CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	**Russell Street Bridge Sewer Pipe Communication Cable Installation**
Proposed Implementation Date:	**July 2017**
Proponent:	**Charter Communications**
Location:	**NE4NE4, Section 20, T13N - R19W**
County:	**Missoula**

I. TYPE AND PURPOSE OF ACTION

Montana Code (MCA 70-16-201) provides for state ownership from the low water mark to the low water mark on navigable water bodies. Based on historical evidence, the Clark Fork River is commercially navigable from Deer Lodge, Montana to the Idaho state line. Therefore, the state claims ownership of the riverbed below the low water mark between these two points. DNRC has received an application from the Charter Spectrum, a private utility company, for a 20 ft. wide by 319.11 ft. long pipeline easement across the Clark Fork River. This project would involve approximately 0.147 acres of state trust land.

Charter Communications, a subsidiary of Charter Spectrum, is proposing to install fiber and coax cables in existing abandoned sewer pipes underneath the Clark Fork River. The Montana Department of Transportation (MDOT) is planning to build a new Russell Street bridge over the Clark Fork River and will no longer allow utilities to suspend lines from the bridge as had been done in the past.

Using the existing abandoned sewer pipes would allow Charter to relocate existing lines with no disturbance to the soil around or underneath the Clark Fork River. Charter would be able to pull multiple 2 inch conduits through the 14 inch sewer pipe and extend the conduit to ground level on both sides of the river and would then be able to pull fiber and coax through the 2 inch conduits. Any fiber and coax river crossing would require a DNRC utility easement. The proposed easement is a 20 foot utility easement, being 10 feet on each side of the abandoned sewer line in place under the Clark Fork River, in the Northeast Quarter of the Northeast Quarter of Section 20, Township 13 North, Range 19 West.

II. PROJECT DEVELOPMENT

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

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

As part of the regulatory process, the City of Missoula was contacted.

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

No excavation is proposed within the floodplain and no permits are known to be required.

3. ALTERNATIVES CONSIDERED:

Alternatives Considered:

- Attaching lines to the new bridge was considered but is not permitted by MDOT.
- Overhead construction and suspension of the lines was considered but the City of Missoula discouraged a new overhead installation across the river.
- The only viable proposed action (Action Alternative) alternative is to install fiber and coax cables in existing abandoned sewer pipes underneath the Clark Fork River.

In the analysis of this easement grant application, DNRC will evaluate the environmental effects of both the No Action Alternative and the proposed action (Action Alternative). This analysis incorporates by reference, information contained in the "Statement of Necessity"; permit applications; and easement exhibits submitted by Charter Communications.

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.

Existing Conditions:
Soils within the floodplain are mixtures of stratified alluvial sands, silts and gravels. The river channel sediments move and shift with changing flow dynamics and geomorphology of the Clark Fork River. No unique geology was identified in the project area. The DNRC easements would be limited to the channel bottom lands below the low water mark.

No Action: No effects.

Action Alternative: The proposed use of existing cast iron pipelines would have no effects on soils.

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.

Existing Conditions: The existing pipelines crossing of the Clark Fork River at the Russell Street Bridge had a minimum depth of cover of five feet under the bottom of the river when constructed in 1963. The channel banks are generally stable at the crossing sites. There is potential that future river scour associated with flood flows or ice scour may exhume and damage the existing pipelines. It should be noted these pipes have been in place for 54 years.

No Action: The existing pipelines are covered by riverbed deposits, but the depth of cover is unknown. There is a long term potential risk that future river scour associated with flood flows or ice scour may exhume and damage the existing pipelines. In a rare very severe flood event, the pipelines may be exhumed which could result in increased sedimentation and channel scour damage to DNRC ownership and alter river geomorphology if not repaired and stabilized. The existing Russell Street Bridge is planned to be replaced with a new bridge that would be less restrictive to the channel and anticipated to have less potential scour that the existing bridge cross-section.

Action Alternative: Use of the existing pipelines wouldn't impact the Clark Fork riverbed or banks or wetlands. The proposed cable inlet and exit points are positioned above the high water mark and are approximately 50 feet away from the river's edge. Stringing cable through the existing pipes would not impact the state ownership below the low water mark (proposed easement area). Charter Communications owns the existing pipelines. The pipelines are not exposed and would be purged, swabbed and plugged with grout to maintain the capped pipeline section in-place. Should the abandoned pipelines become exposed in the future, a site specific response plan would be developed to address the situation.

