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6.0 CONSULTATION AND COORDINATION

6.1 INTRODUCTION

During the NEPA process for this EIS, the BLM made formal and informal efforts to consult and coordinate with other Federal agencies, State and local governments, Indian Tribes, and the interested public.

The following sections of this chapter describe the public involvement, consultation, and coordination process, including key consultation and coordination activities undertaken to ensure the BLM's compliance, in both the spirit and intent, with 40 CFR Parts 1501.7, 1502.19, and 1503.

6.2 Consultation and Coordination with Tribes, State and local Governments, and Federal Agencies

In accordance with CEQ regulation 1501.6, the BLM invited other agencies with special expertise related to environmental issues to participate in the NEPA process. During the public scoping process for this EIS, the EPA, USFWS, USACE, DOT, State of Utah, Carbon County, Duchesne County, Uintah County, and the BIA-Uintah and Ouray Agency, were formally invited to be Cooperating Agencies (CAs). The EPA, USFWS, State of Utah, Carbon County, Duchesne County, and Uintah County agreed to participate as CAs throughout the EIS process. The USACE, DOT, and BIA agreed to participate as informal cooperators primarily in a review capacity.

Those who elected to participate as CAs were provided with numerous opportunities to assist in the development of the alternatives early in the NEPA process. The first alternatives development meeting was held by the BLM in Price, Utah, on February 2, 2006. A second meeting was held at the same location on May 3, 2006. The majority of the CAs were either represented at these meetings in person or participated by teleconference. Following the development of alternatives, each of the CAs was provided with a draft version of Chapter 2 (Alternatives). Approximately two weeks after the CAs received the copies, a two-day meeting was held (August 23-24, 2006) to provide the CAs with an open forum to discuss their concerns. Taking into consideration these concerns, the BLM made revisions to Chapter 2 of the EIS. On December 6, 2006, the BLM held a conference call with the CAs to discuss the content of the Agency Preferred Alternative. On February 2, 2007, a revised version of Chapter 2 was sent to the CAs.

In addition to providing valuable assistance in the development of alternatives, the CAs were given multiple opportunities to comment on the impact analyses. For example, on April 6, 2007, hard copies of the Preliminary DEIS were distributed to the CAs for critical review. Two meetings were held (April 11, 2007 and May 8, 2007) to allow the CAs to vocally express their concerns. In addition, the BLM invited and received written comments from the majority of the CAs. For each comment received on the Preliminary DEIS, the BLM provided a written response indicating how they intended to address specific concerns within the DEIS. Partially due to the volume of comments received from the CAs, converting the Preliminary DEIS into a DEIS took the BLM a considerable amount of time. During this time, the BLM invited the CAs to participate in two teleconferences (June 20, 2007, and July 20, 2007) to keep them informed on the

progress of the EIS. The CAs were notified about the public release of the DEIS and given hard copy versions for review. During the 90-day public comment period, the BLM held a meeting on March 26, 2008, with the CAs to once again provide them with an opportunity to vocally express their concerns. Each of the CAs provided formal written comments on the DEIS, and many of the recommended changes have been included within this FEIS. Individual responses to the CAs' substantive DEIS comments are discussed in **Section 6.3**. Finally, the CAs were afforded an opportunity to review the Preliminary FEIS prior to its publication.

In addition to formally inviting the aforementioned agencies to participate as CAs, 27 Native American Tribal organizations were also invited to formally participate as consulting parties in October of 2005. No Tribe elected to participate as a consulting party; however, Government-to-Government Tribal consultation has been ongoing throughout the EIS process. The summary of this consultation are discussed in the next section. A complete history of Tribal consultation can be found in the *Proposed West Tavaputs Plateau Natural Gas Full Field Development Plan Native American Consultation and Identification of Traditional Cultural Places* (Summit Applied Anthropology 2008), which is contained in the administrative record for this project.

6.2.1 Tribal Consultation

On October 4, 2005, the Price Field Office mailed a certified notification letter, a project summary, and a project location map to 27 Native American Tribal organizations for the WTP EIS:

- Hopi Tribal Council
 - Hopi Cultural Preservation Office (CPO)
- Jicarilla Apache Tribe
- Navajo Nation
 - Aneth Chapter
 - Dennehotso Chapter
 - Mexican Water Chapter
 - Navajo Mountain Chapter
 - Navajo Nation Historic Preservation Office (HPO)
 - Navajo Utah Commission
 - Oljato Chapter
 - Red Mesa Chapter
 - Teec Nos Pos Chapter
- Northwestern Band of Shoshoni Nation
- Paiute Indian Tribe of Utah
- Pueblo of Acoma
- Pueblo of Laguna
- Pueblo of Nambe
- Pueblo of Santa Clara
- Pueblo of Zia
- Pueblo of Zuni
- Shoshone Business Council
- Shoshone-Bannock Tribes
- Southern Ute Tribal Council
- Uintah and Ouray Ute Indian Tribe

- Ute Mountain Ute Tribe
 - White Mesa Ute Tribe

From October 2005 to December 2008, the BLM contacted and received written and verbal responses from Tribal organizations. The goals of contacting Tribal organizations for the proposed WTP EIS were: 1) to notify Tribal authorities of Price Field Office issuance of the NOI to conduct public scoping and prepare an EIS for the proposed project; 2) to identify Tribal organizations that may attach religious and cultural significance to historic properties within the WTP Project Area; 3) to document traditional values associated with these types of properties in accordance with various Federal environmental laws; and 4) to invite the Tribes to be consulting parties in the Section 106 process.

Results of the contact effort were as follows: eighteen Tribes responded to the initial request to consult:

- Twelve Tribal organizations (i.e., Hopi, Navajo Nation HPO, Navajo Utah Commission, Oljato Chapter, Red Mesa Chapter, Ute Mountain Ute Tribe, Paiute Indian Tribe of Utah, Pueblo of Acoma, Pueblo of Santa Clara, Pueblo of Zia, Pueblo of Zuni, and Uintah and Ouray Ute Indian Tribe) requested the WTP EIS Class I Cultural Resource Overview.
- Six Tribal organizations (i.e., Navajo Mountain Chapter, Dennohotso Chapter, Mexican Water Chapter, Southern Ute Tribe, Pueblo of Laguna, and Jicarilla Apache) did not require additional consultation for the WTP EIS.

In February, 2006, a copy of the report, *West Tavaputs Plateau EIS Class I Cultural Resources Literature Review*, was mailed to 12 Tribal organizations with the results as follows:

- Four Tribal organizations (i.e., Hopi Tribe, Navajo Nation HPO, Paiute Indian Tribe of Utah, and Uintah and Ouray Ute Indian Tribe) requested additional consultation in the form of a field visit to view the WTP Project Area. The Hopi Tribe also requested a meeting with BLM personnel.
- Two Tribal organizations (i.e., Pueblos of Acoma and Zia) requested to be informed in the event of inadvertent discoveries.
- Two Tribal organizations (i.e., Red Mesa Chapter and Navajo Utah Commission) did not require additional consultation, but requested to receive project information (i.e., a copy of the DEIS) when it becomes available.
- Representatives from three Tribal organizations (i.e., Pueblo of Santa Clara, Pueblo of Zuni, Ute Mountain Ute Tribe) reviewed the cultural resources literature review and did not have additional comments or require additional consultation.
- One Tribal organization (i.e., Oljato Chapter) did not provide a final response to the literature review.

The Price Field Office responded to the requests for additional consultation by hosting two field visits to the WTP Project Area, participating in a meeting at the Hopi CPO in Kykotsmovi, Arizona, and participating in a conference call with the representatives from the Navajo HPO. At each meeting, BLM personnel provided Tribal representatives with

a project overview and map, and a summary of the project's Proposed Action and alternatives.

Initially, one TCP, a prehistoric temporary camp site with culturally modified tree scars, was identified by the Uintah and Ouray Ute Indian Tribe during consultation. Additionally, several previously-documented archaeological sites (rock art panels) were noted as sites of interest to the Hopi Tribe.

On January 29, 2008, the DEIS was mailed to five Tribal organizations (i.e., Navajo Nation HPO, Hopi CPO, Navajo Nation-Red Mesa Chapter, Uintah and Ouray Ute Indian Tribe, and Paiute Indian Tribe of Utah) that requested the document during the course of consultation. Of these Tribes, the Navajo Nation HPO, Hopi CPO, and Paiute Indian Tribe of Utah submitted verbal and written comments to the DEIS. The Navajo Nation HPO and the Paiute Indian Tribe of Utah did not require additional consultation following the release of the DEIS.

The Hopi CPO provided a substantive DEIS response letter with a new TCP claim for Nine Mile Canyon. It should be noted, the Hopi Tribe did not make this claim during the course of consultation. Nonetheless, as a result of this claim, the BLM held additional meetings with the Hopi CPO. The BLM and Hopi CPO consultation concerning this site and TCP analysis for eligibility to the NRHP is ongoing.

In January of 2009, development of the WTP PA (see **Appendix T**) with "consulting parties" was initiated to address adverse effects associated with the full field development program. All four interested tribes were invited to be involved in the development of the WTP PA and have been included in all correspondence. Betsy Champoos, Director of Cultural Rights and Protection for the Ute tribe participated in some of the meetings. A copy of this final WTP PA as well as a formal consultation letter will be distributed by the BLM to the interested Tribes who will be invited to sign.

A summary of the consultation results are provided below.

Hopi Tribe

At the request of the Hopi Tribe, the BLM met with the Hopi CPO Director and staff on July 19, 2006, in Kykotsmovi, Arizona. The Hopi Tribe asserted a claim of cultural affiliation to the inhabitants of Nine Mile Canyon, and voiced concerns about dust impacts to the petroglyphs in the WTP Project Area and increased use of the Nine Mile Canyon Road. Direction of the Hopi CPO, Mr. Leigh Kuwanwisimwa, requested an ethnographic overview of the Nine Mile Canyon complex that would allow BLM personnel and the operators to better understand the Hopi cultural presence in the canyon (affiliation to petroglyphs and other structures). A suggested focus of the study would be a TCP investigation of the cultural significance of the petroglyphs in the canyon before resource development changes the nature of the canyon.

During the meeting, Hopi CPO staff also requested long-term impact studies (recreation, traffic studies) to cultural resources and golden eagle habitat in Nine Mile Canyon.

With consideration to the cultural resources in Nine Mile Canyon, the Hopi CPO staff members would not support any of the alternatives being developed for the EIS because

none of the alternatives consider an alternative access route to the existing county road in Nine Mile Canyon.

The Price Field Office WTP project team hosted Hopi Cultural Resource Advisory Team (CRAT) representatives for a two-day field visit to the WTP Project Area on September 12-13, 2006. Four CRAT members and Mr. Terry Morgart, Hopi CPO Legal Researcher, attended the field visit. Representatives requested to spend the majority of the tour viewing petroglyph panels in Nine Mile, Cottonwood, and Dry Canyons, instead of viewing the plateau locations selected for proposed development. All panels viewed during the tour were either at existing interpretive sites or could be viewed from the canyon roads. Hopi clan symbols were identified at the following panels:

Nine Mile Canyon

- 1) 42DC162 (water snake-plumed serpent figures, corn symbols, spiritual figures-possibly 'war gods'; depiction of celestial phenomena including star constellations)
- 2) 42DC771 (migration symbol along with other symbols depicting Hopi movement across the landscape)
- 3) 42CB120 (plume serpent)

Dry Canyon

- 1) 42CB50 (whirls, spiral serpent)
- 2) "The Mummy" formation (guardian figure similar to those in southern Utah)

In addition to the petroglyph panels, CRAT members identified several culturally-significant plant species. Each of these plant species and their Tribal use are discussed in the Table below:

Plant and Mineral Resources Identified During Hopi Field Visit		
Plant/Mineral Name	Hopi Name	Tribal Uses
Sage	<i>Kungya</i> <i>Wikwavi</i>	Ceremonial
Greasewood	<i>Teeve</i>	Planting, Hunting, Harvesting, Ceremonial
Willow	<i>Qahavi</i>	
Rabbitbrush	<i>Siivapi</i>	Basketmaking
Snakeweed	<i>Maaövi</i>	Ritual
Saltweed		Preparation of corn/corn batter
Cliffrose	<i>Hunvi</i>	Medicinal
Yucca	<i>Samowa</i>	
Water tobacco	<i>Piiva</i> <i>Tapalviva</i> <i>Paaviva</i>	Ritual
Juniper	<i>Ngömapi</i>	Medicinal/Ceremonial
Cottonwood	<i>Söhövi</i>	
Cottonwood Root	<i>Paako</i>	Ritual-used to make family katchinas
Water Reeds	<i>Baqavi</i>	Ritual, Weaving

Plant and Mineral Resources Identified During Hopi Field Visit		
Plant/Mineral Name	Hopi Name	Tribal Uses
Douglas Fir	<i>Salaavi</i>	Ceremonial
Clayshale		Pottery
Sourberry	<i>Suvisifsi</i>	
Reed	<i>Paaqai</i>	Pipe stems, Snorkels, Weaving loom, and Ritual
Cattails		Ritual
Yellow Pigment	<i>Paavisa</i>	Ritual

Following the field visit, a meeting was held at the county picnic grounds in Nine Mile Canyon. The Hopi had the following comments:

- Requested provision in the DEIS for an ethnographic study, as discussed during the meeting held on July 19, 2006.
- The Hopi do not have issues with full field development on the plateau. The use of Nine Mile Canyon as the primary access to the plateau is the main concern due to dust impacts to the petroglyphs. Another alternative should be developed in the DEIS that would provide a different route to the plateau. The percent increase in industrial traffic and fugitive dust that are proposed in the alternatives is unacceptable.
- BLM must consider the Backcountry Byway status of the road in Nine Mile Canyon.
- A follow-up meeting should be held for the purpose of discussing the ethnographic study.

