



**WESTERN RESOURCE  
ADVOCATES**

*Submitted via FERC's eFiling system*

December 4, 2012

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**RE: Trout Creek Reservoir Hydroelectric Project, Project No. 14446-000:  
Western Resource Advocates and Colorado Environmental Coalition's  
Comments on the Pre-Application Document, Comments on Scoping  
Document 1, and Study Request.**

Dear Secretary Bose:

Western Resource Advocates and Colorado Environmental Coalition appreciate the opportunity to submit these comments on the Pre-Application Document ("PAD") and "Scoping Document 1" for the proposed Trout Creek Reservoir Hydroelectric Project ("Trout Creek Dam"), filed with the Federal Energy Regulatory Commission ("FERC") on August 9, 2012.

We write to highlight two critical concerns related to the Trout Creek Dam:

- ✓ FERC must ensure adequate protection of the Yampa River's important aquatic habitat and flows. Any individual Endangered Species Act ("ESA") Section 7 consultation for the proposed Trout Creek Dam must carefully and transparently evaluate whether the consumptive use proposed by this project is covered under the Yampa River biological opinion.
- ✓ FERC must include in any NEPA analysis for the proposed Trout Creek Dam an evaluation of the project's significant indirect impacts associated with coal mining, including greenhouse gas emissions.

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## The Commenters and Their Interests

**Western Resource Advocates** is a nonprofit conservation organization dedicated to protecting the Interior West's land, air, and water. Western Resource Advocates seeks to mitigate the impacts of climate change to the West's communities and rivers, and promotes a sustainable energy and water future. For nine years, Western Resource Advocates has been a member of the Upper Colorado River Endangered Fish Recovery Program.

**Colorado Environmental Coalition** ("CEC") is a Colorado-based environmental advocacy organization with two field offices in western Colorado and a main office in Denver, Colorado. CEC has more than 4,000 individual members and over 90 affiliated organizations. CEC campaigns engage citizens in the protection of Colorado's wild places, healthy rivers, wildlife and quality of life. CEC is an active participant in natural resource management in Colorado, with a demonstrated interest in development of Colorado's water resources. CEC staff and members visit the Yampa and Green rivers and neighboring lands for recreation and are concerned with protecting wildlife, scenery, and other values.

### I. Factual Background

#### a. Federal and state efforts to recover the endangered native fish species in the Yampa and Green rivers.

- i. *A natural flow hydrograph in the Yampa and Green rivers is critical to the recovery of four federally-endangered native fish species.*

The proposed points of diversion for the Trout Creek Dam, as well as the related Sage Creek Coal recapture diversion on the Yampa River, are upstream of designated critical habitat of four federally endangered fish species: the Colorado pikeminnow, humpback chub, razorback sucker, and bonytail chub. The Green River is also home to several species considered "sensitive" by state agencies in Colorado, Wyoming, or Utah, and that also suffer from more than a century of diversions, impoundments, habitat destruction, and other anthropogenic disturbances and that, as a result, may one day be listed under the ESA.

The Yampa and Green rivers play an essential role in the Upper Colorado River Endangered Fish Recovery Program ("Recovery Program" or "Program"), a program run by the federal government in cooperation with Upper Colorado River basin states and other partners. The Recovery Program works to recover the four federally endangered fish species, while allowing continued development of Colorado River (and tributary) water by the Upper Basin states, and avoiding a more severe application of the ESA. Since its inception twenty-five years ago, the Recovery Program has held out flow protection and improvement in the major tributaries of the Colorado River as an essential foundation for success of the Program.

The history of conflict between water interests and those concerned with the protection of the river's endangered fish is long and acrimonious. But by the mid-1980s, all parties to the conflict – the responsible federal and state agencies, water developers, and the environmental community – decided to sit down and develop a cooperative approach to protecting these fish populations. Subsequent negotiations among the U.S. Fish and Wildlife Service (“USFWS”), Bureau of Reclamation, Western Area Power Administration, the states of Colorado, Utah, and Wyoming, water users, and conservation groups resulted in the formalization of the Recovery Program: an inter-agency program for the recovery of the endangered fish designed to accommodate both environmental and water development concerns.<sup>1</sup>

A central feature of the Recovery Program has been the establishment of habitat needs of the fish in an open and scientific forum, based on the working assumption that the listed fish could be restored while, at the same time, the states could develop their entitlements under the 1922 Colorado River Compact. Underlying this assumption was the concept that the Program would operate on the principle of adaptive management, *i.e.*, the hypothesis testing of habitat management actions guided by a formal research and monitoring program.