The proposed Russell Street Bridge will increase the hydraulic opening associated with the structure and would be expected to reduce the depth of channel scour compared to existing conditions. Leaving an existing cleaned section of pipeline in place would reduce sedimentation or potential impacts to water quality that would be associated with removal of the pipeline within the river channel. The proposed operations present low risk of direct, in-direct or cumulative impacts to water quality.

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.

No Action: No effects

Action Alternative: No effects. The contractor installing the fiber optic lines within the existing pipelines would use reasonable methods and devices that control, prevent, and minimize emissions or discharges of air contaminates. Equipment that shows excessive emissions would not be operated until corrective repairs or adjustments are made.

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.

No Action: No changes to existing vegetative conditions would occur. Noxious weeds will continue to occur on the banks of the Clark Fork River at the pipeline location site. Levels of infestation will vary depending on level of control measures.

Action Alternative: A minimal amount of disturbance to natural vegetation is proposed under the Action Alternative, and would be primarily associated with the connection of a 2" cable conduit to the existing sewer boxes. No change would be expected to effects on DNRC ownership of the river bed.

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.

Existing Conditions: Terrestrial
Limited habitats for terrestrial wildlife exist in the project area. Surrounding uplands and riparian habitats support a variety of wildlife species.

No-Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Action Alternative: Minor short-duration disturbance to terrestrial wildlife could occur. No changes to existing habitats would be anticipated. Collectively, negligible effects to terrestrial wildlife would be anticipated.

Existing Conditions: Fisheries
The Clark Fork River supports a diverse fishery. Species present include bull-trout, westslope cutthroat trout (WCT), mountain whitefish, northern pike minnow, longnose dace, longnose sucker, slimy sculpin, brown trout, rainbow trout, brook trout, northern pike and other minor species (MFISH 2016). Both westslope cutthroat trout and bull trout are considered sensitive species by DNRC. Bull trout is a federally threatened species and potential for impacts to this species are discussed in detail in Section 9 below.

No Action: The existing pipelines are covered by riverbed deposits, but the depth of cover is unknown. There is a long term potential risk that future river scour associated with flood flows or ice scour may exhume and damage the existing pipelines, or increase sedimentation that could impact fisheries if not repaired and stabilized.

Action Alternative: The existing pipeline would be purged, swabbed and plugged with grout to prevent any upstream pipeline waters from entering the segment that is located under the riverbed and protect water quality. The pipeline connection boxes are located on adjacent uplands, away from the river and would have no direct, indirect, or cumulative effect to fisheries.

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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.

Existing Conditions: Limited habitats for terrestrial wildlife exist in the project area. Surrounding uplands and riparian habitats support a variety of wildlife species. Proximity to roads, human residences, and numerous other forms of human disturbance likely limits some wildlife use of the vicinity.

No-Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Action Alternative: Minor short-duration disturbance to terrestrial wildlife could occur. No changes to existing habitats in the project area would occur. Collectively, negligible effects to terrestrial threatened, endangered, or sensitive wildlife species would be anticipated.

Bull Trout: Bull trout is a federally threatened species. This reach of the Upper Clark Fork River is a historic migratory corridor for bull trout. Bull trout are rare in the Clark Fork River but may have improved migratory connections to headwaters streams following the removal of the Milltown Dam in 2008. This reach of the river is considered potentially occupied but undocumented bull trout habitat.

Bull Trout- No Action: No immediate changes to the crossing or existing fisheries would occur, but there is a long term risk of channel scour damage to the existing pipelines and sediments.

Bull Trout Action: Water quality would be protected by not removing the existing pipelines. There would be no direct, indirect or cumulative impacts to bull trout, with the proposed use of an existing pipeline. In the extreme rare case of severe flood scour that exhumes the pipelines, a site specific response plan would be developed with permitting agencies to address the situation.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

No-Action and Action Alternative: *No Effect* to state owned *Antiquities.*
A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE on state land (Clark Fork River bed). Because the state owns only the bed of the Clark Fork River in the APE, and the proposed action only involves the installation of fiber optic and communications lines into existing abandoned cast iron sewer pipes, the project would have *No Effect* to state owned *Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work would cease until a professional assessment of such resources can be made.