Follow-up contact with the Hopi CPO included several telephone calls with Mr. Morgart. During a telephone conversation on September 27, 2006, Terry Morgart said that the Hopi did not want to identify individual panels in Nine Mile Canyon as TCPs, but would rather work with the Nine Mile Coalition and BLM to secure the NMCAD nomination to the NRHP. Mr. Mogart also indicated that he was against the idea of “segmenting” the cultural significance of Nine Mile Canyon by listing each panel as a separate historic property.

An ethnographic overview that considers the Hopi cultural presence in Nine Mile Canyon is currently being developed by ethnographer Dr. John N. Fritz (Montgomery Archaeologists).

To assist in preparation of the overview, a meeting was planned for October 26, 2006, between the Hopi CRAT and project ethnographers, but the Hopi CPO staff scheduler cancelled the meeting due to CRAT members conflicting travel schedules for other projects.

On February 22, 2007, Dr. Fritz attended a meeting with members of the Hopi CPO and the CRAT to review the proposed Hopi Ethnographic Overview of WTP Project Area and Nine Mile Canyon. The scope of work and table of contents were examined, discussed, and accepted by Hopi representatives. During discussions concerning the organization of the fieldwork, the group agreed that pre-field organization and tightly-structured itineraries would be essential to maximize the time in the field. The need to safeguard and protect Hopi sacred knowledge was also discussed. A member of the Hopi CPO

was assigned to assist Dr. Fritz with field trips and research. It was agreed that the ethnographers' work products including notes, transcripts of interviews, and working drafts would be returned to the Hopi CPO upon completion of the project.

On May 2, 2007, representatives from the BLM Utah State Office and Price Field Office participated in a conference call with the Hopi CPO to discuss several ongoing projects within Nine Mile Canyon. Ongoing gas exploration projects, the repatriation consultation for a prehistoric flute discovered in the Range Creek area (not within the WTP Project Area), and the ethnographic overview were agenda items. The BLM and Hopi CPO also discussed a possible Hopi TCP claim for Nine Mile Canyon, first identified in a letter to the BLM dated March 12, 2007, regarding an unrelated project.

On January 9, 2008, the BLM mailed a copy of the WTP DEIS to Mr. Kuwanwisimwa. Mr. Kuwanwisimwa submitted a written response on April 30, 2008, in support of Alternative B, the No Action Alternative, stating that the DEIS does not identify or avoid cultural resources significant to the Hopi Tribe, nor does it provide a comprehensive TCP analysis of the WTP Project Area. The Tribe also made a TCP claim for Nine Mile Canyon based on oral history related to creation and migration stories, and based on the interpretations of clan symbol markings identified on Nine Mile Canyon rock art panels. The Tribe pointed out the Backcountry Byway road designation within Nine Mile Canyon and gas exploration and drilling activities would have adverse effects on cultural resources significant to the Hopi Tribe. The effects of industrial traffic and lack of adequate control measures for dust plumes and dust accumulation on rock art in the Nine Mile Canyon complex were specifically discussed in the response letter. The Tribe also noted their continued support of national and local efforts to nominate Nine Mile Canyon as a historic district for inclusion on the NRHP. The Tribe requested Advisory Council participation in the DEIS process and Section 106 of the NHPA, citing 36 C.F.R. Part 800, Appendix A, Criteria for Council Involvement in Reviewing Individual Section 106 Cases, (c)(4), *Presents Issues of Concern to Indian Tribes or Native Hawaiian Organizations*.

In response to the Hopi's concerns, the BLM has 1) consulted further with the Hopi Tribe concerning their TCP claim; 2) rigorously explored alternative access routes through the consultation process; 3) approved a dust suppression plan submitted by the Nine Mile Canyon Road Cooperative Board to prevent dust accumulation on rock art; and 4) submitted a multiple properties listing for Nine Mile Canyon to the National Register. In addition, the ACHP has actively participated in the development of WTP PA as a consulting party.

In their response letter to the DEIS, the Hopi also voiced a concern for excavated human remains and requested that BLM IM 2007-002, which allows for reburial of human remains and associated funerary objects excavated on BLM-administered land, to be added to the FEIS. The Hopi have also requested inclusion of a Native American Graves Protection and Repatriation Act Plan of Action (NAGPRA POA) in the FEIS that identifies a pre-designated location where remains can be reburied and protected. This information has been added to the WTP PA in Attachment E-Preconstruction Cultural Resource Identification Plan.

On April 24, 2008, the BLM attended a meeting with the Hopi CPO at their office in Kykotsmovi, Arizona to discuss 1) fieldwork associated with the Nine Mile Canyon ethnographic study; 2) various ongoing gas development projects in the Price Field

Office; and 3) the dust study report commissioned by the BLM to determine the effect of dust and chemical dust suppressants on rock art. The Hopi CPO emphasized their concern for protection of the entire cultural landscape, and also stated that the road in Nine Mile Canyon should be considered as part of the APE for future projects so that impacts associated with traffic can be sufficiently analyzed in future NEPA documents. The BLM also discussed possible dates for field visits to the canyon.

As part of the ethnographic overview, Dr. Fritz and Ms. Molly Molenaar conducted a field visit with Hopi CPO and CRAT members to Nine Mile Canyon on June 18-19, 2008. Rock art sites in Nine Mile Canyon and tributary canyons that had been viewed by Hopi representatives during previous field visits were revisited, and additional comments about these sites were documented.

Following this field visit, personnel from the BLM Utah State Office and Price Field Office, and BBC met with the Hopi representatives. At the post field visit meeting in Price, Utah, on June 19, 2008, the Hopi CPO explained the Hopi connection to Nine Mile Canyon. In terms of significance, Hopi representatives said that the Tribe carries its cultural history through clanships, and that the Hopi CPO and CRAT had successfully identified Hopi clan symbols in rock art panels in Nine Mile Canyon. The Nine Mile Creek was also identified as a culturally-significant feature to the Hopi. Concerns for burial discoveries were again voiced. The BLM requested that the Hopi Tribe submit a written letter to the BLM concerning the TCP claim as soon as possible so that it could be entered into the consultation record.

The Hopi CPO and CRAT representatives participated in another field visit to Nine Mile Canyon on August 4, 2008. The field visit was intended to be part of the fieldwork for the ethnographic overview, but also included some preliminary steps to document the Hopi TCP claim for Nine Mile Canyon. The participants viewed additional rock art panels and located a possible Hopi shrine within the WTP Project Area. As a result of this site, the Hopi have requested one additional field visit and additional survey of the area surrounding the shrine. The Hopi CPO requested that Ms. Molenaar start the documentation effort of the TCP claim by using the NMCAD boundary. A meeting between the Hopi and BLM was held on September 25, 2008, at the Hopi CPO office in Kykotsmovi, Arizona. During this meeting, the BLM provided the Hopi with an update on the progress of the EIS, discussed the ethnographic overview, and the Nine Mile Canyon National Register form.

Finally, a meeting was held on November 20, 2008 with the BLM at the Hopi CPO office in Kykotsmovi, Arizona. The primary purpose of the meeting was to discuss how to proceed with the Hopi TCP claim. During this meeting the Tribe decided to hold their TCP claim in abeyance. This decision was made mainly because of protections afforded to Nine Mile Canyon through designation of the Nine Mile Canyon ACEC in the Price Field Office Approved RMP (BLM 2008b). During this meeting the Hopi also expressed their support for the "Multiple Properties Listing" for the nomination of the NRHP that the BLM is pursuing instead of the National District nomination. The Multiple Properties Listing has since been submitted. The Tribe also reserved the right to renew their TCP claim in the future.

Uintah and Ouray Ute Indian Tribe

Representatives from the Uintah and Ouray Ute Cultural Rights and Protection Program participated in a joint field visit with Paiute Indian Tribe of Utah representatives on May 16-17, 2006. Prehistoric and historic sites, and an operational well pad, were viewed by Tribal representatives on Sagebrush Flat (Peters Point Unit), Daddy Canyon, Cottonwood Canyon, and in the vicinity of the Stone Cabin Gas Field.

The Ute representatives identified three of five scarred Ponderosa trees at site 42Cb1909 (prehistoric temporary camp site) as being culturally modified by Ute ancestors. This site is eligible to the NRHP, but has a road cutting through a portion of the site. As part of mitigation for the archaeological site, BBC avoided the site by re-routing the existing road around the site (for oil and gas traffic only). The Ute Tribe did not request additional mitigation at the site, but questioned why the original road that bisects the site remained open. The project archaeologist and ethnographers will update the archaeological site forms to include the cultural significance of the tree scars and the site will be discussed in a final consultation report as a TCP. The BLM is considering the possibility of closing the original road through the site.

Finally, Ute representatives requested that some type of consultation process be in place to address cultural resource issues as the project moves forward. BLM personnel offered to add the Ute Tribe to an agency resource data distribution list and arrange annual meetings with the Tribe, as needed. The BLM also offered to send Betsy Chappoose (Director, Cultural Rights and Protection) and the Business Committee all archaeological reports as they are completed, which would allow the Tribe an opportunity to comment on and participate in pre-drill onsite inspections as needed.

A copy of the DEIS was mailed to Curtis Cesspooch (Chairman), Betsy Chappoose, and Bruce Pargeets (Energy and Minerals Department) on January 29, 2008. All of the parties received the document, but did not provide comments.

Betsy Chappoose has participated in the development of the West Tavaputs Plateau Natural Gas Full Field Development Programmatic Agreement meetings.

Paiute Indian Tribe of Utah

Two Paiute Indian Tribe of Utah representatives attended the joint field visit with the Uintah and Ouray Ute Indian Tribe on May 16-17, 2006. Traditional cultural locations were not identified by Paiute representatives during the field visit, but the Paiute Tribe voiced concern for wildlife habitats within the WTP Project Area, especially in the vicinity of the proposed and existing drilling operations.

In a letter dated December 13, 2006, Ms. Dorena Martineau (Cultural Resources Director) voiced concerns for the protection of wildlife habitat in areas near existing drilling operations. She said that the fences used to enclose the water holding ponds will not prevent animals and birds from drinking the water and possibly falling into the pools. She also voiced concern for the fugitive dust in the canyon bottoms and preventative measures (potentially harmful salt mixture) used to control the dust plumes in the canyon.

A copy of the DEIS was mailed to Lora Tom (Chairwoman) and Dorena Martineau on January 29, 2008. Ms. Martineau reviewed the document, did not provide additional comments.

Navajo Nation Historic Preservation Office

A field visit was planned with Mr. Marklyn Chee (Cultural Resources Director, Navajo Nation HPO), but the visit was cancelled by Mr. Chee and his supervisor, Tony Joe (Program Manager, Navajo Nation HPO Traditional Cultural Programs). Their travel request was denied. A conference call was held in lieu of the field visit on October 16, 2006.

The following comments and concerns were recorded:

- Appropriate protection of the petroglyphs in Nine Mile Canyon- What is the BLM doing about the dust, traffic issues, and road improvements that were considered during consultation for past projects in the canyon?
- The more education visitors have about cultural resources in the canyon, which includes the Native American perspective, the better chance the resources will be protected.
- Signage and interpretive sites are useful tools in educating the public.

A copy of the DEIS was mailed to Joe Shirley, Jr. (President, Navajo Nation) and Marklyn Chee on January 29, 2008. On March 28, 2008, Tony Joe submitted a written response stating that the proposed project would not impact any known Navajo TCPs or historic sites. Mr. Joe requested to be notified within 24 hours in the event of inadvertent discoveries during the course of project construction.

Navajo Nation-Red Mesa Chapter

A copy of the DEIS was mailed to the chapter offices January 29, 2008, but the chapter did not provide comments to the document.

Ongoing Consultation

As stated in Stipulation #3 of the WTP PA, the BLM will continue to consult with appropriate Indian Tribes regarding historic properties of religious and cultural significance, in accordance with the NHPA, the NAGPRA, ARPA, AIRFA, Executive Order 13007 Sacred Sites, and their implementing regulations. The BLM will provide copies of any report/studies developed pursuant to the Agreement to those tribes that have expressed a desire for information as it is gathered for the WTP project.

6.2.2 Federal, State, and Local Governments

In addition to their aforementioned involvement as CAs, the BLM has made substantial efforts to coordinate and consult with the USFWS, EPA, State of Utah, as well as with other federal, State, and local governments in compliance with statutory environmental laws (e.g., the ESA and NHPA) and to address specific resource concerns within the

EIS. These agency-specific coordination and consultation efforts are briefly discussed in the following sections.

U.S. Fish and Wildlife Service

In addition to the USFWS being actively involved in the WTP project as a CA, the BLM is formally consulting with the USFWS in accordance with Section 7 of the ESA, which requires Federal agencies to evaluate their actions with respect to any species that are proposed or listed as endangered or threatened, and their critical habitat, if any has been formally designated. Consultation meetings between the BLM and the USFWS to discuss the WTP project included several agency-agency meetings and numerous teleconferences. In addition, a WTP site visit was made by the USFWS and BLM on April 24, 2008, to familiarize USFWS biologists with the WTP Project Area and examine field conditions.

Based on an agreement between the BLM and USFWS, the information on threatened, endangered, and candidate species within the EIS is being used as the Biological Assessment for this project. As such, this EIS has been used by the USFWS to prepare their Biological Opinion. The USFWS' BO concurred with the BLM's findings for threatened, endangered, and candidate species within the WTP Project Area. The final BO was signed by the USFWS prior to completion of this FEIS, thereby formally concluding the Section 7 Consultation process.