The need to protect the Yampa and Green river flows is specifically articulated in the Recovery Program’s 1987 “Blue Book.”<sup>2</sup> Participation in the Recovery Program provides ESA compliance for both existing and future water development by the Upper Basin States. Over the past twenty-five years, the Recovery Program has spent tens of millions of dollars on fish passage, bottom-land habitat acquisition, non-native fish management, and improved flows below major federal dams.

A key Recovery Program action to protect and restore the endangered fish in the Green and Yampa rivers is the multi-year, collaborative effort that resulted in a Final

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<sup>1</sup> The program contains five major elements:

- 1) Habitat management: identify and quantify instream flows, including the change in operation of federal reservoirs;
- 2) Habitat development: research methods for creating, protecting, and improving habitat;
- 3) Stocking native fish: identify and maintain specific genetic stock of native fish, study survival of hatchery fish stocked in the wild, and evaluate feasibility of constructing a hatchery;
- 4) Non-native species and sport-fishing: monitor sizes of native and non-native fish populations, study competition between the two, and limit areas in which non-native fish may be stocked; and
- 5) Research, monitoring, and data management: study various means of recovering fish, monitor long-term population trends, recommend flows, evaluate genetic differences between populations, recommend "refugia" (facilities to hold and protect rare fish), evaluate differences between hatchery and wild fish, establish brood stock, and develop and manage centralized data base.

Key Elements of the Upper Colorado River Endangered Fish Recovery Program, *attached as Exh A.*

<sup>2</sup> U.S. Fish & Wildlife Service, Final Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin 4-4 to 4-5 (Sept. 29, 1987) (a.k.a. the “Blue Book”), *attached as Exh. B.*

Environmental Impact Statement (“FEIS”)<sup>3</sup> and Record of Decision (“ROD”)<sup>4</sup> to re-operate Flaming Gorge Dam. The Flaming Gorge FEIS and ROD were agreed upon by the Recovery Program participants—*i.e.*, no lawsuits were filed—to implement the USFWS *Flow and Temperature Recommendations of for Endangered Fish in the Green River Downstream of Flaming Gorge Dam* (Sept. 2000) (“Recovery Flows”).<sup>5</sup> These Recovery Flows for the Green River attempt to protect the river’s natural hydrograph, including year-round base flows and annual spring peak flows based on each year’s snowpack (*i.e.*, wetter years have higher and longer-duration peak flows; drier years have lower peak flows). The Recovery Flows include flow targets in all reaches of the Green River from Flaming Gorge Dam to the confluence of the Green and Colorado Rivers in Canyonlands National Park. These reaches include critical habitat for the endangered fish—river reaches found to be necessary for the fishes’ recovery. Importantly, the reoperation of Flaming Gorge Dam relies heavily on the Yampa River peak flow to achieve the Flow Recommendations in the Green River.<sup>6</sup>

In developing quantitative recovery goals and downlisting and delisting criteria for the endangered fish, the USFWS concluded that the Green River may be the only river in the Upper Colorado River Basin with the carrying capacity to restore the Colorado pikeminnow to self-sustaining populations (minimum viable populations). The Green also is only one of two places in the entire Upper Colorado River basin with capacity to restore razorback sucker and bonytail chub. While some progress has been made, including the Bureau of Reclamation’s Flaming Gorge FEIS and ROD, full flow protection for endangered fish has not yet been secured in the Green River or in its most important tributary, the Yampa River. It is a significant unfinished task in the Recovery Action Plan (a.k.a. the “RIPRAP”). In light of the above, we feel compelled to raise the essential issue of the need to protect Green River Recovery Flows for endangered fish in this FERC docket.

*ii. The Green River frequently fails to meet the Recovery Flows.*

Despite the re-operation of Flaming Gorge Dam, the Recovery Flows for the Green River are not being met. In the September 2000 report for the Recovery Flows, the USFWS modeled the Recovery Flows against existing flows, in six representative water years.<sup>7</sup> For each of the six years, flows at the gage near the City of Green River, Utah failed to meet the recommended flows for significant portions of the year.<sup>8</sup>

*iii. The Green River is under pressure from many other water proposals.*

New depletions above Green River, Utah, including depletions in the Yampa River basin, are likely to exacerbate the challenge of meeting the Recovery Flows.

