wetlands. This corridor represents important habitat for trumpeter swans.
- The Green River and associated tributaries' riparian corridors provide numerous areas of brood rearing habitats for Greater Sage-grouse. These habitats will likely be negatively impacted by reduced flows.
- The pipeline would go through Rawlins draw that receives substantial deer and pronghorn use. We are concerned additional impact in this area will negatively impact wildlife, especially during periods of winter stress. This will also constitute additional ground disturbance in a world-class wildlife area (the Little Mountain Ecosystem) and increase the spread of noxious vegetation, especially cheatgrass.
- Reduced flows will likely negatively impact wading and shorebirds that use the river as a migration stop-over area.
- Reservoir in Scott Canyon will displace part of Steamboat elk herd especially if this occurs in conjunction with proposed wind complexes.
- We are very concerned about cumulative impacts of projects in the Green River Region, both terrestrial and aquatic. The proposed reservoir will represent an additional impact to Steamboat elk and mule deer in the White Mountain area. Valuable parturition habitat occurs in this area, which will become unsuitable security habitat as road density increases.
- Reduced flows will also impact aquatic furbearers (beaver, muskrat, mink and river otters)

- Surveys should be funded by the company to determine species that use the river now, before any development takes place.

Migratory and Resident Birds

One of the points of diversion is approximately 200 feet south of the Seedskafee National Wildlife Refuge (NWR) boundary. Taking a large volume of water out of the Green River will likely impact the refuge's flora and fauna, and the entire watershed from Fontenelle Reservoir downstream. Seedskafee NWR was established in 1965 as mitigation for the loss of habitat when Flaming Gorge and Fontenelle dams were constructed.

The lower Green River and Seedskafee NWR provide habitat, especially wetland habitat, for many species of migratory and resident birds including waterfowl, shorebirds, and colonial waterbirds. Thousands of migratory birds use the refuge during migration and nesting periods. The refuge provides a good place for fishing, hunting, wildlife observation, wildlife photography, environmental education, and interpretation.

The riparian corridor of the lower Green River is an important migration route and nesting area for a wide variety of migratory game and nongame birds. Dewatering will likely reduce the quantity and quality of habitat available to wildlife. Negative impacts to wildlife use include reduction in channel width and depth, reduction in disturbance/predator barrier of current channel to permanent islands, reduction of water surface area, increased distance from water's edge to vegetation, increased potential for ice formation in the river, and reduction of wet oxbows.

Dewatering would lower the water table thus impacting riparian vegetation and would further lower the potential for floodplain scouring needed to create proper germination conditions for riparian vegetation propagules.

Aquatic Considerations:

We have reviewed the materials that were provided to represent the proposed project. Overall, we understand and appreciate that there are many details associated with this proposed action that are yet to be identified and offered for our consideration. The lack of this detail limits our ability to identify all of the associated potential fishery impacts or benefits and consequently limits our ability to provide a full set of specific recommendations. If and when this project advances, we anticipate needing to refine or expand on our comments and recommendations as appropriate. The comments and recommendations provided here are offered per our legal obligation and intent to represent the public interest of Wyoming citizens in fish and wildlife resources associated with the proposed project and its various alternatives. Any net loss or degradation of those resources is undesirable and we encourage a general strategy of avoidance as opposed to mitigating or replacing documented or anticipated losses.

Fishery resources are affected by a variety of factors that typically are defined by the complex interactions of five primary ecological variables. These are broadly described as hydrology (flow patterns and processes), geomorphology (channel forming processes), biology (organisms

that live in and adjacent to the stream), water quality (both physical and chemical properties), and connectivity (longitudinal, lateral, vertical and temporal). A basic summary of how and why these factors are important is outlined by the Instream Flow Council (Annear et al. 2004). Comments and recommendations we provide here are largely based on these factors.

Per our review, each of the various alternatives described in the documentation for the project bears considerably more potential to degrade or diminish fishery and herpetological resources than to benefit any of those resources. This potential varies somewhat with each of the alternatives. In consideration of the likelihood that the scope of each alternative may change due to a variety of factors, our comments and recommendations are organized according to the fishery resources with remarks about which alternatives appear to have the greatest potential to elicit the conditions or impacts we identify.

General Comments

- Public Participation – Many of the people that live in western Wyoming and eastern Utah (Salt Lake Valley) that frequent the Green River, Flaming Gorge Reservoir, and Fontenelle Reservoir may not been given adequate opportunity to participate in the scoping process. This user group receives significant public benefits from all of these resources and their input should be included.
- Economic Impacts Associated With Fishery Changes – As described below, negative effects to the important fishery resources affected by this project will impact more than the quality of angling experiences for the public. Recreational angling and numerous fishing contests held throughout the year generate significant revenue for local communities. Studies are needed to assess the potential reduction in angling and angling-related revenue that might occur due to diminished reservoir and river

Flaming Gorge Reservoir

- The Record of Decision – Operation of Flaming Gorge Dam – Final Environmental Impact Statement February 2006 concluded under the environmentally preferable alternative that; “...fish communities in Flaming Gorge Reservoir, particularly kokanee salmon, are predicted to benefit from decrease in reservoir fluctuations.” This conclusion does not take into account the withdrawal of the additional 250,000 acre-feet of water that could be withdrawn annually associated with this proposed project. The proposed withdrawals from both Flaming Gorge Reservoir and the Green River upstream will increase reservoir fluctuations, which is a potentially significant issue for reasons noted below.
- Flaming Gorge Reservoir supports stocked populations of rainbow trout, brown trout, channel catfish and wild reproducing populations of kokanee salmon, lake trout and smallmouth bass. All of these fish species could be negatively affected by the proposed project.
 - Kokanee Salmon

- This species of fish spawns in October and the resulting fry emerge from the gravels in May the following spring. Most egg deposition (redds) occurs on gravel substrates from just under the surface to a depth of approximately 30 feet. The highest densities of kokanee spawning occur from 5 feet to 20 feet below the surface elevation at the time of spawning. Any increased reservoir elevation decline between October 1 and May 31 would negatively affect the abundance and persistence of this species in the reservoir. It seems unlikely that this potential impact could be mitigated other than by avoidance of increased reservoir fluctuations during this period.
- To assess the magnitude of this potential threat, realistic, detailed information is needed to describe the intra- and inter-annual timing, duration, and magnitude of storage elevation levels in Flaming Gorge Reservoir. Should this project advance to implementation, the annual operating plan should institutionalize agreed-upon elevation targets to the greatest extent practicable.
- Lake Trout
 - This is a trophy, world-class quality fishery that is highly valued by anglers throughout the region and beyond. Lake trout rely heavily on kokanee salmon as their primary food source. A significant reduction in numbers of kokanee on a long-term basis will ultimately lead to a reduction in growth rates, numbers of fish, and the overall quality of this important fishery resource.
 - In addition to a reduction in angling diversity and opportunity that this might represent, local economies could experience an economic loss. As noted above, realistic, detailed reservoir elevation information is needed to assist with an assessment of this potential impact. Should this project advance to implementation, the annual operating plan should institutionalize agreed-upon elevation targets to the greatest extent practicable.
- Smallmouth Bass
 - Flaming Gorge Reservoir supports a high quality, self-sustaining smallmouth bass fishery. The bass spawn in the backs of bays during June. Draw-downs during June and July may impact the successful recruitment of this species with a subsequent reduction in the abundance and size of fish. This potential impact could negatively affect the number of and attendance at the many bass fishing tournaments that are held here annually. In addition to a reduction in angling diversity and opportunity that this might represent, local economies could experience an economic loss.
 - As noted above, realistic, detailed reservoir elevation information is needed to assist with an assessment of this potential impact. Should this project advance to implementation, the annual operating plan should institutionalize agreed-upon elevation targets to the greatest extent practicable.
- Water Quality In The Reservoir
 - The upper end of Flaming Gorge Reservoir presently suffers from eutrophication as nutrients from the surrounding watershed are deposited in the reservoir. Nutrient accumulation such as this tends to increase primary production (aquatic plants), which often leads to oxygen deprivation at times of year when plant die-offs naturally

- occur (fall and winter). When ice cover forms on this part of the lake, the lack of oxygen can kill fish or cause them to avoid the area entirely.
- The reduction of the reservoir's capacity by an additional 250,000 acre-feet as a consequence of this proposed project would likely increase eutrophic conditions. Detailed analyses are needed to describe the existing inter- and intra-annual water quality properties and processes. Additional studies are needed to predict the project's potential effect on water quality if it is implemented. This information is needed to assess potential loss of habitat for various life stages of fish and recreational opportunity.
- Pumping from Flaming Gorge Reservoir
 - According to information we have been provided, the proposed location of the pump station is on top of a cliff adjacent to an existing pipeline crossing. The schematic suggests the lower intake may be as deep as 50 feet below the reservoir's full pool level. Since construction of Flaming Gorge Reservoir, the elevation has been as low as 5985 feet, which is 55 feet below full pool. The construction and operation of the intakes could have undesirable short or long-term impacts to aquatic and terrestrial wildlife. To assess these potential effects, additional information is needed on the construction and operation of this project feature. Of particular concern is whether the reservoir will be lowered to facilitate installation of the deepest intake. If it will, information is needed on the timing and duration of the draw-down. These concerns are primarily associated with Alternatives A and D.
 - Specific to alternative E, locating the pump station in this cove seems likely to negatively affect recreation, fishing and camping in this popular location. Information is needed to better understand how human use of this area will be managed or restricted in the future. Any loss of recreational opportunity here would require adequate mitigation or replacement of existing recreational facilities and opportunities.