U.S. Environmental Protection Agency

On April 10, 2006, the Draft WTP Air Quality Modeling Protocol was sent to the EPA for review. Comments were requested by April 28, 2006, and received from the EPA on May 15, 2006. Each of the EPA's comments was incorporated as appropriate into the protocol and a copy of the Final WTP Air Quality Modeling Protocol was then sent to the EPA on May 31, 2006.

In their formal comments on the DEIS, the EPA requested that the BLM conduct project-specific ozone modeling, which was not requested during their original review of the modeling protocol at the start of the project. In response to the EPA's request the BLM agreed to conduct project-specific ozone modeling. Multiple conference calls were then held with the EPA to discuss ozone modeling options. A copy of the ozone modeling protocol, which was approved by the BLM National Operations Center, was sent to the EPA in September of 2008. On November 7, 2008 a draft copy of project-specific ozone modeling assessment was sent to the EPA for review. Since that time, several meetings and/or teleconferences have been held to discuss the results of the WTP ozone modeling analysis and to identify additional and appropriate air quality mitigation and monitoring measures.

Advisory Council on Historic Preservation

During May of 2006, the ACHP made a field visit to the WTP Project Area, including Nine Mile Canyon, with the BLM and SHPO to gain a better understanding of the Proposed Action and significant cultural resources. In addition, the ACHP was provided with a copy of the Class I Cultural Resource Literature Review (Whitfield et al. 2006). On August 17, 2006, the ACHP was sent a letter providing clarification of BLM's decision regarding consulting parties. During the public comment period, the ACHP was sent a

copy of the DEIS for review; however, the BLM did not receive any written or verbal comments. On May 16, 2008, the BLM received a letter from the ACHP requesting an update on how the BLM was meeting its responsibilities under Section 106 of the NHPA. The BLM sent a formal response to the ACHP on June 2, 2008.

On September 29, 2008, the BLM received a letter from the ACHP wherein they notified the BLM of their decision to formally participate in consultation pursuant to the criteria for involvement established in Section 4(b)(3) of the BLM Nationwide Programmatic Agreement regarding “highly controversial undertakings” and Section VII(A)(3) of the Utah State Protocol.

In consultation with the SHPO, the BLM determined that implementation of the Agency Preferred Alternative could have an ‘Adverse Effect’ on historic properties within the WTP Project Area. The “Adverse Effect” was originally defined as the dust that is generated by the industrial traffic that settles on and visually affects the visual appearance of the rock art panels pursuant to CFR 36 part 800.5(a)(2)(v).

In order to resolve potential adverse effects, the BLM, in coordination with the ACHP and SHPO, determined that it would be appropriate to develop a WTP PA for the project. Development of the WTP PA was initiated in January 2009 with consulting parties. During the course of consultation, a representative from the ACHP was present at every meeting. The ACHP signed the WTP PA on January 5, 2010. The signing of the WTP PA and its implementation concludes the Section 106 process.

National Parks Service

In a letter dated May 20, 2009 the BLM sent a letter to the National Park Service (NPS) requesting concurrence on a “No Adverse Effect” determination for the WTP project on the Desolation Canyon NHL. The BLM did not receive a written response. Follow-up phone calls were made to the NPS by the BLM. The NPS did not express any concerns.

State Historic Preservation Office

The NHPA and the regulations at 36 CFR Part 800 govern BLM’s cultural resource management program. The regulations provide specific procedures for consultation between the BLM and the SHPO. The Section 106 consultation process with the Utah SHPO, initiated in April of 2006, has been ongoing throughout this EIS.

In April of 2006, the SHPO was provided with a copy of the Class I Cultural Resource Literature Review (Whitfield et al. 2006) and a copy of the operators’ Proposed Action. In addition, during this same month, the BLM consulted with SHPO concerning consulting parties per 36 CFR 800.3(f)(3). Consulting party status was requested by numerous organizations; however, the BLM exercised its discretion as allowed by 36 CFR part 800.2(c)(5), which gives the agency authority to accept or deny an individual’s or organizations consulting party request. In September 2006, the BLM again consulted with SHPO, this time regarding the APEs and the scope of the identification efforts per 36 CFR 800.4(a) and the first section 36 CFR 800.4(b). Finally, in November 2, 2006, a meeting was held to discuss the Class I Cultural Resource Literature Review and the BLM’s identification efforts on the mesa tops. At this meeting, it was determined by the BLM and SHPO that a brief assessment should be made of the Horse Bench area to determine if the cultural resources differed in type or density relative to other portions of

the WTP Project Area (See **Section 3.12.5**). In addition to the above-mentioned meetings, during the development of the EIS, the BLM and SHPO made two site visits to the WTP Project Area (May 17, 2006, and June 1, 2006).

As part of ongoing consultation efforts, on February 28, 2008, the BLM had a meeting with the SHPO to discuss the contents of the DEIS. During this meeting, the SHPO recommended that the BLM develop a long-term cultural resource monitoring plan and communicated the importance of developing measures that clearly mitigate the impacts of dust on rock art. On March 18, 2008, the BLM received a formal comment letter from the SHPO which reiterated these concerns for the DEIS. The majority of the SHPO's recommendations, including a long-term cultural resources monitoring plan and a dust suppression plan, have been added to the FEIS as a requirement of the WTP PA (**Appendix T**). A draft version of the cultural resource monitoring plan was provided to the SHPO on September 8, 2008. SHPO provided comments to the BLM, which were incorporated into the final plan included in the WTP PA. On October 1, 2008, the BLM held another meeting with the SHPO to discuss the progress of the EIS, the contents of the monitoring plan, and to schedule a site visit with the ACHP.

In December of 2008, and in consultation with the SHPO, the BLM determined that implementation of the Agency Preferred Alternative could have an "Adverse Effect" on historic properties within the WTP Project Area. The "Adverse Effect," which has been revised, was initially defined as the dust that is generated by the industrial traffic that settles on and visually affects the visual appearance of the rock art panels pursuant to CFR 36 part 800.5(a)(2)(v).

In order to resolve potential "Adverse Effects", the BLM, in coordination with the SHPO, determined that it would be appropriate to develop a WTP PA for the project. Development of the WTP PA was initiated in January 2009. During the course of consultation, a representative from the SHPO was present at the majority of the meetings. The SHPO signed the WTP PA on January 5, 2010.

Utah Division of Wildlife Resources

The UDWR provided assistance in the development of the Special Protection Measures for wildlife resources that are currently contained within Alternatives C and E of the EIS. The measures were specifically developed to reduce the impacts of winter drilling activities on big game species as well as greater sage-grouse. In particular, the UDWR was consulted regarding the relocation of existing roads around sage-grouse core winter use areas. Numerous meetings with the UDWR were also held prior to the development of the Agency Wildlife Mitigation Plan (**Appendix E**).

Utah Department of Environmental Quality

On April 10, 2006, the Draft WTP Air Quality Modeling Protocol was sent to UDEQ for review. Comments were requested by April 28, 2006. Each of the State's comments was addressed, and a copy of the Final WTP Air Quality Modeling Protocol was sent to UDEQ on May 31, 2006.

In response to comments received on the Preliminary DEIS, the BLM and the State of Utah participated in a number of phone conversations to discuss the need for inclusion of additional air quality mitigation measures. The BLM received a formal letter from the

State of Utah signed by John Harja (Acting Coordinator of the Public Lands Policy Coordination Office), dated August 31, 2007, requesting the inclusion of specific emission control technology and air quality mitigation measures. These measures are included within the FEIS under Alternatives C, D, and E (see **Table 2.6-8**).

In September of 2008, the UDEQ received a copy of the ozone modeling protocol from the BLM National Operations Center for review. UDEQ did not provide the BLM with any formal comments on the ozone modeling protocol. On November 7, 2008 a draft copy of project-specific ozone modeling assessment was sent to the UDAQ for review. Since that time, several meetings and/or teleconferences have been held to discuss the results of the WTP ozone modeling analysis and to identify additional and appropriate air quality mitigation and monitoring measures.

Carbon County and Duchesne Counties

The BLM has had an open dialogue with Carbon County throughout the EIS process to address transportation issues and concerns. At the request of the County, the BLM has incorporated information into the EIS regarding use and maintenance of Nine Mile Canyon Road, traffic and law enforcement, vehicle accidents, the County's Encroachment Ordinance, easements purchased in perpetuity from the SITLA for other roads in the WTP Project Area, and dust suppression plans.

Both Carbon and Duchesne Counties were invited to participate in development of the WTP PA. Representatives of the Counties attended meetings held between January 2009 and January 2010. Both Counties are signatories to the agreement and have obligations as members of the Nine Mile Canyon Road Cooperative Board to assist BBC and other operators with maintenance of Nine Mile Canyon Road.

6.2.3 Consulting Parties

In January of 2009, the BLM invited the NTHP, NMCC, URARA, UPAC, CPAA, USAS, BCS Project, SUWA, and BBC to be consulting parties under Section 106 of the NHPA. Between January 2009 and January 2010, meetings were held on nearly a monthly basis to discuss cultural resource concerns. During the course of consultation, a substantial amount of time was devoted to exploring potential alternative access routes to the WTP Project Area that would reduce or eliminate the use Nine Mile Canyon as the primary access route. However, in the end, the BLM determined that use of Nine Mile Canyon could not be avoided (see **Section 2.8.6**). While alternative access routes were dismissed, discussions with consulting parties resulted in the BLM expanding the APE, modifying the "adverse effects" determination, and developing the WTP PA, which includes mitigation measures that will minimize the impacts of natural gas development. On January 5, 2010 each of the abovementioned organizations signed the WTP PA at a signing ceremony held at the Utah State Capitol. Included in the WTP PA is a stipulation that requires the BLM to meet with consulting parties on an annual basis to discuss the implementation and effectiveness of the mitigation measures contained in the document. In addition, many of the WTP PA stipulations contain provisions that give the consulting parties an opportunity to actively participate in implementation of the PA.

6.3 Public Participation

Throughout public involvement process for the EIS, the BLM has sought out information from individuals and organizations with knowledge of or concern for resources in the WTP Project Area.

This EIS has included a thorough and ongoing public participation process that demonstrates the BLM's compliance, in both spirit and intent, with 40 CFR Parts 1501.7, 1502.19, and 1503.

The public participation process began in August 2005, during which time the BLM initiated scoping to solicit input and identification of environmental issues and concerns associated with the Proposed Action. The scoping process was formally initiated on August 26, 2005 with the publication of the NOI in the Federal Register (<http://www.gpoaccess.gov/fr/>) and the EPA's Federal Register of Environmental Documents (<http://www.epa.gov/fedrgstr/>). The BLM prepared a scoping information notice and provided copies to Federal, State, and local agencies, numerous Tribes, and the general public. Announcements of the scoping period were sent to the Vernal Express, Uintah Basin Standard, Deseret News, Emery County Progress, Price Sun Advocate, Denver Post, and Salt Lake Tribune for publication; local and Utah radio stations for broadcast; and Channel 3 (i.e., the local Price television station) for announcement. These announcements included information on public scoping and informational open houses, which were held October 18, 2005, at the Holiday Inn in Price; October 19, 2005, at the Museum of Ancient Life in Lehi; and October 20, 2005, at the Roosevelt Campus of Utah State University in Roosevelt. The official scoping period ended November 4, 2005 (within 15 days after the final public meeting). The Price Field Office received several scoping letters commenting on the Proposed Action. The contents of these letters may be found in the WTP EIS administrative record at the Price Field Office. The concerns and comments regarding the proposed project are summarized in **Section 1.7.1** of this EIS.

On February 1, 2008, a NOA announcing the availability the DEIS for a 90-day public comment period was published in the Federal Register (<http://www.gpoaccess.gov/fr/>) and the EPA's Federal Register of Environmental Documents (<http://www.epa.gov/fedrgstr/>). CDs containing an electronic copy of the DEIS were mailed to approximately 275 agencies, organizations, and individuals. Each CD packet included a postcard describing the public comment period, how to submit comments, where to submit comments, and when to submit comments. An electronic copy of the DEIS was also made available for download on the Price Field Office's project website. Approximately 50 paper copies of the DEIS were distributed to agencies, organizations, and individuals. Additional paper and CD copies were made available for the public at the Price Field Office. On February 27, 2008, the BLM issued a press release announcing public meetings for the DEIS, which were held on March 11, 2008, at the Utah State University Campus in Roosevelt, Utah; March 12, 2008, at the Holiday Inn in Price, Utah; and March 13, 2008, at the Salt Lake City Library in Salt Lake City, Utah. The public comment period officially closed on May 1, 2008.

6.4 COMMENTS ON THE WTP DEIS

During the DEIS public comment period, the Price Field Office received approximately 58,000 comment letters from other Federal agencies, State, and local governments,

Indian Tribes, and the interested public. As required by NEPA, the BLM is required to identify and formally respond to all substantive public comments. In accordance with CEQ regulations, substantive comments include those that question one or more of the following:

- Purpose and need statement;
- Adequacy of the range of alternatives;
- Baseline information;
- Adequacy or accuracy of the analysis;
- Methodologies used to determine impacts; and/or
- Compliance with legal and administrative procedures.

To identify and evaluate substantive comments, the BLM developed a systematic process to ensure all comments were tracked and the content seriously considered. A description of this system follows.

First, each submission (letters, emails, faxes, etc.) was carefully reviewed to capture all substantive comments. Second, each submission that contained one or more substantive comments was given a unique identifier for tracking purposes. Third, for each comment within a unique submission, the BLM assigned a number to the comment, and captured the text of the comment.