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<sup>3</sup> Executive Summary *attached as* Exh. C.

<sup>4</sup> *Attached as* Exh. D.

<sup>5</sup> *Attached as* Exh. E.

<sup>6</sup> *See* Flaming Gorge FEIS, chapters 1-2 at 37-39, *attached as* Exh. F.

<sup>7</sup> Recovery Flows at 5-24 to 5-31 (Figures 5.3 though 5.9).

<sup>8</sup> *Id.*

Peabody Energy's ("Peabody") Trout Creek Dam proposal occurs in the context of unprecedented new development pressure on the Green River basin. Other notable planned water projects include, but are not limited to:

- The proposed Blue Castle Nuclear Power Plant would consumptively use approximately 53,600 AF/year from the Green River near the City of Green River, Utah. The Utah State Engineer approved applications to change the approved use of San Juan River and Lake Powell water rights for the proposed power plant, with conditions aimed at, among other things, protecting the ESA-listed native fish species.<sup>9</sup>
- The proposed Flaming Gorge Pipeline (a.k.a. "Regional Watershed Supply Project") would pump approximately 250,000 acre-feet ("AF") annually out of Flaming Gorge Reservoir and the Green River through a 500 mile pipeline over the continental divide primarily to municipal and agricultural users in Colorado and southeastern Wyoming.<sup>10</sup>
- Oil shale development in Colorado has the potential to dramatically reduce flows on the White River, which is tributary to the Green River. As of 2009, there were nearly 1.2 million AF of decreed water storage rights for oil shale in the White River Basin.<sup>11</sup> Although it would likely be impossible to develop all of these rights, they illustrate the potential impacts to flows in the Green should a commercial oil shale industry emerge.

There is growing recognition in the region that continued use of the Green River by water diverters depends upon protecting habitat for the River's endangered fish species. As recently stated by one State of Utah official:

Utah's continued use of Colorado River water depends upon careful consideration of ESA compliance. . . . Requests for consumptive use of Green River water should be analyzed . . . with the need for continued ESA compliance[] in mind. Otherwise, Utah's use of its Colorado River water could be jeopardized – not just future use, *but existing uses as well*.

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<sup>9</sup> See Order of the State Engineer, a35402, 89-74, *attached as Exh. G*; Order of the State Engineer, a35874, 09-462 (Jan 20, 2012), *attached as Exh. H*.

<sup>10</sup> General information about the Flaming Gorge Pipeline is available at FERC Docket No. P-12966. Although FERC denied an application for a preliminary permit for the Flaming Gorge Pipeline, *Wyco Power & Water, Inc.*, 139 FERC ¶ 61,124 (May 17, 2012), the State of Colorado continues to explore developing the Flaming Gorge Pipeline, *see, e.g.*, Eric Hecox, Op-Ed., *Water 2012: Can Flaming Gorge Meet Future Water Needs?*, VALLEY COURIER (Alamosa, CO), Sept. 25, 2012, *attached as Exh. I*.

<sup>11</sup> Lawrence J. MacDonnell, *Water on the Rocks: Oil Shale Water Rights in Colorado* 8 (Western Resource Advocates 2009), *attached as Exh. J*.

Letter from Dennis Strong, Director, Division of Water Resources, to Kent Jones, Utah State Engineer (Jan. 7, 2010) (emphasis added).<sup>12</sup>

iv. *The Yampa River's peak flows are important to the recovery of the four federally listed native fish species.*

In 2004 and 2005, the USFWS developed a Management Plan for Endangered Fishes in the Yampa River Basin (“Management Plan”),<sup>13</sup> and a Final Programmatic Biological Opinion on the Management Plan (“PBO”).<sup>14</sup> The PBO allows for approximately 53,000 acre feet per year of cumulative additional depletions above estimated depletions in the Yampa River Basin in 1998, including approximately 30,000, acre feet per year in Colorado.<sup>15</sup> Table 6 in the Management Plan lists the anticipated increases in depletions and their associated uses:

**Table 6. Current and future depletions from the Yampa Basin in Colorado by sector**

Sector	Current <sup>1</sup> AF of depletions	Future (2045) average annual AF of depletions			Unlimited minus Current
		Limited <sup>2</sup>	Unlimited <sup>3</sup>	Shortage <sup>4</sup>	
Agriculture	87,765	87,755	92,258	4,503	4,493
M&I	5,201	15,100	15,307	207	10,106
Power	16,947	32,350	32,350	0	15,403
Exports	2,815	2,814	2,917	103	102
Evaporation	12,543	12,543	12,543	0	0
<b>TOTALS</b>	<b>125,271</b>	<b>150,562</b>	<b>155,375</b>	<b>4,813</b>	<b>30,104</b>

<sup>1</sup> Based on estimated demands as of 1998, limited by supplies and legal constraints (Table 5).