Green River

- General – relate to all sections of the river between Fontenelle and Flaming Gorge reservoirs
 - The Green River fishery below Fontenelle Dam encompasses 77 miles of trout habitat that supports stocked populations of rainbow trout, Snake River cutthroat trout, Bonneville cutthroat trout and wild populations of brown trout and smallmouth bass. The river also supports two races of kokanee salmon that migrate from Flaming Gorge Reservoir to spawn in the Green River.
 - Brown trout – this species is maintained entirely by natural recruitment. Brown trout spawn in the fall so the availability of and access to clean gravels between October 1 and March 31 is essential to facilitate spawning success. Up and downstream passage past diversion structures of all life stages, especially fry, is important to protect this species. Specific design features are needed to minimize the loss of fish from the river. During recent years when flows have been abnormally low, the fishery has suffered. Depending on the magnitude, timing, and duration of releases from

Fontenelle Reservoir as a function of this project, habitat for and populations of this species could be affected.

- Rainbow and cutthroat trout – most of these species are stocked in the river. This fishery draws anglers from across the region, including Utah and Colorado. These fish are abundant in the river and are highly sought after by anglers. Depending on the magnitude, timing, and duration of releases from Fontenelle Reservoir as a function of this project, habitat for and populations of these species could be affected.
- Kokanee salmon – two strains of kokanee salmon migrate upstream from Flaming Gorge Reservoir every fall and spawn in clean gravels below Fontenelle Reservoir. The fry that are produced provide an important contribution to the Flaming Gorge Reservoir fishery. Up and downstream passage past diversion structures of all life stages, especially fry, is important to protect this species. Specific design features are needed to minimize the loss of fish from the river.
- Native fishes – The native fish assemblage in the Green River includes two species considered sensitive by both State and Federal agencies. These species include: flannelmouth suckers *Catostomus latipinnis* (NSS1) and bluehead suckers *Catostomus discobolus* (NSS1). Status 1 species are physically isolated and/or exist at extremely low densities throughout their range, and habitat conditions are declining or vulnerable. Therefore, the Department has been directed by the Commission to recommend that no loss of habitat function occur. The drainage also supports fish species that are more common and abundant across their range but no less important. These species include: mountain suckers *Catostomus platyrhynchus* (NSS3), speckled dace *Rhinichthys osculus* (NSS5), mottled sculpin *Cottus bairdi* (NSS4) and mountain whitefish *Prosopium williamsoni* (NSS4). Depending on the magnitude, timing and duration of releases from Fontenelle Reservoir as a function of this project, habitat for and populations of these species could be affected. Specific design features are needed to minimize the loss of fish, and especially fry of these species, from the river.
- Like all rivers and streams, the Green River depends upon a seasonally appropriate, sustained flow regime. A single, year-round “minimum flow” will not provide the ecological benefits needed to sustain fisheries in any portion of the river. Variable flows at different times of year are needed to provide ecological processes that include, but are not limited to, features such as channel maintenance, sediment flushing, water temperature regulation, seasonally appropriate connectivity, and water quality.
 - Low flows during the summer months lead to increased water temperatures (at time approaching lethal limits for trout) and decrease water quality.
 - Low or highly variable flows during the winter months can significantly affect ice formation processes (e.g. the location and duration of ice cover, formation of ice jams, and elevated occurrence of frazil and anchor ice) that can lead to increased trout mortality – especially for juvenile fishes.

- Though we have done preliminary instream flow work on the Green River, additional studies are needed at multiple locations to better quantify and define flow regime needs. These studies can take up to two years to complete data collection, analysis and reporting.
- Seedskadee National Wildlife Refuge to Flaming Gorge Reservoir
 - Based on the information we were provided, Alternatives A and C would withdraw 85,000 acre-feet of direct flow from the Green River immediately downstream of Seedskadee National Wildlife Refuge during dry years. Withdrawals would increase to 157,000 acre-feet in an average precipitation year and 195,000 acre-feet in a wet year. From this proposed diversion point, the Green River supports a unique and complex biotic community of terrestrial and aquatic wildlife and riparian vegetation over approximately 33 river miles. Alternative B proposes to divert 250,000 acre-feet from the Green River point of diversion. Depending on the timing and magnitude of withdrawals, all of these diversion schemes could have a significant impact on flows and the existing river fisheries, terrestrial wildlife, and riparian vegetation.
 - The lower river below Interstate-80 provides a valuable trout fishery for the Green River community especially the youth that can easily access the river.
 - Sediment loads in this section of the river are relatively high in part due to the unstable soils through which the Green River flows. However the Big Sandy River also contributes a large amount of bed material to the Green that must be passed downstream. Lower peak flows will negatively impact the sediment transport capacity of the lower river, which could negatively affect habitat quality and quantity for all life stages of trout as well as many aquatic insect species – an important food source for fish. Studies are needed to assess existing sediment transport rates and quantify the potential reduction in sediment transport capacity under various flow scenarios as affected by the project. In particular, more information is needed about anticipated flow depletions on an intra- and inter-annual basis.
 - Water quality at all times of year (temperature, dissolved oxygen as a function of thermal alteration, suspended sediments, and nutrients) may also be degraded as a function of depletions and reduced flow at some times of year. Studies are needed to assess existing conditions for these features and quantify the potential changes under various flow scenarios as affected by the project. In particular, more information is needed about anticipated flow depletions on an intra- and inter-annual basis.
 - Alternative B has similar impacts and concerns as for alternatives A and C. The only difference is that alternative B will impact a smaller reach of the Green river - 8 miles.
 - Alternatives A and C propose to withdraw water from the Green River 200 yards downstream of Seedskadee National Wildlife Refuge. The designs provided by the consultant show some details of the pump station and traveling screen to pass debris and fish but do not address getting water into the pump station. The Green River tends to be wide and shallow and the pump station has a 72 to 96 inch pipe that would transport water to a treatment facility. Such large pipes suggest a large quantity of water will be transported. It is unclear how enough head will be established to keep water in the pump station during both low and high flows. It is also unclear how the diversion will manage

the high volumes of sediment that pass this part of the river and address fish passage concerns – especially as related to fry life stages. Additional information is needed to better understand this aspect of the project and its potential effects on fish and wildlife.

- Fontenelle Reservoir to Seedskafee National Wildlife Refuge
 - The Green River below Fontenelle Reservoir is an important sport fishery that supports important fisheries for brown trout, rainbow and cutthroat trout, two strains of kokanee salmon, mountain whitefish (NSS4), and native non-game fishes. Maintaining unrestricted year round connectivity for the upstream and downstream movement of all life stages of fish throughout the entire river below Fontenelle Reservoir is an important issue. Because the fishery in Flaming Gorge Reservoir depends heavily on natural reproduction from some of these species, up and downstream passage of fish, and especially fry, past diversion structures is a critically important issue.
 - We are concerned that if alternatives A, B, or C are built, additional releases from Fontenelle Reservoir may occur to provide additional water for pumping below Seedskafee NWR. If such releases were to occur it seems likely they would fall outside current reservoir release regimes. The effect of such supplemental flows on river fisheries would depend on the timing, duration, and magnitude of these flows.
 - Additional information is needed to clarify this water management practice. If such releases are intended, specific details of releases are needed to assess potential effects on fish populations in the reservoir and river.

Fontenelle Reservoir

- Fontenelle Reservoir supports stocked populations of rainbow trout, snake river cutthroat trout, kokanee salmon and wild populations of brown trout and smallmouth bass.
- Depending on how releases are factored into the operation of this project, reservoir levels and fluctuations in Fontenelle Reservoir could negatively affect fisheries and recreational opportunities. Information is needed to clarify future water storage practices and processes on both an intra- and inter-annual basis. This concern is associated primarily with Alternatives A, B, and C.

West End Reservoir

- This project feature appears to pose little threat of loss to existing fishery resources but additional information is needed to ascertain its potential for providing fishery benefits or impacts.
 - Such information includes, but is not limited to details about how it will be operated on a seasonal basis as well as over the life of the project. Some potential benefit may exist for developing recreational angling, however that benefit may be tempered by the potential to transport undesirable species from the Green River basin to other river basins in the eastern part of Wyoming and Colorado.

- Impacts may also be experienced by other species such as midget faded rattlesnakes (see below). If potential impacts are identified, mitigation strategies will be needed. It is also unclear if water will ever be released out of the reservoir and down the native channel. If that is anticipated, studies would be needed to address all environmental consequences (e.g. erosion, sedimentation, water quality). These concerns are associated primarily with alternatives B and C.

Other Resources and Issues

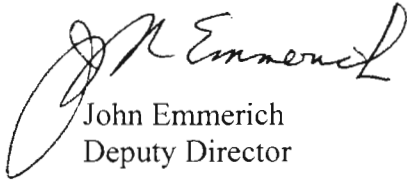
- Midget faded rattlesnakes
 - Midget faded rattlesnakes inhabit rocky outcrops and adjacent sage habitat of the Green River Formation surrounding and a little north of Flaming Gorge Reservoir in Wyoming. Much of the available habitat for midget faded rattlesnakes in Wyoming was flooded by the construction and inundation of Flaming Gorge Reservoir. The remaining population of snakes is currently threatened by energy development proposals on the east side of Flaming Gorge Reservoir. Midget faded rattlesnakes are vulnerable to human persecution (purposeful killing, poaching, and road mortality) and habitat fragmentation associated with the development of new roads and improvement of existing roads.
 - Components of alternatives A, B, D, E all traverse midget faded rattlesnake habitat. Project related activities, including routing of all pipelines, should not occur within one mile of rock outcrops or areas where this species has been documented to occur. Additional monitoring is needed to document the location of dens and seasonal distribution patterns of this species. Considering the extent of impacts to this species by energy development-related activities, a cumulative effects analysis approach will be needed to assess potential impacts.
- Northern tree lizards
 - Another rare and sensitive species that utilizes the same habitat as the Midget Faded Rattlesnake. Within the state, Northern Tree Lizards are only found in the Flaming Gorge Region.
 - Impacts that affect midget faded rattlesnake habitat and populations will also likely affect this species.
- Aquatic invasive species (AIS)
 - Trans-basin diversions that move water from one watershed to another amplify this threat by becoming a vehicle for transporting AIS and seeds of terrestrial invasive species from drainage to drainage. The pipeline for this project will pass through and possibly deliver water to the headwaters of several major continental watersheds. For some invasive species, such as New Zealand mud snails, only one snail needs to be moved for a new population to be established. Burbot (*Lota lota*) have been moved twice via a pipeline from the Green River to the Jim Bridger Power Plant surge pond (30 plus miles). If this project is built it is realistic to expect burbot and other invasive species to reach every watershed that receives water from the project if specific measures are not taken to continuously and completely prevent such movement. Information is needed to detail

how this level of prevention will be achieved while also avoiding negative effects on receiving waters, such as Lake Hattie.