To assist interdisciplinary team members in determining if the substantive issues raised warranted modifications to one or more of the alternatives, further impact analysis, factual corrections, or grammatical corrections, the BLM created a public comments database. Within the public comments database, the BLM considered every substantive comment, whether the same comment was made by many people or from a single person. Where warranted, the BLM responded to substantive comments by making revisions to the EIS (text changes). If no change was warranted, the BLM clearly explained why the comment did not warrant further response, citing the sources, authorities, or reasons, which support that position. Submissions that were determined to be non-substantive have been included as part of the administrative record. Non-substantive comments generally include statements of opinions, feelings, and/or preferences for one element or one alternative over another. Submissions which included comments that were personal and/or philosophical in nature were read, analyzed, and considered, but because such comments are not substantive in nature, the BLM did not respond to them.

6.4.1 Summary of Comments

Table 6.4-1 below contains a summary of the substantive comments, which were extracted from the public comment database, as well as the BLM's responses to those comments. Comments were selected for inclusion within this summary if they 1) resulted in modifications to the alternatives; 2) resulted in substantial changes in the impact analysis; or 3) if they were representative of a common concern or issue raised by multiple commenters. It should be noted that comments received on the DEIS were minimal for certain resources (e.g., Health and Safety, Rangeland Management, and Land Use and Status), and are therefore not included within the comments summary.

On the contrary, the volume of comments received for other resources or topics (e.g., cultural resources, air quality, and the range of alternatives) was extensive. Therefore, it is feasible that some comments that qualified under the above-mentioned criteria for inclusion in the summary of comments may have been unintentionally omitted. The inclusion or exclusion of a comment from the summary does not imply any greater or lesser degree of significance or importance. A copy of the complete comments database, which includes the BLM's response to all substantive comments, is included as **Appendix S**, which is available on a CD accompanying this document.

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
Cultural Resources	
<p>The EIS should include a more comprehensive study of the impacts of dust, dust suppression chemicals, vehicular exhaust, and vibration, in addition to a baseline archeological report, along the proposed transportation route.</p>	<p>In an effort to better understand the effects of dust and dust suppression chemicals (magnesium chloride) on rock art, BBC voluntarily agreed to fund a Dust Study that is included in the EIS as Appendix G. One of the objectives of the Dust Study was to research precedents, if any, for scientific studies of the effects of dust on rock art. The literature search confirmed that there is no project that sets a precedent or provides an exact model for a dust study in Nine Mile Canyon. Therefore, the Dust Study conducted for this EIS is pioneering research. As part of the WTP PA BBC has committed to conduct additional research which will investigate the potential impacts of dust on historic properties. Specifically, the study will investigate what constituents are present in various dust samples taken from rock art panels and whether the dust is causing physical degradation of the rock art (see Appendix T, Stipulation (B)(ii)).</p> <p>In accordance with CEQ regulations (CFR 1502.22), the EIS has been revised to clearly disclose that the impacts of vehicle exhaust and vibration on cultural resources within the WTP Project Area are currently unknown. In the absence of site-specific data, the best available information has been used to predict the impacts of vibration on cultural resources which could occur under the Proposed Action (see Section 4.12.1.2). Similar discussions can be found in each of the corresponding alternative-specific impact analyses. Implementation of the cultural resources monitoring plan under the WTP PA (Appendix T) will allow the BLM to monitor vibrations and vehicle emissions, and gather additional baseline information about cultural resources within the APE.</p> <p>In the absence of site-specific data and/or peer-reviewed literature, BLM resource specialists have made a good faith effort to disclose possible effects of vehicle exhaust on cultural resources.</p>
<p>There are significant cultural resource deficiencies with all of the action alternatives, which are virtually the same, including inadequate area of</p>	<p>The delineations of the APEs in the DEIS were determined by the BLM in consultation with SHPO, as defined in 36 CFR 800.4(a) and</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
potential effect identification.	800.16(d). However, In December of 2008 the BLM, in consultation with the SHPO, determined that implementation of the Agency Preferred Alternative could have an “Adverse Effect” on historic properties in the WTP Project Area. Within the determination letter, which was submitted to the SHPO and ACHP, the BLM recommended development of the WTP PA. In January of 2009, the BLM invited all organizations and individuals that had previously expressed interest in being consulting parties for the project to participate in development of the WTP PA. Those that were invited and elected to participate include the NTHP, NMCC, URARA, CPAA, USAS, BCS Project, and SUWA. In addition to these organizations, the BLM, ACHP, SHPO, BBC, State of Utah’s Governor’s Office, Carbon and Duchesne counties, and SITLA also contributed to development of the PA. All Tribes that had previously shown interest in the WTP EIS were also invited to join in development of the WTP PA. However, only the Ute Indian Tribe elected to take part. During the WTP PA process the BLM 1) increased the size of the APE; 2) revised their “Adverse Effects” determination; and 3) developed mitigation measures which would allow natural gas development to occur while minimizing impacts to cultural resources. The revised APE, shown on Figure 3.12.4 , has been expanded to include the north rim of Nine Mile Canyon; Gate Canyon from the east to west rim; and Nine Mile Canyon from Sheep Canyon (project boundary) west to its junction with Minnie Maud Creek. A complete description of the revised APE boundary can be found in Appendix T -WTP PA. The Agency Preferred Alternative has also been modified to include the WTP PA stipulations as a requirement under the alternative.
Given the isolated nature of the broad geographic areas that would be closed to public access, and the consequent opportunities for oil and gas workers to engage in activities that denigrate or diminish the integrity of archaeological sites here, independent audits of site conditions by qualified archaeologists should be periodically implemented to assess any human-caused changes to site conditions. Such audits would deter inappropriate and illegal behavior, and could	Under Alternative E as part of the WTP PA, the BLM would require the operators to comply with a long-term Cultural Resources Monitoring Plan as part of the WT PA (Appendix T). This monitoring plan would allow the BLM to monitor the direct, indirect, and cumulative impacts of full field development on specified cultural resources. As part of the monitoring plan, BBC and other operators would be required to continue dust sampling at sites evaluated in the dust study. The effects of this

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
therefore be considered within the context of “minimizing” adverse effects, as defined in 36 CFR 800.	long-term monitoring plan are considered under the Agency Preferred Alternative.
The magnesium chloride that is used for dust abatement will cause chemical erosion of the surrounding rock, and further damage cultural resources in Nine Mile Canyon.	There is presently no substantive or scientifically-sound evidence that magnesium chloride used for dust abatement in Nine Mile Canyon has or would become a vector of deterioration of the Canyon's rock art. However, because there is potential that this suppressant may cause damage, the BLM is requiring BBC and other operators to use alternative dust suppressants in Nine Mile Canyon and its side canyons. Under Alternative E and the WTP PA (Appendix T), BBC, Carbon County, and Duchesne County have agreed to discontinue the use of magnesium chloride as a form of dust suppression within canyon bottoms in the APE unless scientific research demonstrates there are no negative effects on rock art. In addition, under Alternative E and the WTP PA (Appendix T), enhanced dust suppression with alternative suppressants would be required throughout the revised APE, which is larger in size than the Project Area. In addition, under the WTP PA BBC has agreed to fund conservation treatments, which would include developing systems for removing dust from panels that have been affected by past oil and gas development that will be tested by a rock art conservator selected by the BLM.
A Class II intuitive survey should be conducted in areas of Nine Mile Canyon, side canyons, and the WTP that have not been previously surveyed. The results of this survey should be combined with current archeological data in making appropriate planning decisions.	As part of the WTP PA process, the Class I inventory was amended to include the expanded APE, which is referenced in previous RTCs and in Section 3.12 . Under the Agency Preferred Alternative and the WTP PA (Appendix T), BBC would be required to fund a Class II inventory not to exceed 3,700 acres to better determine the extent of cultural resources within the APE. A Class II inventory is most useful for improving cultural resource information in large areas where previously conducted cultural resource surveys are insufficient and information is lacking. During development of the Class II cultural resource survey a committee recommended by the Concurring Parties and approved by the BLM will determine what

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
	<p>areas will be surveyed including intuitive survey areas.</p> <p>Based on the BLM's previous experience conducting Class III inventories and subsequent implementation of avoidance measures (i.e., requirements for relocating, re-routing, and fencing), archaeological monitoring in culturally sensitive areas, and protocol for unanticipated discoveries, there is no evidence to suggest that the Class III inventory standards that would continue to be required are inadequate or insufficient (see Appendix N).</p>
<p>The EIS relies on incomplete survey data to create "Site Density Estimates", but the results can only be considered guesses without reliable data input. These data should not be used to create overview values of cultural sites within the WTP Project Area.</p>	<p>Given the number, size, distribution, and extent, previous cultural resource inventories provide a valid means of evaluating culturally-sensitive areas within the revised APE. Appendix O lists the previously completed cultural resource surveys within the APE. Figure 3.12-1 illustrates the previously completed cultural resource survey areas within the APE. With the exception of the Horse Bench area, most of the proposed development would occur in areas that have received considerable scrutiny from cultural resource inventories. These inventories consist of linear corridors surveyed for ROWs and seismic lines, individual well pads, all roads leading up to the WTP, the majority of the Nine Mile Canyon Road in the APE, large portions of the major canyon rims, and at least one large block. Taken collectively, these surveys have resulted in a fairly systematic examination of the APES, resulting in sufficient site data for identifying culturally-sensitive areas. As shown in Figure 3.12-1, the previously inventoried areas can be construed as representative of significant portions of the WTP Project Area.</p>
<p>In consultation with the SHPO and ACHP, BLM should identify organizations with a demonstrated interest in the undertaking's effect on historic properties to participate in the Section 106 process as consulting parties.</p> <p>After identifying consulting parties in consultation with the SHPO and ACHP, BLM should convene a meeting with all parties, and learn to</p>	<p>In December of 2008 the BLM, in consultation with the SHPO, determined that implementation of the Agency Preferred Alternative could have an "Adverse Effect" on historic properties in the WTP Project Area. Within the determination letter, which was submitted to the SHPO and ACHP, the BLM recommended development of the WTP PA. In January of 2009, the BLM invited all organizations and individuals that had previously expressed interest in being consulting</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
engage in consultation concerning the effects of the project on historic properties, in a manner consistent with 36 CFR Part 800.	parties for the project to participate in development of the PA. Those that were invited and elected to participate include the NTHP, NMCC, URARA, CPAA, USAS, BCS Project, and SUWA. In addition to these organizations, the BLM, ACHP, SHPO, BBC, State of Utah’s Governor’s Office, Carbon and Duchesne counties, and SITLA also served as consulting parties for the WTP PA. All Tribes that had previously shown interest in the WTP Project were also invited to join in development of the WTP PA. However, only the Ute Indian Tribe elected to take part. During the WTP PA process the BLM 1) increased the size of the APE; 2) revised their “Adverse Effects” determination; and 3) developed mitigation measures which would allow natural gas development to occur while minimizing impacts to cultural resources.
The DEIS lacks baseline information concerning the following aspects of the affected environment: the proximity of documented rock art sites to project roads and the condition of documented rock art sites.	<p>Rock art sites and other site types that include rock art (e.g., rockshelters, granaries, etc.) most commonly occur in Nine Mile Canyon, its major tributary canyons (Dry, Cottonwood, and Water Canyons, etc.), Desolation Canyon, and other large canyons that discharge their seasonal or perennial waters directly into the Green River (e.g., Jack Canyon). There are 560 documented sites with rock art in the WTP Project Area. Figure 4.12-1 represents the distance from and elevation above the major project roads for most of the rock art sites in the WTP Project Area. Sites with rock art not included in the figure include those located more than 300 meters (984 feet) from the nearest major road. Sixty-seven documented sites with rock art, or approximately 12 percent of all sites with rock art, are in excess of 300 meters from the nearest major road. The majority of these sites are in Lower Nine Mile and Desolation Canyons. There are 212 sites with rock art within 50 meters (164 feet) of a major road; accounting for about 38 percent of all sites with rock art. Of these 212 sites, 183 sites are less than 50 meters above the associated road. The remaining 281 sites with rock art, or 51 percent, occur between 50 and 300 meters of a major road.</p> <p>The Dust Study (Appendix G) provides a representative sample of baseline site conditions from which the spatial extent of the dust problem can be generally understood. This is especially true given that</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
	<p>the majority of the cultural sites is distributed throughout Nine Mile Canyon and its side canyons in close proximity to the road, and would be subject to the same impacts both in terms of context and intensity as those that were evaluated as part of the field sampling completed for the dust study. In addition, under Alternative E and the WTP PA, the BLM has initiated that will determine baseline information about a sample of sites, monitor those sites over time, and collect samples of dust from sites to determine if dust is being deposited on them.</p>
<p>In 2005, the BLM assured the public that there would be no industrial surface occupancy allowed within Nine Mile Canyon. However, for three of the proposed DEIS alternatives (including the BLM's Preferred Alternative) include two more pump stations are being proposed within the canyon; one near the mouth of Harmon Canyon and a second pump station in Nine Mile Canyon just south of Cottonwood Canyon. These pump stations will have auditory and visual impacts on that would disrupt the canyon's cultural and historic integrity.</p>	<p>During the 2005 public scoping period the BLM stated that no well pads would be constructed on federal lands within Nine Mile Canyon.</p> <p>However, one of the primary issues identified during the scoping process by the public was how increased traffic would impact the resources in the WTP Project Area. In response to this concern, and through the alternatives development process, it was determined by the BLM that transporting water and condensate via pipeline could substantially reduce the volume of traffic in Nine Mile Canyon and its side canyons (compare Tables 2.2-4, 2.4-4, and 2.6-4). Thus the DEIS included conceptual locations for four pump stations that would pump produced water and condensate from the canyon bottoms up to the plateaus rather than trucking. The proposed pump stations are a vital part of the proposed pipeline system, and thus necessary to reduce truck traffic in Nine Mile Canyon.</p> <p>Therefore, under Alternatives A, C, and E, two pump stations were proposed and conceptually illustrated on the alternative maps in Nine Mile Canyon. The station located near the mouth of Harmon Canyon is conceptually sited on private land; whereas, the station located near the mouth of Cottonwood Canyon is conceptually sited on Federal lands. The conceptual location of the pump station previously illustrated on Federal lands in Nine Mile Canyon near the mouth of Cottonwood Canyon has been removed from Figure 2.6-1 in the FEIS. Under Alternative E, the BLM has developed criteria that would be used to determine the future location of pump station(s), while taking into</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
	<p>consideration other resource concerns.</p> <p>Additional information on the pump stations has been included within Section 2.1.5.3 of the EIS. Impacts of the pump stations have been more thoroughly addressed in Chapter 4 resource sections (e.g., cultural, recreation, and noise).</p>
<p>Operators should be required to participate in a cultural resource mitigation fund, wherein annual commitments would be required to pay for 1) ongoing studies of adverse effects (e.g., dust studies); 2) stabilization or recovery of sites impacted by development activities, 3) development of recreational facilities that ameliorate conflicts with industrial uses, and 4) other projects that could mitigate the cumulative impacts of industrial development.</p>	<p>Under the Agency Preferred Alternative and as part of the WTP PA process (see previous responses as well as Appendix T), the operator would be required to comply with a suite of additional cultural mitigation measures. These measures include, but are not limited to:</p> <ul style="list-style-type: none"> • Providing funding for a Class II cultural resource inventory; • Providing funding for a cultural resource monitoring plan; • Providing funding for conservation treatments and continuing research; • Expansion of current dust suppression efforts and dust monitoring; • Increasing personnel training; and • Development of visitor interpretation/enhancement sites. <p>A list of applicant-committed environmental protection measures can be found in Table 2.2-6. It should also be noted that the range of alternatives, as well as the numerous BMPs, environmental protection measures, and mitigation measures (see Tables 2.6-7 and 2.6-8) included in the EIS were developed and refined by the BLM and CAs in direct response to issues raised during the NEPA process. These alternatives and mitigation measures address the full spectrum of resource concerns and issues that could be affected by natural gas development in the WTP Project Area.</p>
<p>The DEIS lacks a reasonably complete discussion of measures to mitigate the effects of project traffic on rock art sites.</p>	<p>The FEIS has been modified to include a discussion of additional mitigation measures that could reduce the effects of project traffic on rock art sites. These measures include analysis of the Trail Canyon access route (under Alternative C), a dust suppression plan (Appendix R) under Alternatives C and D, and a suite of mitigation measures that</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
	<p>would evaluate the effects of project traffic on rock art sites under Alternative E and the WTP PA (Appendix T), including:</p> <ul style="list-style-type: none"> • Providing funding for a cultural resource monitoring plan; • Providing funding for conservation treatments and continuing research; • Expansion of current dust suppression efforts and dust monitoring in the revised APE, including development of a formal Dust Suppression Plan by the Nine Mile Canyon Road Cooperative Board; • Increasing personnel training; and • Development of visitor interpretation/enhancement sites.
<p>The omission of the final report and laboratory results from the dust study corrupts and undermines the credibility of the DEIS and requires the preparation of a supplemental environmental analysis.</p>	<p>The BLM did not omit laboratory results from the DEIS. A final report with laboratory results was not available at the time of publication. However, a copy of the completed dust study with laboratory results has been included in the FEIS as Appendix G.</p> <p>The inclusion of new information does not always compel an agency to prepare a supplemental EIS, especially when the information is provided in direct response to public comments. To require a supplemental EIS every time new information comes to light would render agency decision-making intractable, always awaiting updated information only to find the new information outdated by the time a decision is made.</p> <p>In addition, as part of the WTP PA, BBC has committed to conduct additional research which will investigate the potential impacts of dust on historic properties. Specifically, the study will investigate what constituents are present in various dust samples taken from rock art panels and whether the dust is causing physical degradation of the rock art (see Appendix T, Stipulation (B)(ii)).</p>
<p>The discussion of the disappearance of magnesium (on pages 6, 21, and elsewhere within the 2007 Preliminary Report included in Appendix</p>	<p>Since the time the 2007 preliminary dust study report was included in the DEIS, additional laboratory work was conducted at the request of</p>