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.

No-Action: No effects

Action Alternative: No effects, as the cable conduit to existing pipeline connection box would be buried and not visible.

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

No-Action and Action Alternative: No effects.

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.

The Montana Department of Transportation (MDOT) completed an EIS addressing the environmental impacts of proposed road improvement work on South 3rd Street West and Russell Street in Missoula including the replacement of the Russel Street Bridge (crossing the Clark Fork River). A result of bridge replacement is that MDT will no longer allow Charter Communications to hang their communications and fiber optics lines from the new bridge. As an alternative, Charter is proposing to place their lines within abandoned sewer lines that they have acquired from the City of Missoula, buried under the river. As noted in Section 5 of this EA, the proposed Russell Street Bridge will increase the hydraulic opening associated with the structure and would be expected to reduce the depth of channel scour compared to existing conditions. The proposed operations present low risk of direct, in-direct or cumulative impacts to water quality.

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.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

No Action: The existing abandoned sewer pipelines are currently buried under the river. There is potential that future river scour associated with flood flows or ice scour may exhume and damage the existing pipelines. These pipelines have been in existence since 1963 (54 years). There is a low risk of major and prolonged impacts to human health and safety associated with the No Action Alternative.

Action Alternative: The placement of communications lines within the existing sewer pipeline will not create a noticeable change from the No Action Alternative. There is a low risk of major and prolonged impacts to human health and safety associated with the action alternative.

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

No Action: There is a potential for disruption in fiber optic and communications services to subscribers should Charter Communication be unable to find a legal means of crossing the Clark Fork River.

Action Alternative: No effect. Implementation of the proposed action would result in a continuation of existing services

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.

No Action: No change

Action Alternative: The proposed project, if implemented, is anticipated to provide short-term work for 4 people for a period of approximately 3-4 days.

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.

No-Action and Action Alternative: No change in tax base and tax revenues would be anticipated with selection of either alternative.

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

No Action and Action Alternative: No change. Should the existing pipelines become exposed or breached in the river, there could be an increased demand for government (emergency) services.

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.

No Action and Action Alternative: No change. Using the existing buried sewer lines would be in compliance with City of Missoula ordinances to reduce the visual impacts of aerial lines crossing the river as well as be compliant with MDT regulations prohibiting the suspension of utility lines from new bridges.

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.

No Action and Action Alternative: No change

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.

No-Action and Action Alternative: No change.

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

No-Action and Action Alternative: No change.

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

No-Action and Action Alternative: No change.

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.

No Action: No change

Action Alternative: Granting of the proposed easement would return an estimated $8,000 to $12,000 in land value to the Public Land- Navigable Rivers trust, and $50 (application fees) to the state general fund.

EA Checklist Prepared By:	**Name:**	Robert Storer	**Date:**	April 14, 2017
	Title:	Trust Lands Program Manager - SWLO		

V. FINDING

25. ALTERNATIVE SELECTED:

I select the Action Alternative, granting a 20 foot wide utility easement, being 10 feet on each side of the abandoned sewer lines under the Clark Fork River involving 0.147 acres of State-owned property below the low water mark of the river with recommended mitigations (see below).

Granting this easement will allow Charter Communications to maintain their existing services by utilizing abandoned sewer lines to reroute their communications and fiber optic line under the Clark Fork River resulting in no new disturbance to the river or to adjacent banks.

Mitigations: I recommend the following stipulations be incorporated into the easement upon concurrence and acceptance by the State Board of Land Commissioners:

- The existing pipeline be purged, swabbed and plugged with grout to prevent any upstream pipeline waters from entering the segment that is located under the riverbed and protect water quality.
- Should the pipelines become exposed in the future, a site specific response plan would be developed with the permitting agencies to address the situation.
- That Charter Communications periodically monitor the depth of fill over the pipelines.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The Action Alternative will not result in significant environmental impacts.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:**	Jonathan Hansen
	Title:	DNRC Missoula Unit Manager
Signature:		**Date:** April 26, 2017

North bank of Clark Fork River looking south (Sewer access on concrete pad in foreground)

South bank of Clark Fork River looking north (Sewer access on concrete pad in foreground)