- Another threat from invasive species comes from the construction phase of building the pipeline and infrastructure. Invasive species such as zebra mussels, Quagga mussels, New Zealand mud snails, aquatic vegetation and algae's can be transported long distances on construction equipment. Specific precautions would be needed to make certain all equipment coming in from out of state and all equipment moving between 4th Level HUC's within the state of Wyoming will be cleaned and disinfected.
- Hydrostatic testing upon completion of the pipeline poses yet another threat of moving AIS and terrestrial invasive species between watersheds. We recommend that all water from a "live" source that is used to test pipelines be returned to where it was collected upon completion of testing. Where this proves impractical, hydrostatic testing could be done using treated water either from municipal or other sources where specific, approved steps have been taken to remove or kill all invasive species. At no point should water from one drainage be released into a different drainage.
- Construction of pipelines via trenching through perennial and ephemeral drainages
 - This practice can be very disruptive to aquatic ecosystems. Threats to aquatic systems include liberation of sediments during construction, disruption of fish spawning, and contamination of streams from construction equipment fluids. To avoid restrictive construction windows and environmental impacts, we recommend directionally drilling underneath all perennial and ephemeral water bodies.
 - If trenching is done through live streams we recommend against construction during periods of ice cover, fish spawning, and when fish fry are vulnerable. Depending on the water body to be crossed, spawning activity could occur from April through June and September through November. Periods of ice cover can extend from November through March or April. In consideration of these factors, trenching to install a pipeline should typically occur in the months of July and August.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact Matt Fry, Staff Terrestrial Biologist, at 307-777-4510.

Sincerely,

A handwritten signature in black ink, appearing to read "John Emmerich". The signature is stylized with a large, looping initial "J" and "E".

John Emmerich
Deputy Director

JE:MF:gb:wn

cc: USFWS
Mark Zornes
Tom Ryder
Greg Hiatt
Terry Creekmore
Rich Guenzel
Will Schultz
Tom Annear
Robb Keith
Mike Snigg
Larry Roberts



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

July 27, 2009

Ms. Rena Brand, Regulatory Specialist
U.S. Army Corps of Engineers, Omaha District
Denver Regulatory Office
9307 S. Wadsworth Blvd.
Littleton, CO 80128-6901



RE: Million Conservation Resource Group Regional Watershed Supply Project

Dear Ms. Brand,

Thank you for the opportunity to supply scoping comments related to the proposed Regional Watershed Supply Project (RWSP) proposed by the Million Conservation Resource Group (MCRG). The primary concerns of Wyoming Department of Environmental Quality Water Quality Division (WQD) relate to water quality changes in the Green River, and to surface disturbance, erosion and sediment transport to the Green River and other waters of the state.

The Green River is classified by the Wyoming Water Quality Standards as Class 2AB, which includes protection of its coldwater fisheries designated use. Removal of up to 250,000 acre-feet from the Green River may cause temperatures in the river to exceed the temperature criterion of 20° F in the reaches below the diversion point. Additionally, Wyoming Water Quality Standards protect habitat and wetlands. Removal of these flows and changes to the flow regime will likely change both the geomorphology and sediment transport capabilities of the Green River. These changes can include shortening of the overall channel length, downcutting of the river channel, and/or excessive sediment deposition, depending on the quantity and timing of flow diversion. River channel downcutting will result in downcutting of the stream channels of the tributaries. These potential effects on water temperature, sediment transport and geomorphology must be thoroughly analyzed and disclosed in the EIS, and any mitigation measures must be clearly described.

Based on estimates from the maps, this project proposes approximately 270 miles of pipeline in Wyoming, with a total right of way (ROW) width of 200 feet. If all 200 feet of ROW width is disturbed, the product comes to 6545 acres of surface disturbance, or over ten square miles for just the Wyoming portion of this project. Additionally, the plans call for 20 acres of disturbance for each pumping station, plus an unidentified amount of disturbance for the access roads and the West End Retention Reservoir. Runoff and erosion from over ten square miles of surface disturbance has the potential to cause significant sediment loading and channel alteration.

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

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| ADMIN/OUTREACH (307) 777-7937 FAX 777-3610 | ABANDONED MINES (307) 777-6145 FAX 777-6462 | AIR QUALITY (307) 777-7391 FAX 777-5616 | INDUSTRIAL SITING (307) 777-7369 FAX 777-5973 | LAND QUALITY (307) 777-7756 FAX 777-5864 | SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973 | WATER QUALITY (307) 777-7781 FAX 777-5973 |
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Road and pipeline crossings of natural channels can often be nick points for erosion both upstream and downstream of the crossings. The EIS should thoroughly describe the monitoring and remediation plan to ensure that erosion is not instigated from the project.

Because of the dry climate, short growing season and poorly developed soils, reclamation in southern Wyoming is often difficult, expensive and time consuming; therefore, there will likely be several years before sufficient vegetation is established to buffer overland flows and erosion potential from the disturbed areas. The EIS should clearly describe the reclamation plan for this project, including measures to monitor success and revegetate where needed.

Soils which have been compacted and otherwise disturbed, but not removed, can often be reclaimed more quickly and successfully than soils which have been removed and replaced. The EIS needs to analyze alternatives which minimize the amount of surface disturbance and topsoil removal.

There are several WQD permits and other requirements that may apply to the project, depending on the eventual scope of the project.

- Storm Water Associated with Construction Activities. This permit is required any time a project results in clearing, grading, or otherwise disturbing one or more acres. The disturbed area does not need to be contiguous. The permit is required for surface disturbances associated with construction of the project, access roads, construction of wetland mitigation sites, borrow and stockpiling areas, equipment staging and maintenance areas and any other disturbed areas associated with construction. A general permit has been established for this purpose and either the project sponsor or general contractor is responsible for filing a Notice of Intent (NOI) and complying with the provisions of the general permit. The NOI should be filed no later than 30 days prior to the start of construction activity. Please contact Barb Sahl at 307-777-7570.
- Discharge Permit. Any discharges to “waters of the state”, including discharges from cofferdam dewatering, discharges from hydrostatic pipeline testing, or discharge of other waste waters must be permitted under the Wyoming Pollutant Discharge Elimination System (WYPDES) program. This program is part of the federal Clean Water Act, but is administered by the WQD. For clarification waters of the state include rivers, streams, dry draws, wetlands, lakes, reservoirs and even stock ponds. This permit will require some sampling and will incorporate effluent limits for any constituents of concern. Roland Peterson (307-777-7090) can provide additional information.
- Temporary Turbidity Variance. Wyoming has turbidity criteria for waters designated as fisheries or drinking water supplies. Any type of construction activity within these streams is likely to result in an exceedence of these criteria. However, in accordance with Section 23(c)(2) of the Chapter 1 Surface Water Quality Standards, the administrator of the Water Quality Division may authorize temporary increases in turbidity above the numeric criteria in Section 23 (a) of the Standards in response to an individual application for a specific activity. While it is not required to get this authorization, this project has the potential to exceed the turbidity criteria and a variance

is recommended. An application must be submitted and a variance approved by the administrator before any temporary increase in turbidity above the numeric limits takes place. This process generally takes about 45 days. Please contact Jeff Clark at 307-777-6891 for more information.

- Spill Reporting. Chapter 4 of the WDEQ Water Quality Rules and Regulations requires that the WQD be notified of spills or releases of chemicals and petroleum products. The EIS should reiterate this and explain how soils, groundwater and surface water impacted by spills, leaks and releases of chemicals, petroleum products and produced water will be restored.
- Section 404. While not a state permit, this project may require a section 404 permit from the US Army Corps of Engineers. Any time work occurs within waters of the US a 404 permit may be required. Additionally, a number of activities such as dam construction will require section 401 certification from the state. Please contact the Corps (307-772-2300) for specific information regarding jurisdiction and requirements.

In summary, we request that the USACOE conduct detailed analysis of the direct, indirect and cumulative effects of this project on water quality. Each proposed alternative should contain detailed descriptions of the preventative measures, reclamation plans and mitigation plans which would be in place to protect water quality.

Sincerely,



John Wagner
Water Quality Division Administrator
Department of Environmental Quality

JFW/MAC/rm/9-0651

cc: Governor's Planning Office, Herschler Bldg, 1st Floor, East Wing

STATE OF COLORADO

OFFICE OF THE EXECUTIVE DIRECTOR

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Phone: (303) 866-3311
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November 3, 2009



COLORADO



DEPARTMENT OF
NATURAL
RESOURCES

Ms. Rena Brand, Project Manager
U.S. Army Corps of Engineers – Omaha District
Denver Regulatory Office
9307 South Wadsworth Blvd.
Littleton, CO 80128-6901

Bill Ritter, Jr.
Governor

Harris D. Sherman
Executive Director

Re: Notice of Intent to Prepare an EIS for the Proposed Regional Water Supply Project (RWSP) in Wyoming and Colorado; Applicant Million Conservation Resource Group; Notice in Federal Register, Vol. 74, No. 53, Page 11920, March 20, 2009

Dear Ms. Brand:

Thank you for the opportunity to comment on and inquire about the Army Corps of Engineers' (Corps) scoping of an EIS for the proposed Regional Water Supply Project (RWSP). The Colorado Department of Natural Resources (DNR) understands that the RWSP proposes to annually divert approximately 165,000 acre-feet of water from Flaming Gorge Reservoir and, in drier years, will divert an additional 85,000 acre-feet directly from the Green River. The proposed transport route for this RWSP water is along the U.S. Interstate 80 corridor in Wyoming and then south to water users along Colorado's Front Range.