Table 6.4-1 Summary of Comments	
Summary Comment	General BLM Response
<p>G of the DEIS) is evidence of the author's lack of understating of chemical principals, and of the basics of ionization of salts in water. When magnesium chloride [MgCl₂] and/or magnesium oxide [MgO] are placed on roads, it is usually mixed with lots of water and sprayed on. This is necessary so that it can soak in and harden the road base to a maximum depth. A thin surface coating would have little effect and would soon be broken up, so that is not a common procedure.</p>	<p>Constance Silver to further examine the occurrence and source (i.e., naturally occurring or a result of road application) of magnesium chloride on rock art in Nine Mile Canyon. These additional laboratory results have been incorporated into the final dust study included in the EIS as Appendix G (dated October 2008). In addition, the Dust Study has been peer reviewed by a geologist.</p> <p>Finally, under the Agency Preferred Alternative and the WTP PA, systems for removing dust from rock art panels that have been previously affected by past oil and activity will be developed and tested. In addition, the BLM will select sites for conservations treatments. Finally, research will be conducted to investigate whether dust is causing physical degradation of rock art in Nine Mile Canyon. See Appendix T for more information.</p>
<p>The dust that is adversely affecting the rock art in Nine Mile Canyon is not simply small particles of dirt. It includes aggregates of numerous chemicals from sources like diesel exhaust from heavy trucking activity, road treatment chemicals, effluents from compressor stations, dust from fertilizer and pesticide treatments on adjacent fields, etc. To understand the impact of all these chemicals on the rock art requires the expertise of a chemist. A literature review is not a replacement for a trained chemist or geochemist.</p>	<p>A full evaluation of all of the variables that could potentially impact cultural resources within Nine Mile Canyon would require a complex analysis involving numerous variables and linked indirect effects, resulting in a task that is beyond the scope of this EIS. The original objectives of the dust study were to 1) complete an exhaustive literature review of potential impacts from dust to rock art; 2) to examine whether the dust released into the air by various types of vehicles in Nine Mile Canyon can settle on and permanently alter adjacent rock art; and 3) to investigate the use of magnesium chloride as a dust abatement chemical. A secondary objective was to research the possible effects of diesel fuel on rock art; however, this component was not pursued due to lack of information found during the literature review.</p> <p>In addition, as part of the WTP PA, BBC has committed to conduct additional research which will investigate the potential impacts of dust on historic properties. Specifically, the study will investigate what constituents are present in various dust samples taken from rock art panels and whether the dust is causing physical degradation of the rock art (see Appendix T, Stipulation (B)(ii)).</p>
<p>The author of Appendix G is a qualified rock art conservator. However,</p>	<p>The field study was designed, and results were interpreted, by EMSL,</p>

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<p>she is not qualified to assess the effects of chemical agents (magnesium, diesel exhaust, etc.) on the various sandstone formations on which the rock art is located. This requires the expertise of a geochemist.</p>	<p>Analytical, Inc., who has a professional staff which includes a geologist as well as other individuals with appropriate resource expertise. In addition, the Dust Study has been peer reviewed by a professional geologist.</p> <p>In addition, as part of the WTP PA, BBC has committed to conduct additional research which will investigate the potential impacts of dust on historic properties. Specifically, the study will investigate what constituents are present in various dust samples taken from rock art panels and whether the dust is causing physical degradation of the rock art (see Appendix T, Stipulation (B)(ii)).</p>
<p>36 CFR 800.4(3) requires consultation on issues related to potential effects. This has not been addressed in the DEIS.</p>	<p>During May of 2006, the ACHP made a field visit to the WTP Project Area, including Nine Mile Canyon, with the BLM and SHPO to gain a better understanding of the Proposed Action and significant cultural resources. In addition, the ACHP was provided with a copy of the Class I Cultural Resource Literature Review (Whitfield et al. 2006). On August 17, 2006, the ACHP was sent a letter providing clarification of BLM's decision regarding consulting parties. During the public comment period, the ACHP was sent a copy of the DEIS for review; however, the BLM did not receive any written or verbal comments. On May 16, 2008, the BLM received a letter from the ACHP requesting an update on how the BLM was meeting its responsibilities under Section 106 of the NHPA. The BLM sent a formal response to the ACHP on June 2, 2008.</p> <p>On September 29, 2008, the BLM received a letter from the ACHP wherein they notified the BLM of their decision to formally participate in consultation pursuant to the criteria for involvement established in Section 4(b)(3) of the BLM Nationwide Programmatic Agreement regarding "highly controversial undertakings" and Section VII(A)(3) of the Utah State Protocol.</p> <p>In consultation with the SHPO, the BLM determined that implementation of the Agency Preferred Alternative could have an 'Adverse Effect' on</p>

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	<p>historic properties within the WTP Project Area. The “Adverse Effect” was originally defined as the dust that is generated by the industrial traffic that settles on and visually affects the visual appearance of the rock art panels pursuant to CFR 36 Part 800.5(a)(2)(v).</p> <p>In order to resolve potential adverse effects, the BLM, in coordination with the ACHP and SHPO, determined that it would be appropriate to develop a PA for the project. Development of the WTP PA was initiated in January 2009 with consulting parties. During the course of consultation, a representative from the ACHP was present at every meeting. The ACHP signed the PA on January 5, 2010. The signing of the PA and its implementation concludes the Section 106 process. Furthermore, throughout the EIS public involvement process, the BLM has sought out information from individuals and organizations with knowledge of, or concern with, historic properties in the area.</p> <p>This EIS has included a thorough and ongoing public participation process that demonstrates the BLM’s compliance, in both the spirit and intent, with 36 CFR 800.</p> <p>A summary of public participation and agency consultation and coordination is contained in Sections 6.2 and 6.3.</p>
<p>36 CFR 800.5 requires consultation on assessment of effects. This requires identification of any characteristics that qualify a historic property for the National Register. This is not addressed in the DEIS.</p>	<p>The final determination of effects was not included within the DEIS because the BLM and SHPO preferred to consider public input prior to making their decision concerning the determination of effects. Furthermore, as alternatives and analyses are subject to change in response to public comments it would have been premature to render a determination of effects within the DEIS.</p> <p>In consultation with the SHPO, the BLM determined that implementation of the Agency Preferred Alternative could have an ‘Adverse Effect’ on historic properties within the WTP Project Area. The “Adverse Effect” was originally defined as the dust that is generated by the industrial traffic that settles on and visually affects the visual appearance of the rock art panels pursuant to CFR 36 Part 800.5(a)(2)(v). However,</p>

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	<p>during development of the WTP PA, the BLM determined with consulting parties that there are also potential “Adverse Effects” to the cultural setting within Nine Mile Canyon, and indirect impacts to sites over the entire WTP APE. The BLM revised its “Adverse Effects” determination in a letter to the SHPO, ACHP, and consulting parties dated July 7, 2009. A copy of the revised effects determination letter can be found in Appendix T - WTP PA.</p> <p>With the signing of the WTP PA and its implementation the BLM as concluded the Section 106 process.</p> <p>Additional information on the consultation process is included in Section 6.2.2 of the FEIS.</p>
<p>36 CFR 800.4(2) requires consultation on what historic properties have not been yet identified. This has not been addressed with regard to: The Nine Mile Canyon Archaeological District, the Nine Mile Canyon Historic District, The Nine Mile Archaeological Landscape and The Nine Mile Canyon Historical Landscape.</p>	<p>When the EIS was initiated, the nomination form for the NMCAD did not exist. However, in 2009, the NMCAD was determined by BLM and the Utah SHPO to be eligible for the National Register of Historic Places based upon a nomination developed by the CPAA, which was submitted on February 7, 2008. Since that time, the BLM has prepared cover documentation in support of an MPS for Nine Mile Canyon including historic, rock art, and West Tavaputs Adaptation contexts. Using these MPS contexts, 63 sites in Nine Mile Canyon, were listed on the National Register of Historic Places on November 30, 2009. The BLM has committed to prepare and submit 100 recorded individual sites on BLM lands annually over the next 5 years. The impact of proposed development on eligible and listed sites is discussed in Section 4.12 of the FEIS.</p>
<p>The Hopi have identified Nine Mile Canyon as a Traditional Cultural Property.</p>	<p>Section 6.2.1 clearly describes the BLM’s consultation process with Hopi Tribe, which was initiated in October of 2005 and continues to date. During a November 20, 2008 meeting between the BLM and the Hopi, the Tribe decided to hold their TCP claim in abeyance. This decision was made mainly because of protections afforded to Nine Mile Canyon through designation of the Nine Mile Canyon ACEC in the Price</p>

