CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	**Yellowstone Pipeline boring/replacement MM 319.1 (~1.5 miles upstream Milltown)**
Proposed Implementation Date:	**February 2012**
Proponent:	**ConocoPhilips (via Terracon)**
Location:	**Cross-channel, Clark's Fork River Sec. 34 T.13N., R.18W. P.M.M.**
County:	**Missoula County**

I. TYPE AND PURPOSE OF ACTION

ConocoPhilips has requested to replace an existing 10 inch refined petroleum products pipeline due to affects from recent hydrological events on the Clark's Fork River. The current pipeline was likely scrubbed to the surface during high water in the Spring of 2011 which leaves the pipe vulnerable to damage which could cause great harm to life and property downstream, should it be struck by debris during future annual runoff.

The current pipeline is now estimated to have approximately 2-4 feet of fill above it. It was placed in the Clark's Fork in 1954 (state easement grant D-3542). The pipeline was trenched in at that time. The replacement pipe would be bored below the bed of the river to a depth of approximately 40 feet.

The DNRC is requiring that the old pipeline be removed due to its inability to function once the new pipeline is installed and connected to the existing network. There are two methods of removal – one is to expose a portion of the pipeline and pull the remaining pipe out; the other is to trench the entire pipe for removal. It is expected, due to recent removals of similar pipelines in the Billings area, that the removal would actually be a combination of the two methods i.e.-trenching outside of the currently active streambed and pulling that portion of pipe that crosses underneath the Clark's Fork.

There are 3 phases to this project within the proposed action –

1. Issuing a license for the boring operation.
2. Issuing a second license for for the removal of the existing pipeline under the Clark Fork.
3. An expected easement application for the new pipeline

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

A two-week scoping notice was sent to the DNRC Water Rights Division, MT DFWP Region 2, adjacent landowners David Burgin, Montana Felton and Donald King, along with the Missoula County Board of County Commissioners and Montana Senators Williams and Erickson and Representatives Barrett and Bennett. Letters of support were received from the Missoula County Commissioners and the Missoula City-County Health Department Water Improvement District.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

A Missoula County floodplain permit would be required for the boring operation. Removal would require an Army Corp of Engineers 404 permit, a 318 permit from Montana DEQ, a 310 permit from the Missoula Conservation District and a Missoula County floodplain permit.

3. ALTERNATIVES CONSIDERED:

No Action Alternative

A new pipeline would not be placed in the Clark Fork River. The existing line would likely scrub to the surface, creating potential hazards to life and property for hundreds of river miles. Fisheries and riparian habitat would also be placed at risk. Should the pipeline become exposed, it could create the potential for

debris to get caught on the exposed pipe, which may cause flooding in the immediate area and/or the gathering of large amount of debris that could then break loose and have negative impacts on public infrastructure downstream such as bridges and roads.

Action Alternative 1
The new pipeline would be bored to a depth of 40 feet and the abandoned pipeline would be removed. Applicant would then request an easement or maintain an annual land use license for siting of the pipeline on trust lands.

Action Alternative 2
The new pipeline would be trenched into the river and the abandoned pipeline would be removed. Applicant would then request an easement or maintain an annual land use license for siting of the pipeline on trust lands.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks. One geotechnical boring of the river, done to aid in evaluating the crossing area, indicates that the valley fill in the crossing area consists of poorly graded gravel with silt and sand and cobbles with boulders to a depth of 80 feet or more below the bed of the river.

Action Alternative 1 requires no physical entry into the streambed for the boring. Horizontal lengths are well outside of the cross-channel stream width. Removal of the abandoned section would temporarily disturb the riverbed whether the pipe must be trenched or simply pulled from the riverbed. No permanent impacts are anticipated.

Action Alternative 2 would require heavy equipment entry onto the riverbed for replacement and possibly for removal. Trenching increases the tendency of pipelines to "float" to the surface over time, thereby ensuring periodic entry/trenching for removal/replacement as is currently taking place.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The Department of Environmental Quality is the responsible agency for permitting and developing appropriate mitigations for all turbidity producing activities.

Action Alternative 1 would possibly increase turbidity short-term as the old pipeline is removed.

Action Alternative 2 would increase turbidity temporarily short term and periodically, for short terms, in the future.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Under either alternative, no significant or extraordinary air pollutants would be introduced.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks. Under either alternative, there would be no impact to vegetation cover, quantity or quality on DNRC ownership.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks.

Under **Action Alternative 1** short term effects to fish habitat may occur during removal of the existing pipeline, depending on the whether the pipe could be pulled from under the river or if full trenching would be required.

Under **Action Alternative 2** short term effects to fish habitat are likely to occur during installation of the new pipeline and would be likely to occur during removal depending on the method used to remove the pipeline. Periodic reentries due to the tendency of trenched lines to float over time would likely result in periodic short term effects.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks.