Before providing our specific comments, we would like to acknowledge and place additional emphasis on two overarching factors that Colorado considers extremely important in this NEPA process. First, three key programs in place on the Colorado River are designed to assist, rather than impede, the development of each Upper Division State's compact apportionment—the Upper Colorado River Recovery Implementation Program, the San Juan River Recovery Implementation Program (which address the four Colorado River endangered fish) and the Colorado River Salinity Control Program (which addresses water quality). The Corps should recognize in this NEPA process that water project development within a state's compact entitlement is an objective of and is consistent with these programs. Moreover, impacts to these programs cannot and should not be used to distinguish the RWSP from other water development projects in the Upper Colorado River Basin.

Second, Colorado is conducting several studies concerning the availability and need for Colorado River water. DNR encourages the Corps to utilize information from these studies as it proceeds in this NEPA process.

Given these factors and based on our understanding of the proposed project, we offer comments and submit questions as follows.

Project

The Notice of Intent and the material distributed at the public meetings do not adequately describe the proposed project. A more detailed description of the project is required during preparation of the EIS. Some of the additional information necessary should include:

1. The actual amount of water projected to be diverted under average, wet, and dry conditions considering potential climate change, and description of whether the estimates of available water supply are sustainable under those conditions.
2. The project's energy requirements as well as hydropower generation potential.
3. Preliminary cost estimates on an acre-foot basis.
4. Project financing.
5. Given that this is a private endeavor with the potential for transfer to a public entity, provisions for Quality Assurance and Quality Control (QA\QC) during project construction should be considered to assure project reliability.
6. The estimated costs for operations and maintenance during and following construction should be identified.
7. As a water provider, water sold from the project falls under the jurisdiction of the Public Utilities Commission and the Commission can regulate tap fees. The project proponent should explain how this regulation may affect the price of project water and his ability to recover his investment.

The project description and plans should also be consolidated into a single reference (e.g. Definite Plan Report).

Water Rights and Use

1. The Corps should analyze whether the RWSP is speculative in nature. We are unaware of any contracts or commitments for RWSP water at the present time although we understand that the Corps has required the project proponent to identify the end users of RWSP water.
2. The EIS should contain a description of how the project will be administered with respect to other water rights in Wyoming.

Colorado River Compact and Upper Colorado River Basin Compact

1. The EIS should describe the authority, process, and studies relied upon by the Corps to verify the availability of water for the RWSP under Colorado's compact apportionment. Furthermore, DNR would like clarification as to whether the Bureau of Reclamation (Reclamation) will rely on the same authority, process, and hydrologic determination when contracting for Flaming Gorge water as part of any State's compact apportionment. Accordingly, the EIS should describe the hydrologic analysis or determination upon which the Corps and Reclamation will rely. In addition, the EIS should identify the limitations on annual water availability, if any, that are being considering for both the Flaming Gorge Reservoir and the direct diversions from the Green River Basin. Colorado has studies in progress that would be useful in this respect.
2. Colorado is concerned that the Upper Division States maintain their ability to fully comply with the terms of both the Colorado River and Upper Colorado River Basin compacts. Any water service contract should include provisions that allow for water administration and limit the water available to the project under various hydrologic conditions. Colorado is committed to complying with state and federal laws, and in so doing wants all water development projects in the Upper Basin, public or private, to be held to the same environmental compliance standards.

As we stated earlier, if the Upper Colorado River Recovery Program and the Biological Opinion for Flaming Gorge Operations provide ESA protection for Utah's Lake Powell Pipeline Project, for example, then they should provide the same protection for the RWSP or any other project diverting water from Flaming Gorge (so long as that project is within a state's compact apportionment).

3. The Corps should include terms and conditions in the ROD to be inserted into a Reclamation water services contract with the project proponent that allow for the curtailment of the RWSP if Colorado deems curtailment necessary to maintain compact compliance.

Environmental Compliance

1. Given the terms of the Colorado River Compact and the 2007 Guidelines for the Coordinated Operations of Lake Powell and Lake Mead, the EIS should be limited in scope to the appropriate consideration of environmental impacts above Glen Canyon Dam only.
2. The RWSP appears to require numerous permits or approvals from various federal agencies - i.e. a water service contract from Reclamation for release and use of water from Flaming Gorge Reservoir, a right-of-way easement from Bureau of Land Management for construction and placement of the pipeline along the I-80 corridor, approval from Fish and Wildlife Service to divert the water, approval from the Corps with respect to 404 permits and State Health Department Water Quality permits. The complexity of this NEPA analysis calls for the EIS and ROD to be comprehensive enough to support other RWSP permitting processes when complete. To this end, Colorado would like to better understand the Corps' expectation of how other federal agencies will cooperate and coordinate in this NEPA process.
3. The Corps and other federal agencies must treat this project consistently with any other projects proposing to use water from Flaming Gorge. One project should not be used as a means to preclude others or establish priorities so long as the proposed project remains within a state's compact apportionment and is consistent with the Colorado River Storage Project Act. Accordingly, Colorado believes the Corps should describe how the Biological Opinion for re-operation of Flaming Gorge Reservoir for the benefit of Colorado River endangered fish will factor into this NEPA process and any subsequent Reclamation water service contract.
4. The EIS needs to identify and address any water quality differences between the project water and water originating within Colorado.

Contracting Process and Provisions

Colorado requests that the following questions regarding contracting process and provisions be addressed as part of the NEPA process:

1. Will the Corps' NEPA process be adequate to cover Reclamation contracting if the EIS is successfully completed and the ROD issued allowing the project to proceed? Please outline the sequence of events following completion of the EIS and issuance of the ROD that will be required to take place to obtain a Reclamation water service contract (beginning with the request, development of the Basis of Negotiation, steps in development of the contract, NEPA compliance, etc.).

2. What happens if the RWSP is constructed in stages, will this NEPA process cover all stages of development?
3. What would be the duration of any Reclamation contract, and if not permanent, what would be its term of renewability? Is a perpetual contract for a project of this size possible?
4. Is there a process, other than this NEPA process, that will provide the state of Colorado the opportunity for additional input prior to Reclamation's consent to terms on any water service contract for the project?
5. Will the Corps request Reclamation to determine the cost for a stand-by contract or for a long-term water service contract for the project as part of the EIS?
6. Will the EIS address the Operation, Maintenance and Replacement of the pipeline and other facilities?

These comments and questions are not intended in any way to demonstrate support for or opposition to the RWSP. The RWSP NEPA process must refrain from establishing any limitations that make it more difficult for this or any future project to move forward through a NEPA process that would develop Colorado's compact apportionment. If the project proponent is able to successfully address the numerous concerns expressed by DNR and others during this NEPA process, then we request that this EIS be comprehensive so as to minimize further contracting and permitting requirements.

Sincerely,



Alexandra L. Davis
Assistant Director-Water
Colorado Department of Natural Resources
1313 Sherman Street
Denver, CO 80203

cc: U.S. Bureau of Reclamation, Upper Colorado Region
Colorado Water Conservation Board
Colorado Division of Water Resources
Office of the Colorado Attorney General

STATE OF COLORADO

Bill Ritter, Jr., Governor
DEPARTMENT OF NATURAL RESOURCES

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July 29, 2009

Ms. Rena Brand
Regulation Specialist
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Littleton, CO 80128

RE: Section 404 Permit Review and EIS for "Regional Watershed Supply Project" (MCRG)

Dear Ms. Brand,

Thank you for the opportunity to comment on the Section 404 EIS Permit review for the Regional Watershed Supply Project, submitted by the Million Conservation Resource Group (MCRG). Division of Wildlife (Division) has identified several scoping issues that we feel should be considered; as the proposed project spans across large and diverse wildlife habitat types in Colorado. Without a more detailed project plan, it is difficult for us to specifically identify potential wildlife impacts from the proposed 560 mile pipeline and its associated reservoirs, pumping stations, roads and treatment facilities. However, this letter contains a cursory view of potential issues and concerns from the Division's terrestrial and aquatic biologists and managers. We also provide a comprehensive list of requested information so that we can provide you with an adequate biological assessment of this project. If the project progresses, the Division supports the adaptive management approach (as with any large-scale wetland projects) and requests further consultation and input. We also suggest that ongoing monitoring efforts of any potential impacts to natural resources be considered as an important approach when pursuing a project of this scope. Continued data collection and monitoring for sediment and erosion control, native vegetation, invasive weeds and wildlife use are critical to the long term management of natural resources in the pipeline right of way and proposed reservoir locations.

As you are aware, any wildlife mitigation considered in relation to this project is subject to Colorado Statute (C.R.S. 37-60-122.2) authority. Section (1) (a) states:

"The general assembly hereby recognizes the responsibility of the state for fish and wildlife resources found in and around state waters which are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities. The general assembly hereby declares that such fish and wildlife resources are a matter of statewide concern and that impacts on such resources should be mitigated by the project applicants in a reasonable manner".