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	<p>Field Office Approved RMP (BLM 2008b). During this meeting the Hopi also expressed their support for the “Multiple Properties Listing” for the nomination of the NRHP that the BLM is pursuing instead of the National District nomination. The Multiple Properties Listing has since been submitted. The Tribe also reserved the right to renew their TCP claim in the future.</p> <p>In addition, Stipulation #3 of the WTP PA (Appendix T), requires the BLM to continue to consult with appropriate Indian Tribes regarding historic properties of religious and cultural significance, in accordance with the NHPA, the NAGPRA, ARPA, AIRFA, Executive Order 13007 Scared Sites, and their implementing regulations. Furthermore, as part of the WTP PA commitments, the BLM is completing an ethnographic study addressing Hopi traditional use of the West Tavaputs region. The BLM will provide this confidential information only to the Hopi Tribe.</p>
Transportation	
<p>The DEIS says that the average daily traffic in the Canyon would be 550 vehicles with nine drill rigs operating on the Tavaputs. Carbon County did a 24-hour traffic count when there were two drill rigs operating and that traffic count was 340 vehicles.</p>	<p>Between 2005 and 2006, and in preparation for the WTP EIS, the BLM collected approximately 1-year worth of traffic data. Based on the volume of data collected, the BLM is confident that the assumptions included in the EIS provide a more realistic baseline count than the 24-hour representative sample collected by the County.</p> <p>The BLM does recognize that baseline traffic has likely increased in the WTP Project Area since the time that traffic data were collected by the BLM, because interim development actions have increased the number of producing wells. However, minor changes in production traffic would not result in traffic increases comparable to those documented by the County. Baseline information presented in the EIS is sufficient to compare and contrast the impacts of the alternatives and provide the decision maker with the information necessary to make a reasoned and informed decision on the project.</p>
<p>The issues regarding paving of the Nine Mile Canyon Road are complex. On one hand, paving the road will reduce dust and vibration that impact cultural resources. It will also make access to the canyon</p>	<p>The DEIS considered the option of paving the Nine Mile Canyon Road. As discussed in Section 2.1.5.6 (Details Common to all Alternatives), as an alternative to ongoing dust suppression or due to safety</p>

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<p>more viable for the recreational user. On the other hand, paving is expensive, will likely impact cultural resources during the rebuilding of the road, will increase speed along a road that will still be narrow and tight turns, and will provide increased access to cultural resources with no plan for their protection. The DEIS should have considered these difficult issues and provided information and an alternative that addresses them. Until the DEIS addresses these issues, it will be incomplete and inadequate.</p>	<p>consideration, certain road sections may be improved with hard surfacing, such as asphalt or chip-seal, or other materials as approved by the BLM or counties, as appropriate. A discussion of the potential impacts that this could have on resources within the WTP Project Area can be found in individual resource sections (see for example Section 4.14.2.4).</p>
<p>Since the DEIS was published, Carbon County has acquired Title V acquiescence to a series of prior-existing public roads in the Tavaputs natural gas field area from the BLM. This action on the part of Carbon County has enabled BLM to recognize the County's existing authority and responsibility to manage and maintain these routes.</p>	<p>Since Carbon County submitted comments on the DEIS, they have voluntarily relinquished their recently acquired Title V ROWs. BLM recognizes that Carbon County has demonstrated an interest in acquiring Title V rights of ways to a network of BLM system roads in the West Tavaputs Plateau area. As ROW applications are submitted on these roads, BLM will evaluate them in compliance with NEPA, complete necessary consultations, and make a decision on the issuance of grants to these roads on a case-by-case basis. Any ROW grant issued by the BLM would include stipulations, including maintenance requirements and standards, sufficient to address resource issues and concerns.</p>
<p>The DEIS should be augmented to include a more thorough and thoughtful analysis by transportation engineers of potential options wherein dust impacts to cultural sites could be avoided entirely.</p>	<p>Throughout this EIS process, the BLM has taken a hard look at the potential effects of dust on cultural sites and to develop alternative design features and mitigation measures to reduce project-related dust.</p> <p>In an effort to avoid use of and dust-related impacts to Nine Mile Canyon, a BLM interdisciplinary team, BLM engineers, and engineers hired by the project proponent have evaluated alternative access routes to the WTP Project Area. With the exception of Trail Canyon route, nine of these alternative access routes are technically feasible (See Section 2.8.6).</p> <p>Subsequent to the publication of the DEIS, the Nine Mile Canyon Road Cooperative Board approved a dust suppression plan developed by contract engineers (see Appendix R). Prior to developing this plan, the engineers tested the effectiveness of various dust suppressants within the WTP Project Area. Since the summer of 2008, BBC and Carbon</p>

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	County have been applying dust suppressants in Nine Mile Canyon between Harmon and Cottonwood Canyon. Dust suppression will continue under all alternatives evaluated in this EIS.
The BLM has done little to mitigate the dust in the Nine Mile Canyon or on the plateau. The concentration of dust in the canyon has and is taking its toll on people, wildlife, and vegetation.	The failure of past dust suppression efforts is clearly recognized within the WTP EIS (see Section 4.14.2.4). Impacts of dust on various resources including human health and safety, wildlife, and vegetation, and cultural resources are discussed in the appropriate resource sections. As was mentioned in the previous response, between publication of the DEIS and this FEIS, the operators' conducted a Dust Suppressant Testing Project to evaluate the effectiveness of dust suppression techniques other than water and magnesium chloride. A dust suppression plan is now in effect. While the primary purpose of the dust suppression plan is to reduce dust related effects on cultural resources in canyons, implementation of the plan also reduces dust effects on people, wildlife, vegetation, and other resources within the WTP Project Area. Dust suppression on the plateau is conducted on an as-needed basis as required by the BLM.
The DEIS does not address the issue of traffic control/management in Nine Mile Canyon.	<p>Traffic control/management of the Nine Mile Canyon falls under the jurisdiction of Carbon and Duchesne Counties. The EIS recognizes that both Counties would likely incur costs associated with traffic enforcement in Nine Mile Canyon and that increased enforcement could potentially have bearing on traffic speeds and road deterioration rates (see Section 4.14.2.2).</p> <p>According to Carbon County, aggressive patrol has increased over the past 18 months because of increases in reported accidents. In addition, the Safety Manager has conducted traffic studies and has been attempting to identify the most prevalent locations of these accidents. Chief Deputy, Guy Adams, has stated that patrols have been increased, and without setting a routine schedule that at least two cars per week are present in the NMC area. Future plans call for increased patrols, as</p>

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	well as continued negotiations with the BLM for funding assistance to add more patrol personnel in many outlying areas of the County. It should also be noted that new communication facilities are being placed in the Nine Mile Canyon area to give better contact and better emergency response time.
General Comments	
The DEIS fails to identify “other operators” holding leases within the WTP Project Area.	<p>The BLM did not specifically name the "other operators" with leases in the WTP Project Area because it is common in the oil and gas industry for existing leases to change hands. For example, since the time the NOI was published the lessee for the valid and existing oil and gas lease rights in the southern part of the Project Area has changed twice. In addition, if the BLM were to decide to lease unleased lands within the WTP Project Area, it would occur through a competitive lease sale, thus potential lessees are unknown at this time.</p> <p>The decision made in the ROD for this EIS will pertain to all operators that currently or may operate in the future within the WTP Project Area. Thus, identifying them by name is irrelevant and has no effect on the alternatives or the analysis within the document.</p>
Operators should treat State and private land developments with the same standard as BLM land developments.	Under all BLM alternatives, it is recommended that BMPs applicable to Federal lands also be applied to State and Private lands. However, it should be noted development on these lands falls outside of the regulatory jurisdiction of the BLM, and thus mitigation measures would only be applied if required by the appropriate surface management or permitting agency, or if the operators voluntarily commit to implement these measures.
Special Designations	
The WTP DEIS has failed to take a hard look at the obligations of the BLM to manage the Desolation Canyon and Jack Canyon WSAs according to the IMP. The IMP does not grant BBC a blank slate to pursue development in WSAs where it holds leases. In fact, under the IMP, the BLM may not permit BBC to build new roads or well pad locations in the WSAs.	The EIS takes the required hard look at the obligation of the BLM to manage WSAs according to the IMP. IMP H-8550-1 Interim Management Policy for Lands Under Wilderness specifically states: “Those grazing, mining, and mineral leasing uses that existed on October 21, 1976 (the date that FLMPA was approved) may continue in the same manner and degree as on that date, even if this would impair wilderness suitability.”

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	<p>In addition, within the range of alternatives considered is the Conservation Alternative, which prohibits surface disturbance within the WSAs and the Agency Preferred Alternative, which reduces surface disturbance through the use of increased directional drilling.</p> <p>Under Alternative E, some development would occur within the Jack Canyon and Desolation Canyon WSAs. The IMP and Guidelines for Lands Under Wilderness Review (H-8550-1) recognizes valid and existing rights with a provision that efforts be made to minimize unnecessary or undue degradation to wilderness values (BLM 1995b). Although mitigation measures for construction in WSAs are not explicitly disclosed, numerous mitigation measures for various resource values contained within Tables 2.6-7 and 2.6-8 would serve to minimize impacts.</p>
<p>The BLM has failed to take a hard look at the leases by which BBC claims to have to right to develop inside the WSAs. The WTP DEIS contains no information whatsoever regarding the nature of the leases, the date on which they were issued, whether each lease is pre- or post-FLPMA, etc.</p>	<p>A table has been included in Section 3.17.2 of the EIS disclosing all existing federal leases within the WSAs. All existing leases pre-date FLPMA or the establishment of the WSAs.</p>
<p>All the draft alternatives improperly infringe on the Green River WSR corridor and the Desolation Canyon WSA. In addition, every one of the draft alternatives improperly infringes on the Jack Canyon WSA.</p>	<p>Under no alternatives would there be any development within the Green River WSR corridor, which extends ¼-mile on either side of the river from the high water mark. In addition, the range of alternatives considered in the EIS includes the Conservation and No Action Alternatives, both of which preclude development in the Jack and Desolation Canyon WSAs.</p>
<p>BLM must fully consider and analyze an alternative that designates the Desolation and Jack Canyon WIAs as "Wilderness Study Areas."</p>	<p>As established in State of Utah vs. Gale Norton, the authority of the BLM to establish new WSAs, expired no later than October 21, 1993, with submission of the wilderness suitability recommendations to Congress pursuant to Section 603 of FLPMA. The 1999 Utah Wilderness Inventory, which included the Jack and Desolation Canyon WIAs, cannot be used to create additional WSAs or manage lands as if they are or may become WSAs.</p>
<p>All of the alternatives are in opposition to the Desolation and Gray Canyons of the Green River Management Plan.</p>	<p>Under Alternatives B and D, no development would occur within sight or sound of the Green River. Under Alternatives A, C, and E, some</p>

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	development could occur within sight and sound of the river, but it should be noted that all development would be on pre-FLPMA leases within the WSAs that pre-date the establishment of the 1979 river management plan. Under Alternatives C and E, the BLM has included several mitigation measures specifically designed to reduce visual and auditory impacts in an attempt to make development compatible with the river management plan, while still recognizing the operators valid and existing lease rights.
Air Quality	
State and Federal Agencies, as well as members of the public, commented that the BLM had failed to include an assessment of the impacts of the WTP development on ozone concentrations in the region.	Within the DEIS, ozone impacts from the Proposed Action and alternatives were estimated using the results of an impact analysis performed for the Pinedale Anticline Draft EIS in February 2007. The predicted ozone levels presented in the DEIS did not indicate violations of the NAAQS at the time the DEIS was released to the public (February 1, 2008). However, on March 12, 2008, and thus subsequent to the publication of this DEIS, the EPA changed the NAAQS for ground-level ozone. The revised the 8-hour primary ozone standard, designed to protect public health, is a level of 0.075 ppm. The previous standard, set in 1997, was 0.08 ppm (effectively 0.840 ppm). Because the EPA lowered the NAAQS in March 2008, the predicted values in the DEIS exceeded the new NAAQS for ozone. In view of the ozone levels modeled and predicted for the Proposed Action and alternatives, the BLM concluded that additional cumulative and project-specific ozone modeling needed to be completed. The results of this project-specific ozone modeling are included within Sections 4.3, 5.3, and Appendix J . In addition the results of regional ozone modeling conducted for the UBAQS have been added to Section 5.3.
Implementation of the Proposed Action or alternatives would result in exceedances of NAAQS.	No documentation was provided to substantiate these claims and predicted impacts presented in Sections 4.3 and 5.3 of the EIS did not indicate potential exceedances of any standards other than ozone.
The BLM must update background concentrations of PM _{2.5} and PM ₁₀ .	The BLM does not have the regulatory authority to set background concentrations for pollutant background levels. The State of Utah has the authority to regulate air quality matters for the majority of the WTP Project Area. These responsibilities include establishing air pollutant background levels, especially in rural areas where monitoring has not