<sup>2</sup> Limited by 1998 supplies and legal constraints; agriculture affected by senior M&I and power.

<sup>3</sup> Not limited by 1998 supplies and legal constraints.

<sup>4</sup> Shortage = Unlimited minus Limited depletions.

Importantly, “if water is used in a substantially different timing regime that adversely affects endangered fishes in way not considered in [the PBO], then re-initiation of consultation is required.”<sup>16</sup> However, the PBO requires individual section 7 consultation for all future specific federal actions to determine whether they fit within the PBO’s coverage.<sup>17</sup>

The PBO concludes that “water depletions adversely affect all four species of endangered fishes and the primary constituents of their critical habitat.” The PBO notes that reductions in spring peak flows are especially problematic because of their importance to food supply and reproduction.<sup>18</sup> Numerous studies have confirmed the value of peak

<sup>12</sup> Attached as Exh. K.

<sup>13</sup> Attached as Exh. L.

<sup>14</sup> Attached as Exh. M.

<sup>15</sup> PBO at 71; see also Management Plan at 30.

<sup>16</sup> PBO at 74; see also Management Plan at 22 (Table 8 lists anticipated future depletions by water district, i.e., geographic area).

<sup>17</sup> *Id.* at 71.

<sup>18</sup> PBO at 30, 38, 50.

flows to the endangered fish.<sup>19</sup> According to the Management Plan, “[a]lluvial processes are critical to creating and maintaining the habitats needed for the recovery of the endangered fishes.”<sup>20</sup> Specifically, the PBO states the razorback sucker uses off-channel habitats for reproductive activities.<sup>21</sup> “Reduction of peak spring flows eliminates or reduces the frequency of inundation of off-channel habitats”, which in turn is believed to reduce the razorback sucker’s reproductive activity.<sup>22</sup> Furthermore, reduced peak flows may correspondingly reduce a key spawning cue for the razorback sucker.<sup>23</sup> The PBO also states that peak flows are also important for Colorado pikeminnow spawning.<sup>24</sup> For the humpback chub, one study concluded that peak flows are important because peak flows increase the availability of shoreline eddy habitat, which is important for reproduction.<sup>25</sup>

However, the Management Plan proposes more research to resolve the significant uncertainties that surround the connection between peak flows and the geomorphic process that are necessary to provide endangered fish habitat.<sup>26</sup> The Study commenced in 2004.<sup>27</sup> At least one study has concluded that existing sediment flows in the Yampa contribute to the geomorphic health of the Green River.<sup>28</sup> Thus, even though the importance of peak flows to the four ESA-listed native fish species is not in doubt, scientists and federal agencies are still discovering the exact contours of the fishes’ habitat needs, and these efforts may affect the scope of future PBO coverage in the Yampa River basin.

**b. Coal mines are a significant source of harmful greenhouse gas emissions.**

The proposed Trout Creek Dam is intended to serve a physical expansion of Peabody’s existing Twentymile coal mining operations.<sup>29</sup> Coal mining’s extensive contribution to the problem of climate change is twofold: (1) through greenhouse gas emissions directly associated with mining, including the release of trapped methane gas, and (2) by selling a carbon-intensive fossil fuel for combustion by consumers.

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<sup>19</sup> *Id.* at 45 (citing Andrews 1978, 1986; Day & Crosby 1997; Elliott et al. 1984; Holden 1978, 1980; Muth et al. 2000; O’Brien 1987; Rakowski & Schmidt 1999; Schmidt 1996; Stanford 1994; Tyus 1987; Tyus & Karp 1991; Wick 1997).

<sup>20</sup> Management Plan at 106; *see also* PBO at 45.

<sup>21</sup> PBO at 30.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 32.

<sup>24</sup> *Id.* at 45.

<sup>25</sup> *Id.* at 38. The PBO does not cover the habitat needs of bonytail chub in as great detail as the other three ESA-listed species. This is perhaps due to the extreme rarity of the species and because “spawning of bonytail has never been observed in a river.” *See id.* at 40.