We would be happy to discuss the possible mitigation alternatives with you as this moves forward. We have reviewed the permit EIS and associated map and have the following comments. For convenience, we have bracketed the content of this letter into geographic areas of the project that we consider to be higher in priority:

NW Colorado and Green River:

All alternative diversion points are within or above Flaming Gorge Reservoir. It is not clear if diversion of 250,000 ac-ft of water from the reservoir will impact amounts or the schedule of water releases from Flaming Gorge Dam into the Green River, or the flexibility of dam operations to achieve existing flow recommendations for the federally-listed fishes. There is uncertainty concerning how this project might impact ongoing recovery

program efforts to manage flow, habitat and control nonnative fishes and affect annual USFWS determinations of sufficient progress. The following issues would help address our concerns for potential wildlife habitat impacts to the Green River system created by the project:

- Delineate the impacted area of the Green River below Flaming Gorge Reservoir.
- Describe how the project will affect the release of water through Flaming Gorge Dam during construction phases and during pipeline operation.
- Describe and analyze any impacts related to changes in water released from Flaming Gorge Dam (timing, quantity including release sustainability, quality) and the effect on fish populations at all life stages within the Green River drainage including Colorado pikeminnow (federally endangered, state threatened), razorback sucker (federally and state endangered), humpback chub (federally endangered, state threatened) and bonytail (federally and state endangered).
- Assess and analyze how the diversions will impact the capability of dam operations to provide downstream temperature mitigation.
- Assess and analyze how the project's diversion will impact the capability of dam operations to provide the recommended flow regimes as described by the Upper Colorado River Endangered Fish Recovery Program.
- Assess and analyze how the project's diversions will or will not compromise the ability of dam operators to modify releases when recommended by the Recovery Program.
- Analyze and describe how the project will not affect the Service's sufficient progress determination for the Colorado River Endangered Fishes Recovery Program in Wyoming, Utah and Colorado.
- Consider impacts related to changes in downstream habitats due to changes in flow releases from Flaming Gorge Dam and how these changes may affect endangered and native fish populations. Include an assessment of anticipated changes to Green River species and life stage specific habitat (spawning, juvenile, adult), food availability.
- Analyze and discuss how the project will affect the inundation of floodplain habitats, river water temperatures, sediment transport, seasonal, monthly, and daily fluctuations, and riparian corridor and associated vegetation alteration in response to altered releases.
- How will the changes in flow releases affect waterfowl nesting and use patterns?
- Detail how waterfowl use of Green River side and off channel wetland areas will be impacted by flow changes and channel morphology responses.
- Describe how the introduction of new aquatic nuisance species to the Green River above Flaming Gorge Dam will affect pipeline operations and how the proponent will reduce or eliminate impacts to Colorado caused by the subsequent transport of nuisance or prohibited organisms across state lines.
- Consider the cumulative impacts on the Green River system to downstream fish species assemblages, fish habitat, food resources, fish growth and recruitment.
- Assess and analyze the potential impacts to nonnative fish (northern pike, smallmouth bass, walleye, gizzard shad, etc.) and how their growth and population dynamics could be affected by this project.
- Points of Diversion 1 and 4 are the proponent's preferred alternative. Entrained species diversity will differ widely due to the flowing character of POD 1 versus the deepwater reservoir character of POD 4. Describe and analyze the difference between the two PODs and how the diversity of entrained organisms will affect down-pipe reservoirs.
- Describe actions to prevent entrainment of aquatic organisms and subsequent down-pipe transport or treatment of transported water to reduce or eliminate the risk of transporting said organisms to Colorado.

Cactus Hill Reservoir:

The application states that the delivery of water to the South Platte and Arkansas River basins is estimated to be approximately 225,000 ac-ft annually. Water from the project is intended to service agricultural, municipal and industrial users that geographically include areas along the Front Range. It would be helpful if we could review more details on delivery sites and the potential timing of water, as return flows could impact many different drainages statewide. Erosion and water quality issues may exist in these drainages, however the size and scope of the project will determine the extent of this potential impact. We recommend that hydrological modeling be completed on any riparian or waterway system that receives return flows generated by this project. In addition, water quality analysis should be completed in an effort to determine the potential impacts on the associated aquatic life.

The Division feels that Cactus Hill Reservoir could potentially be a quality warm-water fishery. Viewing recreation as a beneficial use of this project, the Division supports and encourages hunting, fishing and wildlife viewing at this and other proposed reservoir locations. The Division would need further information on the operations and associated water fluctuations to make a proper assessment of this potential public benefit. In order for the Division to provide a more detailed analysis of this proposed reservoir, we ask you to consider the following and to have the proponent provide:

- A detailed description of the proposed reservoir (location, surface acres, volume, maximum depth, dam construction, outlet types, spillways, pipeline connections, etc.);
- Assessment of occurrence and status of native wildlife and habitats that could be lost/displaced by reservoir footprint.
- Further identification of proposed reservoir operations; including water elevation changes on seasonal, monthly and daily (diurnal) basis; anticipated water quality parameters including both organic and inorganic components, limnological components (temperature and dissolved oxygen profiles), inflow and outflow rates and timing, and downstream release patterns to natural stream channels;
- A description of the current landform and vegetative component at the footprint of the proposed reservoir location;
- Information necessary to evaluate the anticipated biotic (plankton, macroinvertebrates, forage and sport fish) and public fishery components if possible;
- Estimated public use for wildlife viewing, boating, fishing, picnicking, etc.;
- A detailed assessment of the potential introductions of new and possibly unwanted Aquatic Nuisance Species (ANS) into the Cactus Hill Reservoir and the South Platte River Basin including an assessment of preventing such introduction.

South Platte River:

The following are issues we have identified and would ask to be considered in the draft EIS. These are centered around our questions about how timing or flows of water could be impacted by the proposed project:

- Delineate the affected environment in the Platte River Basin;
- Assess alterations on stream flow in the South Platte River and its tributaries, dependant on where water is to be delivered and the designated use of such water;
- Analyze the changes to all water quality parameters from the proposed actions as compared to baseline. Include evaluation of organic loading, suspended solids, biological oxygen demand, suspended sediment, water temperature, conductivity and the full array of organic and inorganic components. Describe any interactions and changes to levels of selenium. Provide detailed information on the impact of user wastewater effluent on the South Platte River and its tributaries;
- Evaluate the potential effects of increased nutrient loading (via wastewater discharge, agricultural run-off or industrial uses) on any of the lower South Platte River reservoirs;
- Assessment of potential stream bank stability and riparian integrity with anticipated hydrological and water quality changes. Document risk and anticipated levels of stream bank erosion, and fate of suspended sediments transport within the South Platte and its tributaries;
- Adequate assessment of impacts on state listed aquatic species. Including, but not limited to, suckermouth minnow, common shiner and brassy minnow;
- Adequate assessment of impacts to native fish assemblages in the South Platte Basin.
- Potential for transfer of invasive aquatic organisms?

Tributaries to the South Platte (Poudre, Big Thompson, St Vrain, Boulder Creeks)

- Provide known or anticipated delivery points and associated impact to the aquatic system, particularly the impact on transition stream corridors within the South Platte Basin.
- Complete assessment of impacts to riparian and stream corridors as it pertains to minor and major tributaries to the South Platte. This includes water quality, sediment transport and riparian health and stability.
- Evaluation of timing of return stream flows as it pertains to the specific stream fish population structure and function.

- Assess impacts of potential water quality changes that could occur in streams receiving return flows and those impacts on the South Platte River downstream of the confluence with each tributary.
- Evaluate the impacts of both increased flows and conduit crossings on eastern plains native fish communities. Include the effects of changes of water quality and quantity on the reproduction, feeding, growth, movement fish species in the river and associated tributary habitats.

T-Cross Reservoir:

The T-Cross Reservoir (25,000 ac-ft) will be the terminal reservoir situated in El Paso County just east of Fountain Creek. Water from the project is intended to service agricultural, municipal and industrial users that could geographically include areas along the Fountain Creek drainage, and then to the Arkansas River or tributaries to it. As with the Cactus Hill Reservoir, return flows from project user systems should be considered in the hydrological modeling analysis. Any altered flows should be evaluated for their impact to fisheries, fishery in-stream habitat and riparian systems along those stream corridors.

We feel that the T-Cross Reservoir has potential to provide a recreational fishery in El Paso County. The level of benefits associated with this amenity will be determined by physical, chemical and biological characteristics and the considerations for public use. We also ask the following to be considered or provided in the draft EIS:

- Description of the proposed reservoir (location, surface acres, volume, dam construction, outlet types, spillways, pipeline connections, etc.);
- Identification of proposed reservoir operations; including water elevation changes on seasonal, monthly and daily (diurnal) basis; anticipated water quality parameters including both organic and inorganic components, limnological components (temperature and dissolved oxygen profiles), inflow and outflow rates and timing, and downstream release patterns to natural stream channels;
- Describe the current landform and vegetative component that will be inundated by the new reservoir;
- Evaluate the anticipated biotic (plankton, macroinvertebrates, forage and sport fish) and public fishery components that are anticipated for the reservoir. Detail recreational facilities (access roads, parking, restrooms, shade shelters, boat ramps)
- Assessment of occurrence and status of native wildlife and habitats that could be lost/displaced by reservoir footprint.
- Potential for transfer of invasive aquatic organisms?

Fountain Creek:

This system has been well studied by DOW, USGS, CSU and others over the past few years. We do not see a need at this time to conduct additional fish sampling on this system for purposes of the draft EIS, however additional aquatic habitat and biotic assessments are recommended. The Monument / Fountain Creek fishery is typical of a transition zone stream found along the Front Range of Colorado. At the upper reaches it is characterized as a cold/cool water habitat with salmonid components. Once reaching the floor of the valley, the fishery reflects a plains stream system, with increasingly complex habitat features as it flows towards the confluence with the Arkansas River. Sampling conducted in the past has confirmed a diverse fish population of both native and non-native species. The floods of 1999 and more recent drought conditions have brought about alterations in both habitat and the fish community. Therefore, proper assessment of the fishery should rely on both historical and recent habitat and fishery information. The following are specific aquatic wildlife issues that need to be addressed in the draft EIS.

- Changes to stream hydrology and fish habitat (see comments below on methodology to assess fish habitat). Including details on seasonal, monthly, and daily variations in stream flows. Consider changes in habitat for all life stages of the fish community;
- Complete analysis of changes in water quality parameters in Monument and Fountain Creek including organic loading, suspended solids, biological oxygen demand, suspended sediments, and the full array of organic and inorganic components. Describe any interactions and changes to levels of selenium. Provide detailed information on the impacts of increased wastewater effluent discharge or run-off from agricultural production;
- Discuss any anticipated changes to water quality standards (i.e., aquatic life uses);
- Describe any in-channel modifications (i.e., drop structures) that might be constructed to reduce velocities, and evaluate their impact to riparian or shoreline;

- Evaluation of changes in stream flow patterns to specific fish species population community structure and function. Include an assessment of anticipated changes to species and life stage specific habitat (juvenile, adult, spawning), food availability, spawning habitat and conditions, and migration and/or dispersal impediments. Consider the accumulated impacts of historic and potential stormwater hydrological components along with the additional project-induced alterations to stream flows;
- Assessment of potential streambank stability and riparian integrity with anticipated hydrological and water quality changes. Document risk and anticipated levels of streambank erosion, and fate of suspended sediments transport within Fountain Creek and into the Arkansas River below the confluence;
- Adequate appraisal of the potential impacts to state-listed endangered or threatened species, including Arkansas darter and southern redbelly dace.

