

CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 5

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions of the Environmental Analysis

The conclusions and recommendations presented in this section are those of the FERC environmental staff. While our conclusions and recommendations were developed with input from the BLM as a cooperating agency, the BLM will present its own conclusions and recommendations in its ROD for the EPP.

Review of the information provided by Entrega and further developed from data requests; field investigations; scoping; literature research; alternatives analysis; and contacts with federal, state, and local agencies, and individual members of the public indicates that the proposed project would result in limited adverse environmental impact during construction and operation. We conclude that if the project were constructed and operated in accordance with applicable laws and regulations, Entrega's proposed mitigation, and the additional mitigation recommendations presented below, it would be an environmentally acceptable action. Although many factors were considered in this determination, the principal reasons are:

- 94 percent of the proposed pipeline would be located within 300 feet of existing pipeline, utility, and road ROWs. Where Entrega's proposed pipeline would parallel existing pipelines, it would generally be installed at a 40-foot offset from the nearest pipeline centerline;
- the project would be consistent with or in conformance with federal resource management plans;
- Entrega would implement a number of resource- or activity-specific plans, procedures, and agreements to protect natural resources, avoid or limit environmental impact, and promote restoration of all disturbed areas during construction and operation of the project;
- the use of the HDD method would avoid disturbances to the beds and banks of the White and Yampa Rivers;
- the appropriate consultations with the FWS, the SHPOs, the BLM, other affected land management agencies, and any appropriate compliance actions resulting from these consultations, would be completed before Entrega would be allowed to begin construction in any given area; and
- an environmental inspection program would be implemented to ensure compliance with all mitigation measures, Certificate conditions, and requirements contained in the POD.

In addition, we have developed specific mitigation measures (including a compliance monitoring program) to further reduce the environmental impact that would otherwise result from construction of the project. The additional studies or field investigations which we recommend typically result in site-specific mitigation and further reduction of impact; therefore, we are recommending that these mitigation measures be attached as conditions to any Certificate issued by the Commission. These mitigation measures are presented in section 5.6. We believe that the recommended mitigation measures would reduce potential environmental impacts from Entrega's proposed action to less than significant levels.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.2 Alternatives Considered

No Action or Postponed Action

The No Action and Postponed Action Alternative were considered. While the No Action or Postponed Action Alternative would eliminate the environmental impacts identified in this EIS, U.S. markets would be denied access to the 1.5 Bcfd of natural gas that Entrega proposes to transport to its system. Furthermore, natural gas development in the Piceance and neighboring basins could be hindered by a lack of interstate pipeline transportation capacity options available to ship gas to markets. Consequently, new and existing natural gas users would need to obtain natural gas from other sources, use alternative energy sources, or use alternative fuels.

In this instance, the first option would likely require the construction of additional and/or new pipeline facilities in other locations to transport natural gas supplies currently being developed in the Piceance Basin or planned for development/production in the near future. If other natural gas facilities are approved and constructed, each project would result in its own set of specific impacts that could be less or greater than those associated with the current proposal.

The second option (use of alternative energy sources) is infeasible because the use of solar, hydroelectric, or other energy sources (e.g., geothermal, fuel cells) has not been developed to the point where they would be viable energy supply alternatives to the proposed project.

The third option (applicable primarily to large industrial or commercial users) would require natural gas customers to apply for and seek regulatory approval to use other fuels. Assuming regulatory approval to use alternative fuels could be obtained within the required time frames, it could result in increased use of less clean-burning fuels (such as coal) and a corresponding increase in air pollutant emissions.

System Alternatives

Existing natural gas pipelines that pass through, or near the proposed Meeker Hub were evaluated for their ability to convey the proposed EPP volumes. We determined that none of the existing pipeline systems have sufficient remaining capacity to convey the volumes proposed by Entrega.