<sup>26</sup> *Id.*

<sup>27</sup> PBO at 18.

<sup>28</sup> Management Plan at 112.

<sup>29</sup> PAD at 3-24.

Greenhouse gas emissions associated with fossil fuel extraction are responsible for nearly half as much near-term global warming as is caused by burning those fossil fuels.<sup>30</sup> Direct methane emissions at coal mines are particularly problematic because of methane's exceptionally high potency as a greenhouse gas.<sup>31</sup> Fortunately, there may be feasible opportunities and economic benefits associated with capturing the methane emissions associated with coal mines, and selling it as feedstock for natural gas.<sup>32</sup>

Coal continues to represent a disproportionate share of the nation's greenhouse gas emissions. In 2011, coal accounted for 34% of the United States' energy-related CO<sub>2</sub> emissions, despite representing only 20% of the nation's energy use.<sup>33</sup> CO<sub>2</sub> emissions from coal compares negatively to CO<sub>2</sub> emissions from other fossil fuels like natural gas.<sup>34</sup> Coal fares especially poorly when compared against renewable energy sources like wind and solar that have no direct CO<sub>2</sub> emissions.<sup>35</sup>

## **II. Individual Section 7 Consultation with the USFWS Should Ensure Protection of the Yampa Peak Flows, Including Updating Current Depletion Estimates in the Yampa River.**

The PAD estimates that the total depletive effect of the Trout Creek Dam and associated releases would be 7,280 acre-feet per year (6,000 acre-feet per year for industrial use, plus an average of 1,280 acre-feet per year of evaporation).<sup>36</sup> The PAD correctly states that this proposed federal action requires an individual Section 7 consultation, and its depletive effect exceeds the threshold requiring a Recovery Agreement.<sup>37</sup>

The Management Plan's annual "unlimited" future depletion increment in Colorado (slightly over 30,000 acre-feet of depletions per year) is, in isolation, greater than the Trout Creek Dam's proposed depletions. However, it is not clear whether the proposed Trout Creek Dam, and related operations, would fit within this future development increment (*see* the Management Plan's Table 6, reproduced above), in light of other cumulative development in the Yampa River basin. The Management Plan's "current" depletion estimates are now fourteen years out-of-date and must be updated as a part of any individual Section 7 consultation for the Trout Creek Dam.

In addition, the proposed reservoir would cause a significant new evaporative depletion, despite that the Management Plan anticipates no specific future evaporative depletion

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<sup>30</sup> Robert S. Eshelman, *Curbing Coal Mine Methane Could Cool Global Warming*, SCIENTIFIC AMERICAN (ClimateWire; Sept. 7, 2012), *attached as* Exh. N.

<sup>31</sup> *Id.*

<sup>32</sup> *See id.*

<sup>33</sup> U.S. Energy Information Administration, U.S. Energy-Related Carbon Dioxide Emissions, 2011 (Aug. 14, 2012), *attached as* Exh. O.

<sup>34</sup> *See id.*

<sup>35</sup> *See id.*

<sup>36</sup> PAD at 3-111.

<sup>37</sup> *Id.*



increment above 1998 levels.<sup>38</sup> Instead, the Management Plan entirely defers consideration of evaporative depletions and the other impacts of new reservoirs to Section 7 consultation.<sup>39</sup> As noted above, the PBO does not treat all types of depletions the same way. The PBO distinguishes between types of depletions because of differences in how they may impact peak flows through timing.<sup>40</sup> In light of Trout Creek Dam's reliance on peak-shaving to fill the reservoir,<sup>41</sup> it appears possible that the dam's proposed evaporative depletions, as well as consumptive industrial uses, could have a disproportionately high impact on peak flows. Thus, at a minimum, the individual Section 7 consultation should ensure that the proposed reservoir's evaporative depletions do not impact peak flows in a manner not considered by the PBO.

Finally, should USFWS conclude that the proposed Trout Creek Dam is covered under the existing Yampa River PBO, it is essential that the agency "show its work" and explain its rationale with specificity in any future biological opinion. The numerous stakeholders that rely on the Yampa River and the ESA coverage granted by the Recovery Program deserve the opportunity to critically review the agency's analysis.