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	<p>been conducted.</p> <p>The PM_{2.5} values in the EIS have been modified to acknowledge new background concentrations for PM_{2.5} based upon limited PM_{2.5} monitoring conducted in Vernal, Utah and Uintah/Duchesne counties in 2007. These concentrations were derived through cooperation between the UDAQ and the BLM State Office Air Quality Specialist. See Section 3.3.2.2 and Table 3.3-3 for updated PM_{2.5} background concentrations.</p> <p>For the remaining criteria pollutant background concentrations, values provided by the UDAQ, including PM₁₀ remain the best available information.</p>
The EIS should be revised to include additional information on greenhouse gases and the project's contributions to global warming.	There are currently no EPA regulatory standards directly limiting greenhouse gas emissions. However, the BLM has included additional analysis of greenhouse gases in Sections 4.3 and 5.3 of the EIS.
The amount of PSD increment already consumed in the Class II area of the proposed project is largely unknown. It is plausible that the air quality in this heavily developed area of Utah has degraded enough to cause concern with regards to compliance with certain PSD increments.	A PSD increment analysis is the responsibility of the permitting authority. The State of Utah is responsible for construction and operating permits for applicable facilities in the WTP Project Area and surrounding areas. If a proposed facility meets the PSD criteria, the State of Utah has the regulatory authority and requirement to perform a PSD Class II increment analysis. Any comparison to PSD increments presented in the EIS is for informational, impact disclosure purposes (see Sections 4.3, 5.3, and Appendix J). An air quality analysis in an EIS does not constitute a PSD increment analysis because the BLM does not have the authority to perform the analysis. Therefore, this NEPA analysis cannot be used to determine increment consumption.
This DEIS must fully consider existing visibility concerns along with the impacts of the increases in air pollutants that contribute to visibility impairment (e.g., sulfates, nitrates, dust, etc.) that will come from the proposed oil and gas development under the various proposed alternatives.	The DEIS considered potential changes in visibility using the CALPUFF model, which is universally accepted by Federal land managers as the model to use to predict air quality related values at Federally-mandated Class I areas. Visibility impacts were also evaluated at "sensitive" Class II areas for disclosure purposes only because there is no visibility protection for Class II areas under any Federal, State or local law.
While the BLM has used a change of 1.0 dv to denote visibility	Potential visibility degradation was evaluated in terms of the change in

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<p>impairment, a threshold of 0.5 Δv is much more protective of visibility in Class I areas. All of the Federal Land Managers (i.e., those agencies with an affirmative responsibility under the CAA for protecting the air quality related values of mandatory Class I areas) including the USFS consider a 0.5 Δv change to be a Limit of Acceptable Change threshold.</p>	<p>deciview (Δv) or a change in background extinction (B_{ext}). A 1.0 Δv "Just Noticeable Change" is equivalent to a 10% change in B_{ext}. There are no applicable Federal, State, Tribal, or local visibility standards. However, predicted visibility impacts are compared to Levels of Acceptable Change (LAC) developed by Federal Land Managers (FLAG 2000). This threshold is based on the original development of the deciview scale (Pitchford and Malm 1994), and is supported by EPA's Final Regional Haze Regulation (EPA 1999) decision to use 1.0 Δv as the significance level when preparing periodic reasonable progress reports. Therefore, a "Just Noticeable Change" threshold of a 10% change in the reference background extinction or 1.0 Δv was used. Since the USFS uses a 0.5 Δv as a LAC threshold in order to protect visibility in sensitive areas, comparison to this threshold was summarized in the Technical Support Document.</p>
Alternatives	
<p>The BLM should evaluate in detail the environmental impacts of alternative access routes to the WTP Project Area, including the Bruin Point Route, and a route through Trail Canyon. BLM should also evaluate in detail an alternative involving a combination of access routes. Further, the BLM should provide the public with the opportunity to review and comment on the supplemental analysis of alternative access routes.</p>	<p>In response to comments received during the public comment period for the DEIS, the BLM reevaluated the suggested alternative access routes and determined that the construction and use of a new route through Trail Canyon should be analyzed in detail. This analysis has been added to the Transportation Impact Reduction Alternative (Alternative C). Under Alternative C, BBC and other operators would be required to construct a new access route through Trail Canyon. Trail Canyon is located directly north of Harmon Canyon, which serves as the primary access route to Prickly Pear Mesa. From State Road (SR)/US 40/191, the proposed Trail Canyon route would be accessed via Gate Canyon to the existing Rye Patch Road (approximately 3.5 miles north of the Gate Canyon/Nine Mile Canyon intersection). A conceptual location of this alternative access route is shown on Figure 2.4-1. Construction and use of a new route in Trail Canyon would reduce the total amount of industrial traffic in Nine Mile Canyon by approximately 22 percent. It would also nearly eliminate project-related traffic on the stretch of road in Nine Mile Canyon between Gate and Harmon Canyons.</p> <p>In addition, the BLM has revised the discussion of alternative access routes in the alternatives considered but eliminated from detailed</p>

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	<p>analysis section (Section 2.8-6). The revised discussion provides the public with additional information supporting the BLM's decision to dismiss other alternative access routes from detailed analysis.</p> <p>Finally, as part of the Section 106 consultation process, and during development of the WTP PA, the BLM reopened discussion of alternative access routes with those organizations that had been invited to be consulting parties. During the course of consultation, a considerable amount of time was spent reevaluating alternative access routes that had previously been dismissed as well as exploring different options. These routes were also dismissed from detailed analysis as described in Section 2.8.6.</p>
<p>All of the Alternatives include proposed development. The BLM must analyze a "No Action" Alternative with no drilling on State and private lands, and no access across Federal lands.</p>	<p>The No Action Alternative is a rejection of the operators' Proposed Action on Federal lands within the WTP Project Area. However, the analysis of the No Action Alternative must take into consideration what is reasonably foreseeable if the application is denied. In this case, it is reasonably foreseeable that the applicant would seek to develop valid and existing leases on State and private lands, over which the BLM has no jurisdiction.</p> <p>Court precedent holds that operators have rights to access these lands. That right is subject to Federal regulation when its exercise requires the crossing of Federal property. Such regulation cannot, however, prohibit access or be so restrictive as to make economic development competitively unprofitable.</p>
<p>A number of comments recommended that the EIS should include different alternatives, a broader range of alternatives, or that alternatives considered but eliminated from detailed analysis should have been analyzed in detail.</p>	<p>The five alternatives analyzed in detail (see Sections 2.1 – 2.6), in conjunction with the seven alternatives considered but eliminated from detailed analysis (see Section 2.8), demonstrate the BLM's careful consideration, exploration, and evaluation of a full range of alternatives as required at 40 CFR 1502.14.</p> <p>The range of alternatives, as well as the numerous BMPs,</p>

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	<p>environmental protection measures, and mitigation measures (see Tables 2.2-6, 2.6-7, 2.6-8) included in the EIS, were developed by the BLM and CAs in direct response to issues raised during the internal and public scoping processes. Furthermore, these alternatives have been refined and resource-specific mitigation measures have been added to the FEIS to respond to comments received during the public comment period for the DEIS.</p> <p>The design features of these alternatives and the included BMPs, environmental protection measures, and mitigation measures address the full spectrum of resource concerns and issues that could be affected by natural gas development in the WTP Project Area.</p>
<p>The assertion that the maximum vertical section under 160-acre surface spacing is over 3,700 feet is in error. The actual maximum is 2,800 feet. Note this maximum is well within the maximum vertical section of over 2,900 feet already drilled at Prickly Pear.</p>	<p>The maximum vertical section of 3,700 feet is technically accurate. The comment assumed a bottom hole drainage pattern that has yet to be proven, and at this point in time is unknown. In addition, the comment also failed to consider other scenarios that could actually increase the maximum required vertical section (e.g., drilling a bottom hole location from a surface location that is located in an entirely different section). The reason for this may be that a surface location is not possible within a given section due to topographical or other limitations. This situation occurs regularly in fields that are being developed using multi-well pads. Under this scenario, using only 160-acre surface locations, the maximum vertical section could easily exceed 3,700 feet. While the numbers can be argued and discussed at length, the main point is that a blanket approach like “only 160-acre surface pads” is not the practical solution.</p> <p>Furthermore, the comment failed to anticipate future down spacing of the field. As a field is down spaced, setbacks become reduced. The illustrated 660-foot setbacks would likely be reduced to 100-foot setbacks if the area is down spaced to 10 acres, which is currently being proven in other tight gas sand Basins throughout the Rocky Mountains. The 100-foot setbacks would provide for greater vertical sections than those demonstrated.</p>
<p>Burial of pipelines in the WTP Project Area will require trenching</p>	<p>Under the Agency Preferred Alternative and in accordance with WO IM-</p>

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through bedrock and dynamite blasting, which will have a permanent impact on the environment despite remediation efforts. While burial of pipelines may be reasonable in certain areas such as canyon bottoms, burial of gathering lines to each individual well on the mesa tops is unreasonable both in terms of the effort to minimize surface disturbances, and the unwarranted time and expense of the installation of such lines. Installing buried water lines for the disposal of produced water on the mesa presents the same issue of unwarranted disturbance.	2007-021 (Integration of Best Management Practices into Application for Permit to Drill Approvals and Associated Right of Way), the BLM would require the burial of pipelines, except in limited circumstances where locally established criteria would allow for surface-laid pipe. These exception criteria are described in Section 2.6.2.3 .
Transporting all produced water from individual well sites to water management facilities exclusively via pipelines is not technically feasible. The Preferred Alternative must include a provision for a case-by-case determination of the feasibility of construction produced water transport lines.	Section 2.6.11.3 of the EIS has been revised to recognize that in limited circumstances transporting produced water from individual well locations exclusively via pipeline may not be technically or economically feasible. Although piping of water/condensate would not be required in all circumstances, to provide a comparison between the environmental impacts of each alternative, it is assumed for analysis purposes that all produced water would be transported by pipeline under the Agency Preferred Alternative (see Table 2.6-4).
Socioeconomics	
The DEIS does not adequately address impacts on recreation due to the failure of the BLM to collect data on the recreation use in the WTP Project Area or even in Price Field Office. These data must be collected and analyzed in order to fully assess the net benefits of any proposed use of the public lands in the WTP Project Area.	<p>The BLM does not currently have an agency-wide program to collect visitor use data that enables the BLM to incorporate statistically-valid visitor-use monitoring information into planning and management decisions. However, the BLM is in the process of developing a program that would provide input for estimating regional socioeconomic impacts associated with BLM visitor use and insight into the recreation settings and recreation experiences that BLM visitors want on the public lands.</p> <p>The EIS (see Section 3.13.5.2) does contain general estimates of recreation visitation for the Price Field Office and specific use data for river recreation within Desolation Canyon.</p> <p>Without specific visitor use data for Nine Mile Canyon and other locations within the WTP Project Area, the recreational and economic impacts can only be discussed qualitatively.</p>
The agency must fully examine and account for the risks and costs associated with water depletion, loss of native fisheries and fisheries	A full evaluation of the economic costs of potential environmental impacts would require a risk assessment and a complex analysis

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restoration, the additional costs of noxious weed mitigation, and the costs associated with the building and potential failure of artificial water retention structures.	<p>involving numerous variables and linked indirect effects resulting in a task that is beyond the scope of this EIS. Given the number of variables that would have to be considered, and the number of complex assumptions that would have to be made, the results of any model which evaluates the economic costs of potential environmental impacts would be too speculative.</p> <p>Compliance with regulatory requirements, as well as the costs of mitigation, would substantially reduce potential environmental impacts and those costs would be internalized by the proponent.</p>
Environmental mitigation costs to the BLM must be estimated and included in NEPA analysis.	Under all BLM alternatives, the operators would bear the cost of all mitigation.
The agency should stop relying on IMPLAN and other models derived from economic based theory. If planners use IMPLAN, the model must account for non-labor income, as well as income from hunting, fishing, and recreation.	<p>As discussed in Section 3.13.3, "In Carbon, Duchesne, and Uintah Counties, non-labor income is associated with income maintenance and public assistance medical care benefits, rather than with public retirement benefits or property income."</p> <p>The changes in non-labor income associated with the alternatives were not reported in Chapter 4 because they do not reflect the investment and retirement income categories that are often associated with amenity-based migration.</p>
Implementation of the Proposed Action or alternatives could seriously damage river outfitters ability to attract customers because the major selling points of a trip through the Desolation and Gray Canyons are their remoteness, unimpaired beauty, and wilderness characteristics. It is likely that the Proposed Action may put some outfitters out of business.	There would be no development within the Green River WSR corridor or the Desolation Canyon NHL under any alternative. While under some Alternatives (A, C, and E) a limited amount of development could be within sight and sound of the Green River, provided for in the range of Alternatives (C and E) are mitigation measures that would substantially reduce these impacts (see Table 2.6-8). Based on this information, the BLM has determined that changes in demand for river recreation would be minor. While quantifying or estimating the total decrease in boaters would be too speculative, the EIS has been revised to recognize that any reductions in river recreation could represent a loss of revenue to commercial outfitters and a loss of revenue for local businesses that serve visitors. There would also be a potential loss of economic value to visitors discouraged from visiting Desolation Canyon, and potentially to all users of the river if the wilderness experience is

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	diminished.
Noise	
<p>Ambient sound levels have been measured in National Parks in Utah that present extremely low readings. The noise levels would be indicative of the background levels that the BLM might observe if it conducted an accurate study of ambient noise in the WTP.</p>	<p>In the absence of sight-specific baseline noise data, the BLM has used literature to assign appropriate background noise levels to a variety of locations within WTP Project Area.</p> <p>The DEIS in Section 3.18.3.2 indicated background noise is typically assumed to be equivalent to EPA's "Farm in Valley" level of 32 dBA during night and 39 dBA during the day. A review of the scientific literature indicates that the existing background levels in WSAs and wilderness characteristic areas would probably be lower. The noise levels reported for Glen Canyon National Recreation Area (National Park Service Long-Term Ambient Sound Monitoring in National Parks, Sound and Vibration February 1992) indicated average hourly noise levels varying from 25 dBA at 7:00 AM, and then steadily increasing to about 45 dBA by noon, and then slowly decreasing 30 dBA by 6:00 PM, and lowering to 25 dBA through the rest of the evening and night. The higher noise levels during the day are attributed mostly to higher wind speeds during the day. Based on this report, it can be assumed that a night noise level in WSAs and wilderness characteristic areas would be 25 dBA, and the daytime level would be 30 to 45 dBA, mostly depending on wind conditions. In areas in the WTP not included as WSAs and wilderness characteristic areas, the anticipated background level of 32 to 39 dBA is an adequate estimate. However, background noise would be higher along major transportation corridors such as Nine Mile Canyon Road. Section 3.18.3.2 has been updated in the FEIS to represent the range of noise background levels that can be expected within the WTP Project Area.</p>
<p>The outcome of detailed predictive noise analysis should be a comparison between the predicted noise levels and background noise levels measured at various sampling positions throughout the WTP. In addition, comparison against reference criteria would also be appropriate to aid in the judgment of the severity of the impact. This analysis should determine the extent of noise impact across the entire WTP site, including all areas with wilderness characteristics, the WSAs,</p>	<p>Noise modeling has been conducted for the FEIS at many representative locations. Noise was evaluated from temporary facilities (e.g., drill rigs), fixed and permanent facilities (e.g., compressor stations and well pad facilities such as pumping units), and transient sources (e.g., traffic). The results have been compared to the estimated background values at each location and incorporated into the FEIS.</p>