The Clark's Fork is identified habitat for Bull Trout (Salvelinus confluentus) which is listed as a threatened species by the USFWS and a Species of Concern with MTFWP. It is also habitat for Westslope Cutthroat Trout (oncorhynchus clarkia lewisi) which is listed as a Species of Concern with MTFWP. Both species of trout spawn on clean gravel riverbottoms. Cutthroat typically spawn in March and April, while Bull Trout spawn in the fall. Habitats for both of these fish have been disturbed and disrupted along this stretch of the Clark's Fork, from Deerlodge, Powell County to the Montana-Idaho state line due to removal of the Milltown dam. Reconstructed channels are still stabilizing.

Under both alternatives, streambed disturbance would destroy aquatic organisms living in the stream bed, but it is likely that many of these organisms would float downstream. Upstream organisms would eventually float downstream and redeposit within the disturbed streambed. (Joint Agency EA DNRC/DEQ, Yellowstone Pipeline Crossing 2005).

Neither alternative would result in cumulative impacts to fisheries.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks. The Clark's Fork is the location of ancient Glacial Lake Missoula. As such, there should be no effects to historical, archaeological or paleontological resources.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks. The proposed project area is located outside the unincorporated town of Turah, and approximately 8

miles east of Missoula. Work may be visible from Interstate 90 or Crystal Creek Road. There would be no cumulative effects to aesthetics.

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12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Action Alternative 1 would require water for drilling operations. It is expected that this water would be obtained from shallow alluvial wells during operations. Under state law, this is an appropriation of water and requires that a Notice of Completion of Groundwater Development be filed with the DNRC Water Rights Division.

Action Alternative 2 would not place any demands on environmental resources of land, water, air or energy.

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13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

A Joint Agency EA was done by DNRC/DEQ for the Yellowstone Pipeline Crossing in 2005. This was for a tract approximately 4 river miles upstream from this crossing.

The proposed project area also falls within the Milltown Reservoir Sediments/Clark Fork River Superfund Site remediation area by the EPA.

Under either Action Alternative, this proposal would have no cumulative effect on the analysis area.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The DNRC TLMD's authority lies within the navigable portions of the Clark's Fork River, between low water marks.

Action Alternative 1 The pipeline would be bored to a depth of approximately 40 feet to eliminate future scrubbing and possible exposure of the line, all but eliminating human health and safety concerns for damage to the line.

Action Alternative 2 A trenched line within the bed of the river could only be placed nominally deep, allowing for continued opportunity for exposure and potential damage during flooding and channel migration.

Under either alternative, the pipeline would be inspected on a regular basis by ConocoPhilips, which has one full-time health and safety coordinator assigned to this pipeline.

Various measures are implemented during pipe line installation to minimize the potential for failure when in operation. These would include construction methods following or exceeding industry standards and permit requirements. Using certified welders and experienced personnel in handling the pipe, using best management practices during construction including sediment barriers, and confirmation of pipeline integrity by hydrostatic testing of the pipe line are all measures put in place to reduce risks to human health and safety during and following installation.

Operationally, the pipe line system is continually monitored electronically and visually observed for anomalies. Periodic monitoring using sophisticated instrumentation (smart pigs) is also conducted according to regulatory requirements to ensure continuing integrity of the pipeline. Personnel are trained to recognize anomalies and act appropriately, including suspension of flow, if necessary.

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15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Replacement of this pipeline is an industrial activity. As such, replacement or repair is part of their ordinary activities for maintance and inspection of these pipelines.

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16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Replacement of this pipeline is an ordinary and regular maintenance activity. Future maintenance and inspection would continue with those cumulative effects to the employment market.

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17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

There would be no known impacts to local and state tax base and tax revenues as a result of this proposal.

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18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There would be no impact to traffic or changes to traffic patterns as a result of the granting of this easement.

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19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

This area is covered under the Missoula County Comprehensive Plan. This project is not affected by that plan.

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20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Action Alternative 1 would cause short term impacts to recreational activities within the Clark Fork River during the brief removal phase of the pipeline.

Action Alternative 2 would cause short term impacts during current and future periodic replacement of the pipeline.

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21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

NONE

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22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

NONE

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23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

NONE

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

An LUL fee would be collected for this proposal, along with a subsequent easement payment. These fees would be placed into the Public Lands trust for appropriation by the state.

EA Checklist Prepared By:	Name: Dana Boruch	Date: February 22, 2012
	Title: Right-of-Way Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Action Alternative 1

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Potential impacts are minimal and can be acceptably mitigated.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Approved By:	Name: Jonathan Hansen	
	Title: Missoula Unit Manager	
Signature: /s/ Jonathan Hansen		**Date:** February 23, 2012