### **III. Future Environmental Impacts of the Sage Creek and Twentymile Coal Mines are Foreseeable "Indirect Effects" of FERC Approval of the Trout Creek Dam under NEPA.**

We are troubled that FERC's Scoping Document 1 omits any reference to the impacts of coal mining. As explained below, these indirect impacts of the Trout Creek Dam must be analyzed under the National Environmental Policy Act ("NEPA").<sup>42</sup>

NEPA is the "basic national charter for protection of the environment."<sup>43</sup> NEPA requires that all federal agencies "include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement", commonly known as an "EIS".<sup>44</sup> The "hard look" requirement of NEPA,<sup>45</sup> requires that agencies supplement environmental impact statements where there is significant new information regarding the proposed action and its impacts.<sup>46</sup> Conclusory assertions by an agency do not meet the "hard look" requirement of NEPA.<sup>47</sup> As a federal court recently stated, under NEPA:

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<sup>38</sup> Management Plan at 20 (Table 6).

<sup>39</sup> *Id.* at 23-24.

<sup>40</sup> *See* PBO at 74.

<sup>41</sup> *See* PAD at 3-36.

<sup>42</sup> 42 U.S.C. §§ 4321-4370f.

<sup>43</sup> 40 C.F.R. § 1500.1(a).

<sup>44</sup> *See* 42 U.S.C. § 4332(2)(C).

<sup>45</sup> *Id.*

<sup>46</sup> *See Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55, 72 (2004) (citing 40 C.F.R. § 1502.9).

<sup>47</sup> *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 707 (10th Cir. 2009).

[Agencies] cannot simply list cursory comments or other information and then assert a conclusion; rather, they must demonstrate the path of their reasoning from whatever data they rely on to their conclusion that [the agency action] will have no substantial effect. In other words, [agencies] must “show their work” to some extent so that the court can have confidence that [agencies’] conclusion was the product of a hard look.<sup>48</sup>

This process is designed to guarantee that an agency prepares a “coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that ‘the agency will not act on incomplete information, only to regret its decision after it is too late to correct.’”<sup>49</sup> A NEPA document will pass muster only if its “form, content and preparation . . . foster both informed decisionmaking and informed public participation.”<sup>50</sup> As a part of NEPA’s “hard look” requirement, agencies must examine the indirect environmental impacts of alternatives.<sup>51</sup> Indirect effects include effects that are later in time, farther in distance, induced changes in land use, and “related effects on air water, and other natural systems[.]”<sup>52</sup>

The environmental impacts associated with the proposed Sage Creek Mine and future operations at the Twentymile Mine are indirect effects of the construction of the Trout Creek Dam. The PAD and Scoping Document 1 assert that most of the depletive uses of the Trout Creek Dam water are for industrial uses related to coal mining operations at the proposed Sage Creek Mine and/or the Twentymile Mine.<sup>53</sup> Therefore, in this proposed FERC licensing action, the impacts of the planned Sage Creek Coal Mine and future operations at the Twentymile Mine easily meet the definition of “indirect effects” of the Trout Creek Dam.

If FERC intends to tier its indirect effects analysis of coal mining to other NEPA documents, it must explicitly cite those analyses. Furthermore, FERC may not blindly tier to other agencies’ NEPA analyses associated with Peabody’s planned coal mining operations. It is well-settled that federal agencies may not wholly defer to another agency’s analysis under NEPA.<sup>54</sup>

The adopting agency must perform its own “independent review,” 40 CFR 1506.3(c) . . . and determine for itself that the EIS adequately addresses all

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<sup>48</sup> *Highway J Citizens Group, U.A. v. U.S. Dept. of Transp.*, Slip Op., 2010WL1170572 at 2 (E.D. Wis.).

<sup>49</sup> *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998) (quoting *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 371 (1989)).

<sup>50</sup> *Colorado Env’tl. Coal. v. Dombek*, 185 F.3d 1162, 1172 (10th Cir. 1999).

<sup>51</sup> 40 C.F.R. §§ 1502.16(b); 1508.8(b).

<sup>52</sup> *Id.* at § 1508.8(b).

<sup>53</sup> PAD at 3-24; Scoping Document 1 at 11.

<sup>54</sup> *See Bd. of Comm’rs of Pitkin County*, 173 IBLA 173, 183 (2008) (internal citations omitted).

of the likely significant environmental impacts. In other words, it must accept responsibility for scope and content of the EIS.<sup>55</sup>

Any environmental assessment or environmental impact statement for the proposed Trout Creek Dam that omits an analysis of the indirect effects related to coal mining would violate NEPA.