The potential for shipping Entrega's gas on WIC's proposed Piceance Basin Expansion Project (PBEP) pipeline that would originate at the Greasewood Hub (7 miles east of Entrega's origin) and terminate at Wamsutter, Wyoming also was evaluated. While the WIC design (pipeline diameter, compressor stations) could be modified to accommodate Entrega's gas volumes, the WIC project would not transport gas east of Wamsutter, and therefore would not meet Entrega's purpose and need. Further, the two projects have reached agreements with different shippers for gas receipt and delivery at different interconnection points at different pressures, under different terms and conditions, etc. We concluded that no existing or proposed pipeline system would meet Entrega's purpose and need.

Route Alternatives - Piceance Basin Expansion Route Alternative

We evaluated the option of routing the Entrega Pipeline along WIC's currently-proposed alignment between the Greasewood Hub and the area where the two proposed routes intersect near Entrega MP 33.2. The alternative would require a 7-mile-long linking pipeline between the Meeker and Greasewood Hubs, and would then follow the route proposed by WIC for its PBEP for another 36 miles. This alternative was evaluated to:

- avoid or minimize impact on sensitive resources (wetlands, wet meadows, and irrigated hayfields¹ along Entrega's initial 14 miles of construction through the Piceance Creek drainage); and
- address/avoid engineering issues (i.e., an area of pipeline congestion combined with steep slopes, rock outcrops, and a ravine associated with the Colorow Mountain crossing [MPs 19.5-20.6], and an area of soil instability and geologic hazards at the north end of the Indian Valley [MPs 25.5-28]).

In the draft EIS we solicited further input from the public, agencies, and the applicant regarding the Piceance Basin Route Alternative. We noted in the draft EIS that the proposed route would cross a larger number of stream crossings and cause more wetland and pasture disturbance, but vegetation recovery times in these areas would be short-term (less than 5 years). Since the draft EIS, however, Entrega has filed supplemental information regarding the wetlands crossed in the Piceance Creek area and the amount of wetlands crossed was substantially reduced. This difference is attributable to the fact that the draft EIS used NWI-maps to estimate wetland impacts, while the new information is based on field delineations conducted in 2004. We have reviewed Entrega's Plan, Procedures, and Incised Bank Stabilization Plan and believe that, when combined with the recommended route realignments that reduce the number of crossings of Piceance Creek, the procedures identified within these plans are sufficient to protect Piceance Creek.

In comparison, the alternative route (WIC's proposed route) would disturb a comparable amount of wetlands, much less pasture, but more shrubland and woodland wildlife habitat would be cleared. Shrubland and woodland recovery times would be long-term (10 to 50+ years). The alternative route would be almost 10 miles longer than Entrega's proposed route.

After reviewing the additional information from the public, agencies, and the applicant regarding the Piceance Basin Route alternative, we are recommending Entrega's proposal with the recommended Piceance Creek realignments as the preferred route.

Route Variations

Three minor route variations from Entrega's proposal were analyzed to determine whether the variations were environmentally preferable to the proposed route.

- 1) Pine Tree Gulch Variation. This variation is recommended because it minimizes livestock and water development impacts. This variation has been adopted by Entrega.

¹ Much of the hayfields are administered by the Colorado Division of Wildlife as the Piceance State Wildlife Area.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 2) Park Meadows Variation. This variation is not recommended because predicted land use impacts would be reduced by routing the pipeline along an existing pipeline corridor rather than creating a new pipeline route that would affect new landowners. This variation has not been adopted by Entrega.
- 3) Cheyenne Hub Variations. Entrega has continued to negotiate with the Lazy D Grazing Association regarding landowner issues at this site. Based on these discussions, Entrega revised their route since the draft EIS and now has adopted Variation A as their proposed route. This is the recommended route at this location.

Aboveground Facilities

The possibility of relocating the Bighole Compressor Station was evaluated; however, no site offered a clear environmental advantage over the proposed site. Consequently, no alternative site was recommended.

In conclusion, we determined that the proposed project is environmentally preferable to any of the alternatives considered.