Arkansas River basin (below confluence with Fountain Creek):

The following issues relate to changes in the timing and quantity of flows on the Arkansas River (or its affected tributaries) that might occur with the proposed action. The following are specific aquatic wildlife issues that need to be addressed in the draft EIS.

- Delineate the affected environment;
- Assess alterations on stream flow in the Arkansas River and its tributaries from the confluence with Fountain Creek downstream to the boundaries of the affected environment. Detail the changes on a seasonal, monthly and daily, and diurnal basis. Provide data indicating changes to peak flows as well as baseline flows;
- Analyze the changes to all water quality parameters from the proposed actions as compared to baseline. Include evaluation of organic loading, suspended solids, biological oxygen demand, suspended sediment, conductivity and the full array of organic and inorganic components. Describe any interactions and changes to levels of selenium. Provide detailed information on the impact of user wastewater effluent on the Arkansas River and its tributaries downstream of the confluence with Fountain Creek. Also evaluate the potential effects of increased nutrient loading (via wastewater discharge, agricultural run-off or industrial uses) on any of the lower Arkansas tributaries or reservoirs that are affected by the project;
- Discuss any anticipated changes to water quality standards (i.e., aquatic life uses).
- Evaluate impacts to the existing native plains stream fishes, non-native species, and recognized sport fish from the Fountain Creek confluence downstream to John Martin Reservoir due to alterations in streamflows or changes in water quality. Include the effect of changes of water quality and quantity on the reproduction, feeding, growth, movement fish species in the river and associated tributary habitats;
- Detail the potential impacts to the native fish assemblages, including Arkansas darters (state-listed threatened species and federal candidate species), suckermouth minnow (state-listed endangered species) within the river between the Fountain Creek confluence and John Martin Reservoir.

Pipeline Right of Way (Wyoming-Colorado State line to Pueblo):


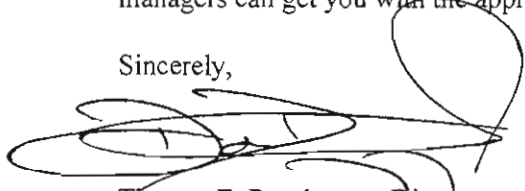
The construction of a 560 mile pipeline and associated maintenance roads bisects contiguous habitat in many areas. The Division is concerned with the potential habitat fragmentation and wetland impacts along the pipeline right-of-way. There are many ways to mitigate for habitat degradation during construction, such as the “jack and bore” method through riparian areas. However, until further detail is provided, the following are specific terrestrial issues that should be addressed in the draft EIS:

- Evaluation of impacts to low elevation riparian habitat as the pipeline appears to cross several rivers streams and associated wetlands on the eastern plains, evaluate the locations of proposed crossings of wetland and riparian areas;
- Assessment of potential impacts to ground and tree nesting raptors, or raptors on escarpments, surveys may need to be completed;
- Evaluate the potential negative impacts on ground nesting passerine birds;
- Determine adverse impacts and fragmentation of black-tailed prairie dog towns;
- Assessment of the potential spread and proliferation of noxious weeds;
- Evaluate impact to wetlands, semi-permanent water and storm event water;

A comprehensive pre and post-construction monitoring study may be the most appropriate way to determine direct impacts to wildlife. Burrowing owl or Swainson's Hawk nests, for example, may exist anywhere along this stretch...but those may not necessarily be directly impacted by construction if they are far enough away. There are ways to mitigate for such impacts, such as timing recommendations (avoiding nesting seasons), distance buffering, weed management and habitat enhancement off-site. The Division can provide survey protocols for many wildlife species that inhabit these areas. The Division of Wildlife requests the project proponent to share subsequent wildlife survey results, so that we can monitor future wildlife use in the area after project completion. Comparing post-construction monitoring data to the information that should be gathered pre-construction will be extremely valuable as new reservoir and pipeline projects are developed throughout Colorado.

Thank you again for the opportunity to comment on this project. Unfortunately, the pipeline and associated reservoirs include several administrative areas and regions within our agency. This may lead to the involvement of many field staff depending on the location of each phase. In an effort to streamline communications between the ACOE, the project proponent and the Division, please contact North East Regional Manager Steve Yamashita (303) 291-7203 for questions regarding Douglas County and areas north to Wyoming. For El Paso County and all areas south, please contact Southeast Regional Manager Dan Prenzlou, at (719) 227-5208. Either of these managers can get you with the appropriate staff to discuss potential wildlife issues at specific locations.

Sincerely,



Thomas E. Remington, Director
Colorado Division of Wildlife

- xc: M. Konishi
- S. Yamashita
- R. Velarde
- D. Prenzlou
- D. Nesler
- G. Gerlich
- J. Ver Steeg



OFFICE of ARCHAEOLOGY and HISTORIC PRESERVATION

June 10, 2009

Rena Brand
Regulatory Specialist
U.S. Army Corps of Engineers, Omaha District
Denver Regulatory Office
9307 S. Wadsworth Blvd.
Littleton, CO 80128-6901

Re: Regional Watershed Supply Project (CHS #54877)

Dear Ms. Brand,


Thank you for your correspondence dated May 8, 2009 (received by our office on March 8, 2009) regarding the subject project. We look forward to continued consultation regarding the proposed project and request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties.

In order to determine the effect of the proposed project on cultural resources, we recommend that you coordinate your National Environmental Policy Act (NEPA) studies with the studies required under Section 106 of the National Historic Preservation Act. According to 36 CFR 800.8 of Section 106, "Federal agencies are encouraged to coordinate compliance with Section 106 and the procedures in this part with any steps taken to meet the requirements of the National Environmental Policy Act." The findings from the Section 106 studies can inform the NEPA studies, such as including mitigation measures identified under Section 106 into the NEPA decision document. Once we receive the Section 106 studies, we will be able to fully complete our reviews under both Section 106 and NEPA.

We recommend that you begin the Section 106 review process as early as possible by initiating the identification of consulting parties and inviting them to participate in the process as well as consulting regarding the establishment of an appropriate Area of Potential Effects (APE). Also, Section 110 of the National Historic Preservation Act states that Federal agencies should "coordinate with the earliest phases of any environmental review carried out under the National Environmental Policy Act."

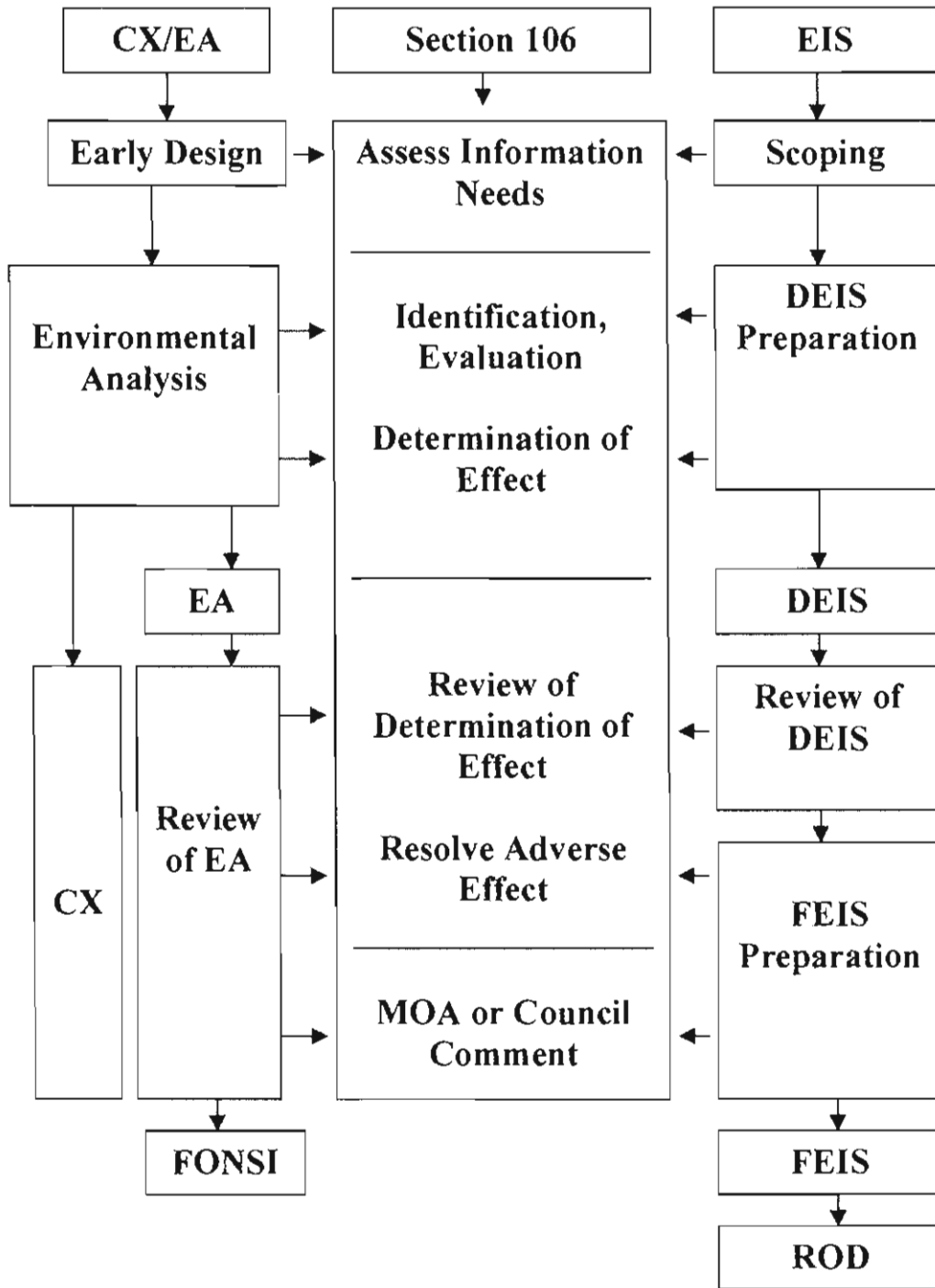
We have enclosed a flow chart that explains the coordination between Section 106 and NEPA. If we may be of further assistance, please contact Shina duVall, Section 106 Compliance Manager, at (303) 866-4674 or shina.duvall@chs.state.co.us.