#### **IV. FERC Must Analyze the Indirect Greenhouse Gas Footprint of the Proposed Sage Creek and Twentymile Mining Operations.**

As discussed above, the proposed Sage Creek mining operations are clearly an “indirect effect” of the proposed Trout Creek Dam. FERC should view the greenhouse gas emissions associated with all action alternatives as a significant environmental consequence of those alternatives under NEPA. Because no one greenhouse gas action can be linked to specific climate change impacts, but all greenhouse gas emissions, no matter how small, contribute to the problem of climate change, then all greenhouse gas emissions are collectively significant under NEPA.<sup>56</sup> As stated by one federal court, “[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”<sup>57</sup>

Under NEPA, FERC must engage in at least a qualitative analysis of the indirect greenhouse gas emissions associated with the proposed Sage Creek and Twentymile mines. A qualitative greenhouse gas emissions analysis may be sufficient to inform decisionmaking between the No Action alternative and the Proposed Action. However, a quantitative analysis may promote informed decision-making where differences in the indirect greenhouse gas emissions of alternatives are less apparent, but greater than *de minimus*.

#### **V. Study Request: Cumulative Hydrological Analysis of Trout Creek Dam and Related Diversions on Flows in the Yampa and Green Rivers.**

Pursuant to 18 C.F.R. section 5.9(b), we request a study of the cumulative hydrological impact of the Trout Creek Dam, the proposed recapture diversion point near Hayden, Colorado, and other diversions on the Yampa and Green Rivers, to critical habitat for the four ESA-listed native fish species.

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<sup>55</sup> *Id.* (emphasis omitted) (quoting *Wyo. Outdoor Council*, 159 IBLA 388, 414 (2003) (citing *State of N. Carolina v. Fed. Aviation Admin.*, 957 F.2d 1125, 1130 (4th Cir. 1992))).

<sup>56</sup> *Center for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008) (finding that although a proposed emissions rule for light trucks would have and individually minor effect on the global climate, the rule was “collectively significant” within the meaning of 40 C.F.R. § 1508.7).

<sup>57</sup> *Id.*

### (1) Study Goal

The study's goal is to identify the cumulative impact of the Trout Creek Dam, including the proposed recapture diversion point on the Yampa River, to flows in the Yampa and Green rivers. The study would focus on the cumulative impacts to habitat needed by the four ESA-listed native fish species. The study would aid individual Section 7 consultation for the Trout Creek Dam.

### (2) Applicable Resource Goals and Objectives

This study will evaluate the compatibility of the Trout Creek Dam, including the proposed recapture diversion point on the Yampa River, against the Green River Recovery Flows and the ESA coverage for certain future depletions under the Yampa PBO.

### (3) Public Interest Considerations

As discussed above, new depletions in the Yampa and Green Rivers potentially threaten ESA coverage for all existing water users in the system. Approving new depletive water projects without carefully ensuring Recovery Program consistency could undermine the multi-decade cooperative efforts to recover the four ESA-listed native fish species.

### (4) Existing Information Concerning the Subject of the Study Proposal, and the Need for Additional Information

Existing information regarding the Recovery Program and the importance of protecting flow in the Yampa and Green rivers is summarized at Part I.a, and Part II, *supra*. Additional information, including an updated assessment of current depletions in the Yampa River basin, is needed to evaluate the impacts of the Trout Creek Dam, including the proposed recapture diversion point on the Yampa River, to flows in the Yampa and Green Rivers. In addition, according to the Recovery Program's 2012 Sufficient Progress Memo, the Colorado Water Conservation Board may have recently completed a past depletion accounting for the Yampa River using a "StateCU" model that could assist a cumulative impacts analysis for the Trout Creek Dam.<sup>58</sup>

### (5) The Nexus between Project Operations and Effects (Direct, Indirect, and/or Cumulative) on the Resource to be Studied, and How the Study Results Would Inform the Development of License Requirements

The proposed Trout Creek Dam would likely have a direct, indirect, and cumulative effect on flows in the Yampa and Green rivers. Direct impacts include peak-shaving to

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<sup>58</sup> USFWS, Final 2011-2012 Assessment of "Sufficient Progress" under the Upper Colorado River Endangered Fish Recovery Program in the Upper Colorado River Basin, and of Implementation of Action Items in the January 10, 2005, "Final Programmatic Biological Opinion on the Management Plan for Endangered Fishes in the Yampa River Basin" 18 (July 18, 2012), *attached as Exh P*.

fill the reservoir and the depletive effects caused by evaporation in the proposed reservoir. Indirect effects include enabling a new year-round diversion point on the Yampa River near Hayden, Colorado. Cumulative impacts include the cumulative effect of the Trout Creek Dam, and other diversions in the Yampa and Green river basins on the flows needed to recover the four ESA-listed fish species. The study results would help inform development of license requirements by ensuring that the Trout Creek Dam is developed and operated in a manner consistent with the Yampa PBO and the Recovery Flows.