5.3 Significant Unavoidable Impacts

The project would result in limited adverse environmental impact. Effects on all environmental resources were evaluated to determine any significant impact that would remain so after application of the mitigation proposed by Entrega. We then considered practical, appropriate, and reasonable measures which would further reduce potential project-related impacts. As a result, we developed additional mitigation which we are recommending be included as specific conditions to any Certificate issued by the Commission. Our analysis indicates that with the application of Entrega's mitigation and implementation of our recommendations below, the proposal would result in no significant impact that is unavoidable. Further, we believe that all environmental impacts would be reduced to less than significant levels if the proposed and recommended mitigation is fully implemented.

5.4 Irreversible/Irretrievable Commitment of Resources; Short- and Long-Term Uses of the Environment

The major nonrenewable resources that would be consumed by the proposed project are fossil fuels used to power construction vehicles and, over the life of the project, fossil fuel and electricity to power the pipeline itself (the proposed compressor stations would be natural-gas powered). Theoretically, the pipeline components could be reclaimed at the end of the pipeline's operational life. However, there would be a number of irretrievable resources committed to the proposal if the necessary authorizations are granted. The primary resources irretrievably lost would include soils (resulting from water and wind erosion in disturbed areas); water (used for dust control); crop/rangeland production (lost or reduced for one season or more); land use (aboveground facilities would replace rangeland and agricultural land for the life of the project); and wildlife habitat (temporary to long-term loss). The loss of cultural and paleontological resources also would be irretrievable, if allowed to occur.

5.0 CONCLUSIONS AND RECOMMENDATIONS

As discussed in section 3.11, the proposed project has been designed to meet or exceed all safety requirements, and the potential for irreversible damage to the environment during operation is slight.

The proposed project would transport significant volumes of natural gas to customers in the central U.S. Its operation would be consistent with federal policies encouraging competitive natural gas transportation services. For these reasons, the limited irreversible and irretrievable resource commitments are acceptable.

5.5 FERC Staff Recommended Mitigation

If the Commission approves the EPP, we recommend that the following measures be included as specific conditions of the Certificate. We believe that these measures would further mitigate the environmental impact associated with the construction and operation of the proposed project.

1. Entrega Gas Pipeline Inc. (Entrega) shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the environmental impact statement (EIS), unless modified by the Commission Order. Entrega must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (Director of OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property and the environment during construction and operation of the project. This authority shall include:
 - a. the modification of conditions of this Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the conditions of this Order.
3. **Prior to any construction**, Entrega shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Entrega shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of

5.0 CONCLUSIONS AND RECOMMENDATIONS

environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Entrega's exercise of eminent domain authority granted under Natural Gas Act (NGA) Section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Entrega's right of eminent domain granted under NGA Section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way (ROW) for a pipeline to transport a commodity other than natural gas.

5. Entrega shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to route variations required herein, additional areas allowed by Entrega's Upland Erosion Control, Revegetation, and Maintenance Plan, or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of this Certificate and before construction** begins, Entrega shall file an initial Implementation Plan with the Secretary for the review and written approval of the Director of OEP describing how Entrega will implement the mitigation measures required by this Order. Entrega must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Entrega will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - b. the number of EIs assigned per spread and a description of how Entrega will ensure that sufficient personnel are available to implement the environmental mitigation;

5.0 CONCLUSIONS AND RECOMMENDATIONS

- c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - d. the training and instructions Entrega will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - e. the company personnel (if known) and specific portion of Entrega's organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Entrega will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the mitigation training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Entrega shall employ a team of EIs (i.e., three or more) per construction spread. The EIs shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Entrega shall file updated status reports prepared by the head EI with the Secretary on a weekly basis **until all construction-related activities, including restoration activities, are complete**. On request, these status reports also will be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. the current construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the EIs during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - c. a description of corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
-