Sincerely,

 Edward C. Nichols
State Historic Preservation Officer
ECN/SAD



COORDINATION BETWEEN NEPA AND SECTION 106



The Public and Consulting Parties must be notified and given the opportunity to comment during each step of the Section 106 review process.



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Office of the Governor PUBLIC LANDS POLICY COORDINATION

JOHN HARJA
Director



July 30, 2009

Rena Brand, Regulatory Specialist
U. S. Army Corps of Engineers, Omaha District
Denver Regulatory Office
9307 South Wadsworth Boulevard
Littleton, Colorado 80128-6901

Subject: Regional Watershed Supply Project
RDCC Project No. 09-10471 [09-10359]

Dear Ms. Brand:

The State of Utah, through the Public Lands Policy Coordination Office (PLPCO), has reviewed this project. PLPCO makes use of the Resource Development Coordinating Committee (RDCC) for state agency review of activities affecting state and public lands throughout Utah. The RDCC includes representatives from the state agencies that are generally involved or impacted by public lands management. Utah Code (63J-4-501 *et seq.*) instructs the RDCC to coordinate the review of technical and policy actions that may affect the physical resources of the state and facilitate the exchange of information on those actions among federal, state, and local government agencies. The attached comments and concerns are offered in the spirit of cooperation through disclosure, analysis and adherence to the provisions of law, regulation, good governance and common sense. The state recognizes impact analyses as a dynamic process that will continue into the future, and reserves the right to supplement these comments as necessary.

1. TERRESTRIAL ENVIRONMENT

Vegetation

The Utah Division of Wildlife Resources (UDWR) is concerned that wide fluctuations of water levels in Flaming Gorge Reservoir (FGR), as a result of the proposed action, will create ideal conditions for noxious weeds. Areas that are currently used by waterfowl, mule deer, antelope, sage-grouse, and passerine birds may become unusable if over-run by non-native vegetation. Additionally, open shorelines used by sportsmen may become inaccessible for recreation. Tamarisk, low whitetop, perennial pepperweed, Russian olive, and various species of

thistle are all weed species of concern in Utah and are found near the shoreline of FGR. Downstream riparian communities are reliant on periodic flood events for re-establishment of native vegetation. Fremont cottonwood communities rely on flooding events to establish new seedlings. Periodic flooding and a high water table are necessary to maintain these trees once established.

Two invasive species of particular concern are tamarisk and Russian olive, which currently occur in relatively low abundance along the shoreline of FGR. These species disrupt the structure of native plant communities by utilizing numerous habitat types and consuming vast amounts of water (i.e., an adult tamarisk can transpire up to 300 gallons of water per day). The proposed removal of 250,000 acre feet of water annually, and the subsequent reservoir drawdown, may allow these non-native plants to colonize the shoreline of FGR in massive stands as seen on similar western reservoirs (Lake Powell, Lake Mead). The seed source bank created by these species could impact surrounding upland areas and downstream riparian corridors.

We recommend that the Environmental Impact Statement (EIS) for this project identify all weed species that are present in the Flaming Gorge area and should analyze how the proposed action may affect the potential proliferation of those weed species. The EIS should also include a plan to prevent the spread of weeds into important native vegetation and wildlife communities adjacent to the reservoir.

Terrestrial Wildlife Species

We suggest that the EIS identify and evaluate impacts to sensitive wildlife species found along the Green River and FGR. The northern river otter, yellow-billed cuckoo, bald eagle, peregrine falcon, osprey, Lewis's woodpecker, and southwestern willow flycatcher are all Utah species of concern that occupy riparian habitat along the Green River in Utah. Also, numerous migratory and shore bird species use the Green River and its associated wetlands and riparian areas as habitat. UDWR is concerned that diminished flows in the Green River will impact the long-term viability of riparian vegetation communities which sustain these species.

UDWR Wildlife Management Areas

UDWR owns and manages the Browns Park and Stewart Lake Wildlife Management Areas (WMA) located along the Green River. The Browns Park WMA, located approximately 16 miles downstream of Flaming Gorge Dam, was established to mitigate for losses of wetland habitat due to construction of the dam and reservoir. Lower base flows, resulting from the project, will impact the ability of UDWR to maintain water levels within wetlands during summer months. This may potentially result in dewatering several existing marshes. The EIS should investigate how the project may affect UDWR's ability to manage these wetlands with UDWR's valid and existing water rights.

The Bureau of Reclamation (BOR) and UDWR have been working together with other state and federal agencies to remediate selenium contaminated bottom sediments from Stewart Lake WMA near Jensen, Utah. The BOR has spent considerable time, research, and funding to remove selenium from the lake bed. High river flows (over 15,000 cfs at Jensen, Utah USGS

gage) for extended periods (> 30 days) provide affective tool for reducing selenium concentrations by flushing the wetland systems. The proposed project may reduce river flows, thereby, reducing UDWR's and BOR's ability to effectively flush Stewart Lake. If flows are reduced as a part of the proposed action, the EIS should mitigate the impacts to UDWR's selenium remediation management of Stewart Lake WMA.

2. FLAMING GORGE RESERVOIR AND GREEN RIVER SPORT FISHERIES

FGR is considered one of Utah's premier sport fisheries and the Green River is nationally recognized as a Blue Ribbon trout fishery. As of 2003, FGR supported 538,462 angler hours, with an estimated annual value to Utah and Wyoming economies of greater than \$15 million dollars. Changes to either of these fisheries could have intense regional recreational and economic impacts. The proposed water withdrawal from the Green River watershed raises several essential economic questions. Will this withdrawal affect the ability of the reservoir and river to maintain viable fisheries and support recreational use? What impact would a loss of fishery productivity have on fishing license sales for the states of Utah and Wyoming? How will a loss in recreational use affect the economy in the surrounding area? What impact will lower reservoir water levels have on boat ramp access and marina operations? We recommend the EIS provide a thorough analysis of the potential impacts to recreational opportunities, local economies and fishery management.

Kokanee Salmon Fishery

Kokanee salmon is the most sought after sport fish in FGR, and also provides key forage for the reservoir's trophy lake trout population. Research completed by Robert Gipson in 1992 assessed the influence of reservoir drawdown on kokanee reproduction in FGR. The depth distribution of kokanee spawning can have a direct effect on the proportion of kokanee eggs that will be lost to reservoir drawdowns. For example, a typical overwinter reservoir drawdown of 3 meters results in 10% loss of kokanee eggs between 0-18 meters. A drawdown of 7.6 meters results in egg losses of about 40%. The magnitude and timing of reservoir drawdown is directly proportional to kokanee egg/fry mortality.

Additional research completed by Dr. Chris Leucke from Utah State University (USU) has shown that approximately 95% of FGR kokanee are the result of in-reservoir spawning. Decreases in in-reservoir kokanee reproduction as a result of reservoir drawdowns could have serious negative impacts on the Flaming Gorge kokanee fishery. The EIS should investigate the impacts the drawdown will this have on kokanee spawning success and the kokanee population.

The proposed project will have water intakes that are in close proximity to key kokanee spawning areas. Currently three spawning stocks occur in Flaming Gorge: the Green River, Sheep Creek, and in-reservoir. Point of Diversion 1 (POD1), near Pipeline Crossing, is immediately downstream of the major in-reservoir kokanee spawning area at Wildhorse Bay. Point of Diversion 2 (POD2) is located on the Green River below the Seedskaadee Wildlife Refuge, within an area utilized by kokanee for spawning. As fry, kokanee salmon utilize stream current for downstream migration, with the peak movement of stream fish occurring during

spring runoff. The proposed placement of these points of diversion (PODs) would entrain kokanee during the spring as fry emerge. Entrainment is the lethal trapping of larval fish away from their natural habitat. Other fishery impacts may also occur to lake trout, smallmouth bass, and stocked rainbow trout due to entrainment in pipeline intakes. The EIS should determine the numbers of kokanee fry that will be lost to entrainment by the proposed project, as well as the impacts these losses will have on the fishery.

USU is currently conducting research for UDWR to determine the impacts of feeding behavior and predation on kokanee by an exotic species, burbot (*Lota lota*), within FGR. Questions that need to be addressed with additional water withdrawals from this project are: Will burbot populations expand under increased water fluctuations, and will increased fluctuations in FGR create more spatial overlap between burbot and kokanee habitats? These concerns, and their potential for impacts on kokanee populations, should be thoroughly discussed in the EIS.

Reservoir Dynamics

The PODs could impact the thermal stratification layer within FGR. Removing vast amounts of water during the summer months at POD1 could change the thermocline/chemocline within regions of the reservoir. Altering the temperatures, and consequently, the dissolved oxygen content in the water column, could reduce suitable habitat for trout species with distinct water quality preferences. By changing the thermal attributes, fish, which are already spatially limited during the summer months, may be forced to find a thermal refuge elsewhere in the reservoir.