(6) Proposed Study Methodology is Consistent with Generally Accepted Practice in the Scientific Community

The Yampa River Management Plan modeled stream flows using the Colorado River Decision Support System (CRDSS) for the Yampa River basin.<sup>59</sup> At a minimum, the proposed study should use the CRDSS model, or an updated version of the CRDSS model, to evaluate the Trout Creek Dam, the proposed recapture diversion on the Yampa River, and other updated cumulative depletions in the Yampa River basin to determine the adequacy of flows in the Yampa River. In addition, the Bureau of Reclamation developed a Green River CRSS model to evaluate the hydrologic impacts of the operation of Flaming Gorge Dam to the Green River. This model, or the Green River MODSIM model currently being developed by the State of Utah as part of their Green River Flow Protection for Endangered Fishes Work Plan, could be used to evaluate flows below the confluence of the Green and Yampa Rivers.

(7) Considerations of Level of Effort and Cost, as Applicable, and Why Any Proposed Alternative Studies Would Not be Sufficient to Meet the Stated Information Needs.

It appears that none of Peabody's proposed studies would specifically address the habitat needs of the four ESA-listed species in the Yampa and Green rivers.<sup>60</sup> While the cost and effort involved in developing a sufficient analysis of the impacts of the proposed Trout Creek Dam to flows in the Yampa and Green Rivers could be significant, the importance of maintaining Recovery Program coverage for existing water users in the basin, and protecting the states', agencies', and other members' multi-million dollar investment in the Program justifies the expenditure of significant resources by those seeking to build large new water projects in the Yampa and Green river basins.

## VI. Conclusion

Thank you again for your consideration. We urge FERC to revise Scoping Document 1, incorporate our comments into any future NEPA analysis for the Trout Creek Dam, and accept our study request, consistent with these comments.

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<sup>59</sup> Management Plan Appendices at G-1, *attached as* Exh. Q.

<sup>60</sup> See PAD at 4-3; Scoping Document 1 at 19-20.

Sincerely,

A handwritten signature in black ink that reads "Robert K. Harris". The signature is written in a cursive style with a large, prominent 'R' and 'H'.

Robert Harris, Staff Attorney  
Bart Miller, Water Program Director  
Western Resource Advocates

Luke Schafer, Northwest Campaign Coordinator  
Colorado Environmental Coalition  
11 W. Victory Way, Ste. 208  
Craig, CO 81625

## CERTIFICATE OF SERVICE

I, Robert K. Harris, hereby certify that on this 4th day of December, 2012, I served a copy of the forgoing **Trout Creek Reservoir Hydroelectric Project, Project No. 14446-000: Comments on the Pre-Application Document, Comments on Scoping Document 1, and Study Request**, electronically per Commission direction upon each person designated on the official Service List compiled by the Secretary for the Trout Creek Reservoir Hydroelectric Project, No. P-14446-000, and that the same was electronically filed with the Commission this same day. In addition, I also sent a hardcopy of this comment letter and study request via U.S. Mail to David Merritt of URS Corporation at the address listed below, pursuant to Paragraph *o* of the Commission's October 5, 2012, Notice of Intent in this docket.

<b>Party</b>	<b>Primary Person or Counsel of Record to be Served</b>	<b>Other Contact to be Served</b>
Peabody Trout Creek Reservoir LLC	Brian Yansen Director, Real Estate Developm Peabody Energy Peabody Energy 701 Market Street St. Louis, MISSOURI 63101 UNITED STATES BYansen@peabodyenergy.com	
	David Merritt URS Corporation 713 Cooper Ave., #100 Glenwood Springs, CO 81601	

s/ Robert K. Harris  
 Robert K. Harris  
 Western Resource Advocates  
 Duly signed original on file at Western Resource Advocates