5.0 CONCLUSIONS AND RECOMMENDATIONS

- e. a description of any landowner/resident complaints that may relate to compliance with the requirements of the Commission Order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Entrega from other federal, state, or local permitting agencies concerning instances of noncompliance, and Entrega's response.
9. Entrega must receive written authorization from the Director of OEP **before commencing service** from the project. Such authorization will only be granted following a determination that rehabilitation/restoration of the ROW and other areas of project-related disturbance are proceeding satisfactorily.
 10. **Within 30 days of placing the certificated facilities in service**, Entrega shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions Entrega has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
 11. Entrega shall include the White River in its assessment of potential streambed scour depths, so that this information will be available for design purposes if an open-cut crossing is ultimately required at this location. (section 3.1.2)
 12. If severe wind erosion occurs (as noted by exposed pipe, deflation, or dune formation), Entrega shall install and monitor erosion prevention devices (e.g., snow fences) to ensure soil stabilization as part of its ongoing maintenance program. Entrega shall notify the FERC of severe erosion and its mitigation in Entrega's quarterly activity reports to the FERC. (section 3.2.1)
 13. **Prior to construction**, Entrega shall revise its Weed Management Plan to include:
 - a. identification of the locations by milepost (MP) where noxious or invasive weeds are currently present either within or immediately adjacent to all areas of project-related disturbance; and
 - b. a site-specific plan for each location where weeds are present which:
 - i. describes options for pretreatment (including the month(s) of the year when pretreatment would be effective);
 - ii. identifies who was consulted regarding possible pretreatment options; and
 - iii. includes whether the landowner/administrator has approved of the pretreatment. (section 3.2.4)
 14. Entrega shall conduct weed management surveys and control measures at least once every 3 years (following the initial 5 years of reclamation and weed control surveys) for the life of the project. Reports of these surveys would be sent to all appropriate conservation districts, local governments, weed

5.0 CONCLUSIONS AND RECOMMENDATIONS

management areas, weed and pest councils, and affected BLM FOs. Measures for long-term weed control strategies shall be developed by consultations with the groups listed above, as well as the local Natural Resources Conservation Service, weed control board or officials, land management agencies, and landowners. Entrega's developed methods and comments from the various agencies shall be filed with the Secretary for the review and written approval of the Director of OEP before implementation. (section 3.2.4)

15. Entrega shall develop and implement an environmental complaint resolution procedure that remains active for at least 3 years following the completion of construction. The procedure shall provide landowners, local governments, and weed management agencies (affected parties) with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the ROW. **Prior to construction**, Entrega shall mail the complaint resolution procedure to each landowner whose property would be crossed by the project and to each affected agency.
 - a. In its letter to affected parties, Entrega shall:
 - i. provide a local contact and telephone number that the affected parties should call first with their concerns; the letter shall indicate how soon they should expect a response;
 - ii. provide Entrega's Hotline phone number and instruct the affected parties that, if they are not satisfied with the response, they should call the Entrega Hotline; the letter shall indicate how soon to expect a response; and
 - iii. instruct the affected parties that, if they were still not satisfied with the response from Entrega's Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030 or at hotline@ferc.gov.
 - b. In addition, Entrega shall include a table in its weekly status report containing the following information for each problem/concern:
 - i. the identity of the caller and the date of the call;
 - ii. the identification number from the certificated alignment sheet(s) of the affected property and approximate location by MP;
 - iii. a description of the concern/problem; and
 - iv. an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved. (section 3.2.4)
16. To minimize impact on water supply wells and systems, Entrega shall:
 - a. file with the Secretary **prior to construction** the location by MP of all water supply wells or water supply systems within 200 feet of all construction work areas. For each, the filing shall identify the type of feature (well, pipeline conveyance, lined channel) and its use (domestic, municipal, industrial, agricultural, etc.);