Removal of water at either POD1 or POD2 will remove water that is rich in nitrates and phosphates, essential for primary productivity (phytoplankton production) in FGR. The upper reaches of the reservoir are characterized as eutrophic: rich in nutrients and high in primary production. The lower end of the reservoir, near the dam, is characterized as meso- to oligotrophic: low in nutrients and limited in primary production. Both PODs have the potential to remove nutrient-rich water from the reservoir, which could have profound impacts on primary production within the reservoir and downstream. These physio-chemical changes are likely to affect the entire aquatic food web in FGR and the Green River. The EIS should evaluate and mitigate for impacts on thermal stratification and nutrient loading on aquatic life within FGR in the Green River below Flaming Gorge Dam.

Aquatic Invasive Species

Extensive research by Dr. Mark Vinson from USU suggests that low, stable flows could dramatically change the invertebrate community in the Green River. Benthic algal biomass would increase on the rocks and substrates, decreasing species composition while having a negative impact on mayfly and caddis fly abundance. Mayflies are considered the preferred forage for brown trout, the dominant sport fish in the river. Invasive New Zealand mud snails (NZMS) would proliferate under the proposed flow conditions, increasing their abundance and negative impacts. NZMS offer little or no nutritional value to trout and have the potential to upset the food web by out-competing other beneficial invertebrate species.

Recently, the 2008 Utah Legislature passed the Aquatic Invasive Species Interdiction Act, and subsequently the Utah Wildlife Board passed an associated rule, R657-60 Aquatic Invasive Species Interdiction, both with a purpose of defining procedures and regulations designed to prevent and control the spread of aquatic invasive species, particularly *Dreissena* mussels, within the State of Utah. Although this project proposes to pump water away from Utah, UDWR is concerned with any potential mechanism that may hasten the proliferation of aquatic invasive species in the west. The EIS should contain a thorough analysis of the threat of the spread of *Dreissena* mussels and other aquatic invasive species, along with appropriate measures to avoid and significantly reduce these risks in the intermountain west.

3. GREEN RIVER SENSITIVE AQUATIC SPECIES

Hydrological Effect

The UDWR is concerned that a reduction of flows into Flaming Gorge Reservoir will inhibit the implementation of the Flaming Gorge flow recommendations. The flow recommendations, initiated in 2006, are a result of an agreement between multiple agencies (including water and power utility interests, environmental entities, and state and federal resource agencies) and are intended to benefit the endangered fishes of the Green River: the razorback sucker (*Xyrauchen texanus*), the Colorado pikeminnow (*Ptychocheilus lucius*), the humpback chub (*Gila cypha*), and the bonytail (*Gila elegans*). These four fish were federally listed under the Endangered Species Act between 1973 and 1991 due to various factors. Two of these factors, habitat alteration and the presence of nonnative fishes, may be exacerbated by the proposed project.

UDWR is concerned that the reduced flow entering the reservoir will require the BOR to minimize releases from the dam into the Green River, especially during spring peak flows. A reduction of spring peak flows will not give young razorback sucker access to floodplain habitat, which is essential for successful recruitment of the species. Razorback sucker are not the only species that uses floodplain habitat; in fact, most Colorado River fishes (including unlisted species such as the roundtail chub, *Gila robusta*) have been observed entering floodplains with high stream flows in the spring.

In addition to spring flows, the proposed project appears to limit the ability of BOR to fluctuate base flows as necessary. The Upper Colorado River Endangered Fishes Recovery Program (Program) submitted a base flow request for the current water year for flows significantly higher than the minimum base flow release from the dam. Current research is showing that higher base flows can disadvantage smallmouth bass (*Micropterus dolomeiu*) to the point that the young-of-year and age-1 fish do not survive. This is important because the Program is currently investing significant time and funding to manually remove smallmouth bass species from the Green River drainage. Also, it is thought that higher base flows will improve survival of young-of-year Colorado pikeminnow, which have been declining in the middle Green River since the mid-1990s.

Species native to the Green River have evolved under highly variable flow regimes and highly variable habitats. As a participant in the Program, UDWR is concerned that further reductions in the flow of the Green River will worsen the native fishes' ability to outcompete nonnatives currently in the river system. In fact, reducing flows, especially the spring peak flows, would greatly improve habitat for nonnative fishes in the system. As proposed, reducing water availability and the current flow prescriptions in the Green River will impede the Program's ability to recover the federally endangered fish.

Specific Comments for Native Fish

The native fish in the Green River include those already mentioned (razorback sucker, Colorado pikeminnow, humpback chub, bonytail, and roundtail chub), and three other fish species similarly adapted to highly fluctuating flows. These native fish are the flannelmouth sucker (*Catostomus latipinnis*), bluehead sucker (*Catostomus discobolus*), and speckled dace (*Rhinichthys osculus*). We are concerned that the four currently unlisted species, in particular the roundtail chub, may be listed under the Endangered Species Act if the species experience significant impacts from this water withdrawal project.

Due to the concerns raised for all native species, UDWR request that the EIS model all impacts to the native fish (reproduction, survivability, condition factor, carrying capacity), especially the endangered fish, under each diversion option. Population Viability Analysis, a common exercise in conservation biology, evaluates whether an organism will still exist 100 years in the future based on current population growth. With this type of modeling, the EIS could better evaluate and comment on each potential impact to the species.

4. ADMINISTRATION OF WATER RIGHTS

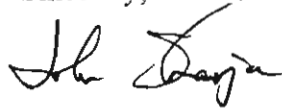
The proposed extraction of up to 250,000 acre feet of water from the Green River and reservoir above the Flaming Gorge Dam will make it more difficult for the State of Utah to administer Water Rights without conflict with the State of Utah commitment to legally protect flows in the Green River identified for recovery of endangered fish species. These flows are recommended by the U. S. Fish and Wildlife Service's Biological Opinion and the reasonable and prudent alternatives outlined in the Recovery Implementation Program Recovery Action Plan (RIPRAP) as part of the Upper Colorado River Endangered Fish Recovery Program.

5. UTAH WATER PLANNING

Utah water planning has long anticipated diversion of water under the Wyoming allocation provided for in the compacts but the delivery of water to Colorado is a new, unanticipated demand on the Green River system that flows through Utah. The extraction of these waters above the Utah State line will complicate the State of Utah's ability to develop its allotment of the Colorado River as outlined in the 1922 Colorado River Compact, the 1948 Upper Colorado River Compact and as planned for and authorized under Utah Water Rights, particularly in the upper reaches of the Green River in Utah.

The State of Utah appreciates the opportunity to review this proposal and we look forward to working with you on future projects. Please direct any other written questions regarding this correspondence to the Resource Development Coordinating Committee at the address below, or call Judy Edwards at (801) 537-9023.

Sincerely,

A handwritten signature in black ink, appearing to read "John Harja". The signature is fluid and cursive, with the first name "John" being more prominent than the last name "Harja".

John Harja
Director

cc: Carmen Bailey, Utah Division of Wildlife Resources



State of Utah

OFFICE OF THE GOVERNOR

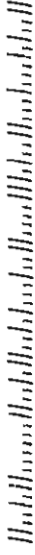
Public Lands Policy Coordination Office
5110 State Office Building
P.O. Box 141107
Salt Lake City, Utah 84114-1107

RETURN SERVICE REQUESTED



Rena Brand, Regulatory Specialist
U. S. Army Corps of Engineers, Omaha District
Denver Regulatory Office
9307 South Wadsworth Boulevard
Littleton, Colorado 80128-6901

8012869019 0057



JSF



JANICE K. BREWER
Governor

HERBERT R. GUENTHER
Director

ARIZONA DEPARTMENT OF WATER RESOURCES

3550 North Central Avenue, Second Floor
PHOENIX, ARIZONA 85012-2105
(602) 771-8500

September 10, 2009



Ms. Rena Brand, Project Manager
U.S. Army Corps of Engineers
Denver Regulatory Office
9307 South Wadsworth Blvd.
Littleton, CO 80128-6901

Re: Federal Register Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Regional Watershed Supply Project in Wyoming and Colorado, March 20, 2009

Dear Ms. Brand:

The Arizona Department of Water Resources (Department) offers the following comments regarding the above referenced Notice of Intent to prepare an Environmental Impact Statement (EIS) for the proposed Million Conservation Resources Group Pipeline Project. The Pipeline Project would divert water from the Green River, a tributary to the Colorado River. The Department suggests that a critical part of this analysis is the evaluation of water supply impacts to existing Colorado River water users.

Arizona shares the water supply from the Colorado River with six other U.S. states and the country of Mexico. The Department supports the right of Colorado and Wyoming to develop each state's Colorado River apportionment. However, the development of an additional 250,000 acre-feet annually of Colorado River water demand may impact other existing water uses. For this reason, the Department suggests that the Corps coordinate with the U.S. Bureau of Reclamation to use accepted hydrologic modeling techniques to evaluate the cumulative impact of this project on future water supplies for existing Colorado River water users.

This analysis is particularly important given Reclamation's recent Record of Decision implementing the *Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead, December 2007 (Interim Guidelines)*. These Guidelines were developed during

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the worst eight-year period of drought recorded in over a century. The Guidelines are crafted to delay the onset and minimize the extent and duration of shortages in the Lower Division States and to maximize the protection afforded to the Upper Division States by storage in Lake Powell against possible curtailment of Upper Basin uses. The Colorado River Simulation System (CRSS) model was utilized to analyze the various operational scenarios that were considered in the Environmental Impact Statement that was prepared for the Interim Guidelines. The Department requests that the Corps work with Reclamation to utilize the same model to analyze the impacts of the Million Conservation Resources Group Pipeline Project so that it can be determined whether or not the Project impacts the expected range of water supply conditions identified from the analysis for the Interim Guidelines.

The Department requests that it be added to the list of interested parties for the EIS. The Department also believes that it would be beneficial for the Corps to conduct scoping meetings in one of the Lower Division States of Arizona, California or Nevada. The Department appreciates this opportunity to comment on the proposed project.

Sincerely,

A handwritten signature in blue ink that reads "Herbert R. Guenther". The signature is written in a cursive style with a large initial "H" and "G".

Herbert R. Guenther
Director