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Desolation Canyon, and Nine Mile Canyon. This may best be achieved by using the contour sound level mapping option and color coding the resulting increases to background noise levels to readily show the severity of noise impact across the site.	
Water Resources	
There is no adequate warning system in place to advise people on the river that an incident involving leaks or spills has occurred.	<p>The alternatives identify or include numerous requirements, BMPs, environmental protection measures, and mitigation measures that are specifically designed to avoid, minimize or mitigate potential leaks, spills, and runoff. For example, the operators would be required to comply with all Federal SPCC requirements. Additional measures are identified in Tables 2.2-6, 2.6-7, and 2.6-8. Potential direct, indirect, and cumulative impacts to surface water resources are carefully evaluated in Sections 4.5 and 5.5.</p> <p>Furthermore, no warning system is needed or required by regulation. Any potential leaks or spills of petroleum or other chemicals related to the project would occur many miles from the Green River. Significant dilution would occur along any potential flow paths to the Green River. Therefore, there is no potential hazard to river users from potential spills.</p>
The DEIS fails to present complete, current baseline information on surface water quantity that is essential to understanding the project's impacts. As such, the BLM cannot assess potential impacts now, and will not be able to assess actual future impacts from the project.	Additional water quality information from five Utah STORET stations located on Nine Mile Creek have been incorporated and discussed in the FEIS. In addition, limited water quality information collected at Utah STORET stations on Minnie Maud Creek and Argyle Creek, as well as tributary canyons to Nine Mile Creek, has also been added.
The essential data on the quantity of sediment currently delivered to the Green River have not been collected for the streams in the WTP Project Area, and thus it is impossible to assess the potential for increased sediment loading to the Green River, potentially increasing salinity levels in the Colorado River System.	The analysis of the total amount of potential increased erosion and sediment delivery from the Proposed Action and alternatives does not depend on accurate data concerning the amount of sediment currently delivered to Nine Mile Creek. These analyses were conducted using an accepted model (WEPP), the soil type being disturbed, the amount of surface disturbance, and the design features of the proposed roads, pipelines corridors, well pads, and other project facilities. The current sedimentation in Nine Mile Creek was estimated based on the median TSS values recorded at the State of Utah water quality monitoring site 4933330, the estimated total runoff for Nine Mile Creek, and the

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	assumption that sediment delivery is at equilibrium for Nine Mile Creek. For the Green River, sedimentation rates are known more accurately based on data recorded at the USGS gauging station located at Ouray, Utah, including 194 samples analyzed for TSS over the period of record dating back to 1928. The median of the TSS values and the average annual flow were used to estimate annual sediment delivery in the Green River.
Within the EIS, there is a need for a comprehensive inventory of seeps, springs, and wells within Nine Mile Canyon, including baseline water quality data.	In response to comments received on the DEIS, a survey of springs and seeps was conducted during August 2008 to provide baseline data concerning flow volumes and the general water quality of springs within areas where development is proposed. The survey consists of five components: GIS mapping of known springs and seeps; review of aerial photography to select locations likely to contain additional springs and seeps; a reconnaissance spring survey in the areas identified as likely to contain springs and seeps; collection of flow and field parameter data from selected springs and seeps; and, data review and compilation.
Without baseline water data, the ability to measure the effectiveness of mitigation plans and efforts will be impossible.	A new mitigation measure has been added to all BLM alternatives, which would require BBC and other operators to conduct long-term monitoring of groundwater, seeps and springs, and surface water within the WTP Project Area. This monitoring program would allow the BLM to measure the effectiveness of mitigation efforts. Additional information on the monitoring program can be found within Appendix Q .

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<p>Every alternative is deficient in explaining how toxic material, either through liquid spill, airborne contamination, or solid waste, will be contained to avoid being spilled into the Green River from drill sites within one-half mile from the river.</p>	<p>As outlined in Section 1.6.5 of the EIS, the operators would be required to comply with various Federal, State, and local laws and regulations designed to prevent or respond to liquid spill, airborne contamination, and handling and disposal of solid and hazardous wastes. Table 1.6-1 summarizes some of the major Federal, State, and local permits and approvals applicable to the project. In addition, under Alternatives C, D, and E the operators would be required to comply with the draft Utah BLM Ground Water Protection Measures (Appendix P).</p> <p>Finally, it should be noted that there are no drilling locations within ½-mile of the Green River proposed under any of the alternatives.</p>
Soils	
<p>Because many of the existing soils in the WTP Project Area are considered “poor” for reclamation potential, the EIS incorrectly assumed that long-term surface disturbance will be much less than the initial surface disturbance due to reclamation measures.</p>	<p>Based on the climatic conditions, as well as previous experience with oil and gas development, the BLM has determined that it is reasonable to believe that interim reclamation measures can substantially reduce the amount of initial surface disturbance within the WTP Project Area. In addition, under Alternatives C, D, and E, the BLM has included annual and total allowable disturbance thresholds (see Appendix C), which are intended to ensure that interim reclamation efforts are successful. Additional information on the BLM Price Field Office’s guidelines for interim reclamation can be found in the Green River District Reclamation Guidelines for Reclamation Plans (BLM 2009a).</p>
<p>The EIS does not include sufficient information on the location or importance of biological soil crusts, which have potential to cover approximately 30 percent of the WTP Project Area (see Section 3.4.4).</p>	<p>Biological soil crust surveys have not been conducted in the WTP Project Area. The presence of biological crusts would be evaluated during the APD process for each proposed project facility. Consideration would be given to relocating project facilities that would destroy significant amounts of biological crusts.</p>
Vegetation	
<p>Several commentators expressed concern that the EIS did not address the effects of noxious weeds in enough detail, that weed management and associated costs would fall to landowners, and that a detailed weed management plan needs to be in place prior to any road construction.</p>	<p>The potential sources of weeds and direct, indirect, and cumulative impacts of invasive species are addressed in Sections 4.8 and 5.8. The potential impacts of weed infestation are also addressed under other resource sections, such as rangeland management and special status plant species. Weed control is an important component of the</p>

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	Proposed Action and BLM action alternatives within the EIS. As indicated in Table 1.6-1 , the operators would be required to comply with the Noxious Weed Act, and as proposed by the operators in Table 2.2-6 , the operators would be responsible for noxious weed control as part of road construction and maintenance. Furthermore, as indicated in Table 2.6-8 , under Alternatives C, D, and E, an Approved Pesticide Use and Weed Control Plan would be prepared and implemented. The operators would incur the expense of all project-related weed control, maintenance, and management activities.
Several comments were received regarding the Uinta Basin hookless cactus. The comments included requests to conduct pre-construction surveys for the species, and comments that did not agree with the "not likely to adversely affect" determination for the species.	The Proposed Action and the No Action Alternative do not include a commitment or mitigation measures to implement the conservation measures that were jointly developed by the BLM and USFWS for Uinta Basin hookless cactus. Therefore, under these alternatives, the effects determinations for Uinta Basin hookless cactus (see Sections 4.10.2.1 and 4.10.2.2) have been changed to " <i>may affect, likely to adversely affect.</i> " The conservation measures are incorporated into Alternatives C, D, and E (see Table 2.6-8). These measures include (among other salient protective mitigations) requirements for pre-surface disturbance surveys within suitable habitat, and salient measures to avoid direct disturbance and minimize indirect impacts to suitable habitat, occupied habitat, populations and individual plants. Therefore, the effect determination under Alternative C, D, and E for the Uinta Basin hookless cactus is " <i>may affect, not likely to adversely affect.</i> "
The BLM received several comments regarding the Uinta Basin hookless cactus and Graham's penstemon which included requests to add effects of dust deposition on the plants, and to add impacts of the project on the species pollinators.	The potential effects of dust deposition on vegetation are described in Section 4.8 . The impact analyses in Section 4.10 for the Uinta Basin hookless cactus have been modified to specifically acknowledge the potential effects of dust deposition on this species. The impact analyses for the Uinta Basin hookless cactus and Graham's Penstemon in Section 4.10 have been modified to include information on potential impacts to pollinators and subsequent effects of pollinator loss on special status species.
Wildlife	
Several commentators requested that before any alternative is selected, wildlife surveys and studies should be completed.	Wildlife studies have been and would continue to be conducted as part of ongoing and future natural gas development within the WTP Project Area. For example, as explained in Section 3.10.2.1 , annual MSO

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	surveys have been completed in the WTP Project Area since 2001. In addition, the measure to survey certain areas for the presence of raptor nests, as described in Table 2.6-8 , illustrates the BLM’s requirement that any necessary wildlife surveys would be completed prior to individually permitted surface disturbing activities.
Several commenters questioned the determination for the endangered Colorado River fish and their critical habitat. One comment states “All water depletions out of the Upper Colorado River basin are considered an adverse affect on the endangered Colorado River fish species and their critical habitat.”	The effects determinations for critical habitat of the Colorado River endangered fish species in Section 4.10 have been modified to “ <i>may affect, likely to adversely affect.</i> ”
Several commenter’s suggested a NSO in sage-grouse habitat in Harmon Canyon (Prickly Pear) and Sagebrush Flat, thereby reducing disturbance in sagebrush areas.	There are approximately 24,000 acres of sagebrush and sagebrush grassland communities within the WTP Project Area, some of which occur on non-Federal lands. In addition, given other spatial and temporal restrictions already in place (e.g., lease stipulations, design features of the alternatives, mitigation measures within the EIS), to prohibit surface disturbance within all sagebrush parklands on Federal land would inhibit the operators’ ability to develop their valid and existing Federal lease rights. Therefore, an NSO requirement within all sagebrush parks is not a feasible measure. However, it is important to note that Alternatives C and E include Special Protective Measures for sage-grouse (see Sections 2.4.1.2 and 2.6.1.4). These measures include (but are not limited to) the following commitments: disturbance would be minimized in and around sage-grouse core winter use areas through strategic planning for optimal realignment of existing roads and placement of new roads, well pads and other infrastructure, thereby reducing habitat fragmentation. This particular measure would result in substantial reductions in sagebrush disturbance under these alternatives.
Several received comments stated that measures to reduce impacts to sage-grouse and their habitat are inadequate. Specifically, comments included the following: roads need to be re-routed outside crucial sage-grouse habitat, re-routing roads would not eliminate traffic-related effects on sage-grouse, and stipulations that restrict surface occupancy or seasonal surface use around sage-grouse leks are insufficient.	In terms of road re-routes, under the Proposed Action, Alternative C, and the Agency Preferred Alternative, existing roads that bisect sage-grouse core winter habitat would be rerouted. In addition, the EIS acknowledges that road realignments outside of these habitats would reduce (not eliminate) traffic-related effects to sage-grouse. As a response to the stipulations restricting surface use and occupancy, the BLM and the UDWR (a CA for this project) have determined that the

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	special protective measures included under Alternatives C and E in the EIS (i.e., development would be precluded within 2 miles of known leks between March 15 and July 15, and regardless of season, development would be prohibited within ½ mile of known leks) are sufficient to protect the lek within the WTP Project Area. In addition, these measures are in compliance with those outlined in the Proposed Plan of the Price RMP (BLM 2008b).
Several commenters expressed concern that the effects of habitat fragmentation were underestimated in the DEIS.	The BLM is confident that the fragmentation analyses included in the EIS are based on good science and provide a conservative and adequate (rather than underestimate) estimate of potential habitat fragmentation that could occur as a result of project implementation. Appendix I outlined the assumptions used to model habitat fragmentation. The species-specific spatial buffers placed around existing and proposed development within the WTP Project Area, in order to determine the extent of existing and potential habitat fragmentation, were based on protocol and suggestions developed by the Wyoming Game and Fish Department in their 2007 publication entitled "Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats." In addition, portions of Section 4.9 relating to elk impacts have been modified to include more information on the potential effects of wildlife displacement and isolation on mesa tops.
Numerous comments were received that requested specific changes to the BBC Wildlife Mitigation Plan.	The BBC Wildlife Mitigation Plan is a voluntary component of the operators' Proposed Action and cannot be modified by the BLM.
Several comments were received regarding the mitigation and monitoring aspect of the Agency mitigation plan. One comment encouraged the "BLM to specifically provide in the WTP FEIS that whenever possible mitigation activities should occur on lands that will not be leased for oil and gas development." Another encouraged greater monitoring coordination in the plan.	A statement has been added to the Agency Wildlife Mitigation Plan that recognizes the need to consider the potential for future natural gas development (as well as multiple other factors) within areas being considered for mitigation. As for the monitoring comment, the Agency Wildlife Mitigation Plan has been revised such that the WTPMOC would include, or at least invite to participate, a representative from a local

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	sage-grouse working group, an area landowner, and representatives from Carbon, Uintah, and Duchesne Counties.

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