5.0 CONCLUSIONS AND RECOMMENDATIONS

- b. revise its Blasting Plan to clarify that ground vibration monitoring would be conducted at all aboveground structures, water supply wells, and water supply systems within 200 feet of construction areas subject to blasting; and
 - c. provide an alternative source of water until any water supply well/system damaged during construction is repaired/replaced or the water rights owner is fairly compensated for the damage. (section 3.3.1)
17. Entrega shall revise its proposed route between MPs 6.7 to 8.2 and MPs 12.8 to 13.8 (as shown in **figures 3.3-3 and 3.3-4** of the final EIS, respectively) to reduce the number of crossings of Piceance Creek. Revised alignment sheets shall be filed with the Secretary for review and written approval by the Director of OEP **prior to construction**. (section 3.3.2)
18. Entrega shall consult with FWS, CDOW, and CDPHE to establish withdrawal and discharge rate guidelines and practices for water used in preliminary testing of the HDD crossings. (section 3.3.2)
19. Entrega shall file with the Secretary for the review and written approval of the Director of OEP **prior to construction**, revised Site-Specific Waterbody Crossing Plans (including contingency plans) that include a 50-foot setback for the Little Snake, White, and Yampa Rivers. (section 3.3.2)
20. Entrega shall coordinate with WIC regarding the crossings of the Yampa and Little Snake Rivers. This coordination shall attempt to minimize in-stream and bank disturbances and shall consider the use of a shared crossing bridge at each location. Entrega shall file the results of this coordination with the Secretary for the review and written approval of the Director of OEP prior to constructing these crossings. (section 3.3.2)
21. Entrega shall continue to consult with the water supply operators and the appropriate federal and state agencies regarding potential impacts on water supplies and the need for specific mitigation measures during pipeline construction. (section 3.3.2)
22. **Prior to construction**, Entrega shall finalize their Hydrostatic Test Plan in consultation with pertinent state and federal agencies (FWS, WGFD, WDEQ, CDOW, CDPHE) and appropriate conservation districts. Entrega also shall:
- a. provide additional descriptions of the discharge/erosion control structures that would be utilized at the discharge locations;
 - b. document these agency consultations and file the finalized Hydrostatic Test Plan with the Secretary for review and written approval of the Director of OEP **prior to construction**; and
 - c. consult and coordinate with the appropriate agencies and organizations immediately before and during the hydrostatic testing program (including the discharge phases) to account for changing site-specific conditions and to ensure that impacts are avoided or minimized in applicable agency jurisdictions. (section 3.3.2)
23. Entrega shall file with the Secretary its final Construction Mitigation and Revegetation Plan (including a line list by MP of proposed wetland mitigation measures) for review and written approval by the
-

5.0 CONCLUSIONS AND RECOMMENDATIONS

Director of OEP **prior to commencing service**. Entrega shall include the comments of the land management and state agencies with whom it consulted during plan development and indicate whether reclaiming wetlands with native species was suggested by these agencies. (section 3.3.3)

24. To facilitate the restoration of riparian woodlands disturbed by project construction, Entrega shall:
- a. conduct pre-construction surveys in woody riparian areas to determine the existing vegetation community composition and density. Based on the results of these surveys, Entrega shall reseed and replant with these existing tree and shrub species at pre-construction densities, accounting for intact root masses; and
 - b. file site-specific plans for each of the six riparian woodland crossings (North Platte River, Medicine Bow River [2], a tributary to Foote Creek, and Rock Creek [2] crossings) with the Secretary for review and written approval by the Director of OEP **prior to construction activities in these riparian woodland communities**. In developing these plans, Entrega shall locate temporary workspace areas to avoid riparian woodland to the maximum extent practicable. Entrega shall provide detailed justification for any temporary workspace area that is not sited to avoid disturbance of riparian woodland. At a minimum, each plan shall include:
 - i. an inventory of the area of disturbance, based on the preconstruction survey;
 - ii. site-specific measures to avoid or reduce the extent of riparian woodland disturbance;
 - iii. site-specific measures to restore all riparian woodland disturbance to near-preconstruction conditions;
 - iv. an aerial-photo based plot plan showing all areas of disturbance, environmental controls, and restoration measures (scale 1:1,200); and
 - v. specific criteria for assessing restoration success. (section 3.4)
25. **Prior to construction at the Medicine Bow River**, Entrega shall prepare and file with the Secretary for review and written approval of the Director of OEP a report indicating whether an HDD crossing is feasible at the Medicine Bow River crossing, and evaluating another route(s) for crossing the river that would avoid or minimize the number of trees to be removed by construction. (section 3.4)
26. Entrega shall consult with the FWS and appropriate state agencies to determine appropriate mitigation for discharging hydrostatic test water within the brown trout spawning season. (section 3.5.1)
27. In order to reduce potential impacts on wildlife from pipeline construction, Entrega has committed to placing earthen ditch plugs, with ramps on either side, at 1-mile intervals along the trench and at well-defined livestock and wildlife trails intersected by the trench on federal lands. Entrega shall adhere to the following mitigation measures uniformly throughout the project.
- a. Entrega shall place earthen ditch plugs, with ramps on either side, at 1-mile intervals along the trench and at well-defined livestock and wildlife trails intersected by the trench. These plugs would provide a means for wildlife to escape if individuals fall into the trench and also would provide a bridge for other wildlife to cross the open trench.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- b. Entrega also shall leave breaks in the strung and welded pipe, topsoil, and spoil piles at locations that correspond to the earthen trench plugs to allow movement of wildlife and livestock across the construction ROW.
 - c. The pipeline trench shall be inspected on a regular basis during construction and immediately prior to backfilling to identify entrapped animals. Wildlife found in trenches during construction shall be coaxed to the nearest ramp and either be encouraged to exit the trench, removed by hand, or trapped (if other methods are unsuccessful). If any animal in the trench is determined to be a sensitive species, only authorized individuals shall be allowed to remove it from the trench.
 - d. Entrega shall limit the duration that welded pipe would be left above the ditch by lowering the pipe no later than 7 days after pipe segments are joined. (section 3.5.2)
28. To facilitate wildlife crossover/escape from the ditch, Entrega's EIs shall, as needed and in conjunction with the federal agencies' compliance monitors, modify the spacing of ditch-plug bridges/escape ramps and breaks in the strung and welded pipe at specific locations where the 1-mile spacing is found to be inappropriate. (section 3.5.2)
29. To minimize the impacts to big game species during winter, Entrega shall:
- a. avoid Wildlife Habitat Management Area lands during non-emergency maintenance activities from November 15 through April 30; and
 - b. in addition to the winter constraint period, avoid construction in the Colorado Division of Wildlife's Bitter Brush State Wildlife Area from October 10 through November 21 to avoid heavy hunter concentration areas. (section 3.5.2)
30. Entrega shall coordinate with the BLM to obtain applicable historic raptor nest locations, **prior to conducting preconstruction surveys for raptors**. (section 3.5.2)
31. Entrega shall conduct pre-construction clearing of suitable habitat for shrub-nesting species for the proposed 2006 construction. Such clearing would be conducted in late fall 2005 or winter 2005/early 2006 (prior to the 2006 migratory bird nesting season), which would make the cleared areas unattractive to potential nesters and thus avoid destruction of active nests during actual construction. Suitable habitat (scrub-shrub) for shrub nesters is primarily located along the western portion of Phase 1, Spread 3 and 4 (between MP 135.5 to 236.68 and MP 285.2 to 286.9). Entrega shall file a preconstruction clearing plan with the Secretary for the review and written approval of the Director of OEP **prior to initiating clearing**. This plan shall identify mileposts to be cleared and provide results of consultations and any applicable permits and authorization from the BLM and/or WGFD that address the extent and method of clearing and fall/winter project activity in big game ranges, as applicable. (section 3.5.2)
32. **Prior to conducting blasting at any location along the EPP ROW**, Entrega shall file the results of its FWS consultation with the FERC for review and approval of the Director of OEP. The filing shall specify the specific locations (by MP) where blasting may occur, known raptor and other migratory bird nest locations within the general vicinity of the blasting, and mitigation measures that would be implemented to minimize impacts on nesting birds. (section 3.5.2)

5.0 CONCLUSIONS AND RECOMMENDATIONS

33. Entrega shall conduct preconstruction field surveys for federally listed plant species (i.e., the Colorado butterfly plant, Dudley Bluffs bladderpod, blowout penstemon, Dudley Bluffs twinpod, and Ute ladies'-tresses) in areas subject to project-related disturbance in accordance with its Special Status Species Survey Plan. **Prior to construction**, Entrega shall file the following information with the Secretary:
- name(s) and qualifications of the person(s) conducting the survey;
 - method(s) used to conduct the survey;
 - date(s) of the survey;
 - area surveyed (include the MPs surveyed); and
 - results of the surveys, to indicate species presence or absence. (section 3.6.2)
34. If a federally listed plant species is found during the preconstruction surveys, Entrega must notify the Commission staff and the FWS before commencing any project construction activity. This notification shall contain Entrega's evaluation of whether or not the plant(s) could be avoided by reroute or by the use of a horizontal bore. Further, Entrega **shall not begin construction activities until**:
- the staff receives comments from the FWS regarding the proposed action;
 - the staff completes formal consultation with the FWS, if required; and
 - Entrega has received written notification from the Director of OEP that construction or use of mitigation may begin. (section 3.6.2)
35. Entrega **shall not begin construction of Phase 1, Spread 4 activities until**:
- Entrega files with the Secretary for review and written approval by the Director of OEP its evaluation of possible ROW re-alignments to avoid Preble's meadow jumping mouse habitat;
 - the staff receives the Preble's meadow jumping mouse survey report as well as comments from the FWS on the survey report and the proposed action's effects on the Preble's meadow jumping mouse;
 - the staff completes formal consultation with the FWS, if required; and
 - Entrega has received written notification from the Director of OEP that construction or use of mitigation may begin. (section 3.6.3)
36. Entrega shall not construct within 0.5 mile of active bald eagle nest sites in Colorado or within 1 mile of active nests in Wyoming during the nesting season. In Colorado, bald eagles generally nest from November 15 through July 31. Bald eagles generally nest from February 1 through August 15 in Wyoming. (section 3.6.3)
37. If Entrega encounters a previously unidentified active bald eagle nest within 1 mile of the construction ROW in Wyoming or within 0.5 mile of the construction ROW in Colorado, Entrega shall concurrently notify the Commission staff, the BLM (if on federal land), and the FWS, and file such information with the Secretary. Entrega **shall not continue with construction** until the staff has reviewed the information, completed any necessary consultation with the FWS, and the Director of OEP notifies Entrega in writing that construction may proceed or use of mitigation may begin. (section 3.6.3)

5.0 CONCLUSIONS AND RECOMMENDATIONS

38. In order to minimize impacts on roosting bald eagles, Entrega shall conduct surveys for roosting eagles within potential winter roost areas if construction occurs between November 15 and March 15 in Colorado (between November 1 and April 15 in Wyoming). In the event that occupied bald eagle winter roost sites are identified within 0.25 mile of construction areas in Colorado or within 1 mile of construction areas in Wyoming, Entrega shall coordinate with the BLM (if on federal land) and the FWS to determine if protection measures (e.g., timing restrictions and/or buffer areas) would be required. Entrega shall report the results of the coordination in a filing with the Secretary, and **shall not begin construction** until the staff has reviewed the information, completed any necessary consultations with the FWS, and the Director of OEP notifies Entrega in writing that construction or use of mitigation may begin. (section 3.6.3)
39. Entrega shall identify all potential bald eagle roosting trees on or immediately adjacent to the ROW and assess measures to avoid any trees that could be damaged by construction. Any potential bald eagle roosting tree that Entrega believes could not be avoided shall be identified to the staff with a justification as to why the tree must be removed and what measures Entrega considered before determining that removal was necessary. This information shall be filed with the Secretary for the review and written approval of the Director of the OEP **before construction** or use of mitigation may begin. (section 3.6.3)
40. For areas where the construction ROW is within 0.25 mile of a sage grouse lek site (whether active or inactive), Entrega shall reduce its construction ROW width to 75 feet. (section 3.6.3)
41. In Colorado, if low intensity preconstruction (e.g., surveying and staking) work is necessary within 2 miles of known sage grouse leks between March 1 and June 30, activities shall occur only between 9:00 a.m. and 4:00 p.m. In Wyoming, if low intensity preconstruction work is necessary within 0.25 mile of known sage grouse leks between March 1 and May 15, activities shall occur only between 8:00 a.m. and 8:00 p.m. (section 3.6.3)
42. In the event that Entrega cannot complete an HDD crossing of the White or Yampa Rivers, Entrega shall not begin a non-HDD crossing until the staff completes any necessary Section 7 consultation with the FWS, and the Director of OEP notifies Entrega in writing that it may proceed with an alternate river crossing method. (section 3.6.4)
43. Entrega shall provide a detailed justification for any area where it proposes to use a 125-foot-wide construction ROW for more than 0.5 mile at a time. The justification shall be filed with the Secretary for review and written approval by the Director of OEP. (section 3.7.1)
44. **Prior to construction**, Entrega shall revise its Site-Specific Waterbody Crossing Plan for the North Platte River to include specific measures to avoid or minimize impacts on recreational boat users. If an open-cut crossing is ultimately necessary at the White or Yampa Rivers, Entrega shall similarly revise the site-specific crossing plans for these locations. All revised site-specific waterbody crossing plans shall be filed with the Secretary for review and written approval by the Director of OEP **prior to construction**. (section 3.7.2)

5.0 CONCLUSIONS AND RECOMMENDATIONS

45. Entrega shall defer construction and use of facilities and staging, storage, and temporary work areas and new or to-be-improved access roads **until**:
- Entrega files with the Secretary all remaining cultural resource inventory and evaluation reports, and necessary avoidance or treatment plans;
 - Entrega files with the Secretary the BLM's and the Colorado and Wyoming State Historic Preservation Offices' comments, as applicable, on all reports and plans; and
 - the Director of OEP reviews and approves all reports and plans and notifies Entrega in writing that it may proceed.

All material filed with the Commission containing **location, character, and ownership** information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "**CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE.**" (section 3.8.3)

46. To confirm compliance after construction, Entrega shall file a noise survey with the Secretary **no later than 60 days** after placing the Bighole Compressor Station in service. If the noise attributable to the operation of the compressor station at full load exceeds 55 dBA L_{dn} at any station property line, Entrega shall install additional noise controls to meet that level within 1 year of the in-service date. Entrega shall confirm compliance with the L_{dn} of 55 dBA commitment by filing a second noise survey with the Secretary no later than 60 days after Entrega installs the additional noise controls. (section 3.10.2)
47. Entrega shall file a noise survey with the Secretary **no later than 60 days** after placing the authorized unit(s) at the Meeker Hub and Wamsutter Compressor Stations in service. If the noise attributable to the operation of the compressor stations at full load exceeds an L_{dn} of 55 dBA at any nearby noise-sensitive area, Entrega shall install additional noise controls to meet that level **within 1 year** of the in-service date. Entrega shall confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after Entrega installs the additional noise controls. (section 3.10.2)
48. To reduce potential cumulative dewatering effects on the Little Snake River during low flows, Entrega shall coordinate their hydrostatic testing and dust control water withdrawals with WIC such that no EPP and PBEP water withdrawals occur simultaneously from the Little Snake River. (section 3.12)
49. At the Arlington and Cheyenne Hub sites, Entrega shall limit the land acquired by eminent domain under the NGA to an area no larger than that needed to construct and operate the proposed facilities. In this case, the Arlington Pigging Station and the Cheyenne Hub Metering Station would require no more than 1 and 2 acres, respectively. This does not place a limit on Entrega's ability to purchase land on the open market at these sites for future use. **Prior to the start of construction**, Entrega shall file with the Secretary for review and written approval by the Director of OEP scaled plot plans for these sites. (section 4.6)